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**Space for Species:**

**Redefining Spatial Justice**

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## KEYNOTE SPEAKERS

### Place-based approach in participatory planning and in transactional study of person-environment relationship

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Participatory mapping can be used both in transactional person-environment research and as a tool for participatory planning. In the presentation, I will give examples of both usage cases of online public participation GIS (PPGIS) methodology. PPGIS methodology is among the most widely spread, digital, place-based approaches used in real life public participation processes and in the study of transactional person-environment relationship. Maptionnaire is an advanced example of PPGIS methodology that was originally developed in Aalto University and today used in more than 40 countries.

To learn in what kind of real life public participation projects the tool was used and to identify the pros and cons of using this methodology, we studied over 200 Maptionnaire cases. The analysis revealed that the studied planning projects varied in geographical scale stretching from nationwide surveys to those concerning single buildings. In terms of the project topics green and blue area planning and management projects together with transportation planning projects comprised over half of the cases. When studying at which phases of the planning project the tool was used, both extremes of the planning process stood out, early initiation and the evaluation phases. To identify the pros and cons of PPGIS approach, we asked whether PPGIS tools can (1) enhance effective arrangements of public participation, (2) reach a broad spectrum of people and (3) produce high quality and versatile knowledge. The results indicated a variety of advantages and disadvantages in using PPGIS methodology in participatory planning practice. By categorizing the pros and cons of using PPGIS in practice, we can enable planners to implement more inclusive and influential participatory planning.

Place-based approach is not only fruitful in promoting smart participation but also in transactional person-environment research, where the active role of both persons and the contexts is considered. A wide variety of research themes have been studied, e.g. social sustainability, active living, ecosystem service accessibility, perceived safety and the everyday service networks & mobility patterns related to various lifestyles. Many different user groups have participated the online PPGIS studies including children and young people and the elderly. These studies produce contextually and individually sensitive evidence about the ways urban structural characteristics are associated with human experiences and behavioral patterns. By anchoring research findings to specific contexts and specific planning solutions, these research findings can become an essential part of knowledge informed planning. Planners, however,

typically rely mostly on the explorative analysis of the PPGIS data. Deeper, diagnostic forms of analysis can potentially be very useful, to explain how urban structural characteristics are linked with human behavior and to predict usage patterns. The search for urban and transportation planning solutions that promote both human wellbeing and planetary health is among the key challenges of today. Place-based research strategy helps achieving a more realistic and context sensitive understanding of the human aspects in planning and helps solving some of the most wicked problems of our era.

# Living in Harmony with Nature: Creating Harmonious Communities for People and for Nature

Dr Wei Yang

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Together with the pandemic, the climate and biodiversity crises are the most direct threats to the survival of humanity. Our future prosperity, our health and well-being aspirations are dependent on whether those urgent crises can be tackled. Spatial planning synthesises a variety of perspectives and approaches and is the glue that binds built and natural environment expertise together to make the world a better place in public interest. It is vital that we recognise spatial planning as an important applied science discipline, which interconnects social, environmental, and behavioural science.

The talk will introduce the 21st Century Garden City approach and present the work of Digital Task Force for Planning. It argues that we need a modernised planning profession and a new way of education to facilitate mindset change, promote jointed up thinking, and lead multidisciplinary collaborations to tackle the grand challenges of our times, and at the same time creating harmonious communities for people and for nature.

# Income Inequality and Segregation between Occupational Groups

Tiit Tammaru

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Research professor, Estonian Academy of Sciences

This talk is inspired by the social polarization thesis proposed by Saskia Sassen in her seminal book „The Global City“ (1991). The central question to be addressed during the presentation is as follows: What are the changes of residential segregation between occupational groups and how is it related to levels of income inequality? The talk is based on a comparative study of selected 13 major cities of Europe. The findings show that residential segregation between occupational groups increased through Europe between the two last census rounds. Changes in the levels of segregation tend to follow changes in income inequality with about 10-year time lag. Levels of inequality and segregation tend to be higher in liberal welfare societies and lower in social democratic societies. However, other factors play a role in high levels of residential segregation, too, including the intensity of new housing construction, planning of residential neighbourhoods and levels of immigration. These findings will be discussed from three perspectives. First, I will consider the role of residential segregation in producing and reproducing urban spatial inequalities within a vicious circles of segregation framework. Second, I will touch upon the emerging conflict between sustainable mobility and urban equity aims in cities from the perspective of high levels of residential segregation. Third, I will ask what could be the effects of the spread of telecommuting on the residential sorting of occupational groups.

## TRACK 1: PLACES

85320

### Distributed working: opportunities and challenges for contemporary neighborhood, city, and regional planning

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The '9 to 5' office-based work, the predominant work mode of postindustrial societies in North America, Europe, and the Global North in general, is changing. It is being replaced by distributed work arrangements such as hybrid (a combination of office-based and off-site) and remote (fully off-site) work that leverage the technology-enabled capability to work at variable times of day and night and from diverse settings such as homes, co-working spaces, third places, and spaces of movement. Distributed working, which was slowly but steadily growing since the 1980s, has intensified in the wake of the lockdowns and social distancing measures implemented to contain the COVID-19 pandemic.

Distributed working marked by people working from home, in a café, on the train, or, in a public park herald the post-functionalist city where work-life boundaries have blurred, different functions co-exist in the same space, and where functions are subjectively and contingently ascribed to settings. This mingling of work and other activities presents new planning opportunities and challenges for contemporary cities typically structured around a fixed time and place for work, regular journey-to-work patterns, and the segregation of land uses. This paper presents the results of a systematic survey of North American and global planning literature (including academic literature, print and online newspapers and blogs, and published reports by governmental and non-governmental agencies) examining the question: what North American and global planning practices for managing the built form and land use and mobility patterns of poly- or post-functional neighborhoods, cities, and metropolitan regions are known or currently in practice?

The paper presents the following outcomes of the systematic literature survey: (1) presents a knowledge base of post-functional planning practices (e.g., form-based code, live/work zoning, building codes for co-working spaces within apartments, designated workspaces in homes, neighborhood services for home-based working, etc.) categorized by the planning scale, context, country and year of origin and implementation, aims, objectives, etc., (2) identifies the key topics, opportunities, and challenges associated with post-functional planning practices from a summative content analysis of the knowledge base, (3) discusses the significance of post-functional planning for contemporary North American and Global North neighborhoods, cities, and metropolitan regions in light of the post-pandemic intensification of distributed working, and (4) presents directions for future research.

Keywords: Post-functional cities, mobile technology-built environment interactions, distributed working, hybrid working, remote working

#### References

1. Batty, M. (2018). *Inventing Future Cities*. The MIT Press.  
<https://mitpress.mit.edu/books/inventing-future-cities>
2. Couclelis, H. (2004). Pizza over the Internet: E-commerce, the fragmentation of activity and the tyranny of the region. *Entrepreneurship & Regional Development*, 16(1), 41–54.  
<https://doi.org/10.1080/0898562042000205027>
3. Felstead, N. A., Jewson, N. N., & Walters, N. S. (2005). The shifting locations of work: New statistical evidence on the spaces and places of employment. *Work, Employment and Society*, 19(2), 415–431.
4. Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
5. Katsikakis, D., Rodriguez, M., Smith, D. C., Leinberger, C., Rockey, R., & Bitner, D. (2020). *Workplace Ecosystems of the Future*. Cushman & Wakefield; Center for Real Estate and Urban Analysis, The George Washington University.
6. Kingma, S. (2019). New ways of working (NWW): Work space and cultural change in virtualizing organizations. *Culture and Organization*, 25(5), 383–406.
7. Lund, S., Madgavkar, A., Manyika, J., & Smit, S. (2020, November). The future of remote work: An analysis of 2,000 tasks, 800 jobs, and 9 countries | McKinsey.  
<https://www.mckinsey.com/featured-insights/future-of-work/whats-next-for-remote-work-an-analysis-of-2000-tasks-800-jobs-and-nine-countries>
8. Pawlak, J., Circella, G., Mahmassani, H., & Mokhtarian, P. (2020). Information and Communication Technologies (ICT), Activity Decisions, and Travel Choices: 20 years into the Second Millennium and where do we go next? TRID - the TRIS and ITRD Database, 12.

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## People-place bonding as an approach for behaviour analysis in city development

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There is a non-stop connection between people and places which formulates intangible and cognitive qualities that are encoded in each place. These qualities are representing the long-term relationship between places and people among different generations, this relationship is influenced by traditions, myths, rituals, identity, concepts, and many more factors (Shamai, 1991; Relph, 1976). Places are not considered as a physical setting only, but also reflect messages and meanings, which people perceive and decode based on their roles, experiences, expectations, and motivations (Rapoport, 1990).

Through daily life, people experience places through their senses (sight, hearing, smell, taste, touch). This sensual experience has a huge effect on how they perceive places, as well as their emotional connection to these places, which trigger different levels of sense of place. Sense of place is that feeling of belonging, identity, and attachment that the individual or group of people hold about a particular place as a result of their cultural interactions with it (Tuan, 1977).

There are three stages of sense of place as Relph (1976) explained, the first level is familiarity with the place, which represents being in a place without realizing its meanings and having no feeling of belonging towards it. The second level is an ordinary familiarity with the place, it is more cultural than personal, where people have deep and strong participation with the place. They will contribute to social activities by paying attention to the place's symbols. This level is most experienced in familiar and sacred places. The third level is profound familiarity with the place. In this level, a person is integrated with the place. These levels play an essential role in people-place bond that contributes in the public participation initiatives and events for the city development projects.

In this paper, a study will be made to identify the term "place" from different perspectives in order to revise the connection between people and places. This study will also highlight the importance of people's feelings toward places and how their sense of place can reinforce their belonging and drive them to participate actively in their city development.

Keywords: people behaviour, sense of place, public participation, place qualities, city development

### References

Rapoport, A. (1990). *The meaning of the built environment: a nonverbal communication approach*. Tucson: University of Arizona Press.

Relph, E. (1976). *Place and placelessness*. London: Pion.

Shamai, S. (1991). Sense of place: an empirical measurement. *Geoforum*, 22 (3), 347-358.

Tuan, Y.-f. (1977). *Space And Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press.

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## Mapping Identity: Find the socio-ecological glue for place making

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Identity is today a key aspect of local development. Landscape identity is understood as transactional process of identity building in the interaction between people and their surrounding landscape (Loupa-Ramos et al. 2016), and is conceptually related to territorial identity and place identity. The process of construction of identity is a shared process that selects a set of landscape qualities, including physical and social aspects, is organised in such a way that it becomes a coherent and unique whole with which people identify, and allow a distinction from other surrounding areas. It is always a dynamic process, varying over time, essentially based on positive differentiation. Changes in identity are the result of changes in people's perceptions and behaviour towards spaces, but also of planning decisions shaping space (Eetvelde, et al., 2016). Here it is argued that understanding this dynamics is pivotal to better steer spatial planning. By gaining insights on what people value in their surrounding landscape and where the “identity voids” located are, action can be taken to maintain or strengthen existing identities, or actively create contents or accessibility to contents that promote the creation of new identities.

Reconnecting people and their landscape (Selman 2012) calls for acknowledging socio-ecological processes as basic glue for place making.

However two challenges arise: (1) How to capture the contents of identity, i.e., how to capture the physical and social characteristics that make it unique, and (2) How to map these identity contents in a format that is straightforward to be integrated in the planning process.

By using the methodological approach developed by Loupa-Ramos et al. (2019), we intend to answer these questions by presenting results from three case studies across different territorial contexts: urban (Almada), peri-urban (Palmela) and rural (Chamusca).

Scrutinizing the results provided by the three cases on social representations, both in terms of structure and processes and identity-related phenomena, spatial patterns emerge that allow us to typify the complexity and dynamism of space related collective identity within local communities.

Keywords: mapping identity, landscape identity, place identity, spatial planning

### References

Loupa-Ramos, I. L.; Bernardo, F. ; Ribeiro, S.C. & Eetvelde, V.V. (2016). Landscape Identity: implications for policy making. *Land Use Policy*, 53, 36–43.  
doi:10.1016/j.landusepol.2015.01.030 (IF -2017- 3.662)

Loupa Ramos, I., Bianchi, P., Bernardo, F., Van Eetvelde, V. (2019) What matters to people? Exploring contents of landscape identity at the local scale. *Landscape Research*, 44, 320-336.  
DOI:10.1080/01426397.2019.1579901.

Selman, P. (2012) Sustainable Landscape Planning: The Reconnection Agenda. Routledge 176 Pages ISBN 9781849712637

Eetvelde, V.V.; Ramos, I.L., Bernardo, F. (2016) Valuing landscape identity of local inhabitants through a tourism discourse. Collins, T. Kindermann, G.; Newman, C. & Cronin, N (Eds) Landscape Values: Place and Praxis (pp 375-381). Co Galway: Galway (Ireland) ISBN 978-1-908358-43-1.

85062

## Understanding students' place attachment in the case of a newly built university neighbourhood

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During their period of stay, higher education students develop an attachment to their term-time location. Research has shown that this place attachment within their university city strongly depends on the students' familiarity with the urban environment, different forms of everyday mobilities, and the socio-cultural context of the city. It also varies from international to local students, as well as from first-years to postgraduates. With the emergence of recently established twenty-first-century universities in cities without any traditional student areas, it is essential to reconsider how, and to what extent, students develop an attachment to their urban environment. The present ongoing study addresses this issue by focusing on the case of the newly developed university neighbourhood 'Belval' in the city of Esch-sur-Alzette, Luxembourg. Belval is a regenerated industrial site that has been transformed into a so-called 'knowledge district', and includes the main campus of the University of Luxembourg since 2015.

By using a mixed approach, combining a survey questionnaire and focus group discussions, this study aims to provide in-depth insights to the formation and characteristics of students' place attachment. It highlights the students' place of residence (on-campus or in the city centre) and their student mobility background (internationals or locals) as two major factors that are thought to influence place attachment. In addition, the existing physical and social discontinuity between the campus and the historical city centre is a specific contextual element that might interfere in the development of the students' place attachment.

Findings will provide useful information about the relationship between the student population and a postindustrial city that has recently been undergoing massive transformations to enter the path of the knowledge economy.

Keywords: place attachment, sense of place, student geographies, Belval

### References

Fincher, R. and Shaw, K. (2011) 'Enacting separate social worlds: "International" and "local" students in public space in central Melbourne', *Geoforum*, 42(5), pp. 539–549.

Holdsworth, C. (2009) 'Between two worlds: local students in higher education and "scouse"/student identities', *Population, Space and Place*, 15(3), pp. 225–237.

Holton, M. (2015a) 'Adapting relationships with place: Investigating the evolving place attachment and "sense of place" of UK higher education students during a period of intense transition', *Geoforum*, 59, pp. 21–29.

Prazeres, L. (2018) 'At home in the city: everyday practices and distinction in international student mobility', *Social & Cultural Geography*, 19(7), pp. 914–934.

Yu, S. et al. (2018) ““Is there a bubble to burst?”-college students’ spatial perception of campus and the city, a case study of rhodes college in memphis, TN’, *Urban Geography*, 39(10), pp. 1555–1575.

85039

## An infrastructural approach to urban design - Creating room for improvised activities and social interaction in public space

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In recent years, there has been significant interest in creating more vibrant and inclusive urban public spaces. At the same time as 'vibrant' and 'inclusive' serve as success measures in urban design projects, there is a growing concern for public spaces that appear over-programmed, 'tight' (Franck & Stevens, 2007), monotonous, and often adapted for tourists and the affluent middle class (Bjerkeset & Aspen, 2016). Critical theorists argue that contemporary urban planning and design leads to limited democratic use of public spaces, restricting access for so-called 'unwanted' user groups, such as the homeless, drug addicts, and political protesters (Mitchell, 1995).

Pablo Sendra and Richard Sennett argue that there are places where improvised activities and social interaction do not happen due to rigid urban environments that are not allowing improvisation to take place (Sendra & Sennett, 2020). They introduce the concept of 'Infrastructures for disorder' as an alternative to conventional planning and design principles. This concept contributes to critical urban theory and introduces urban design strategies practitioners can use (Sendra, 2016). The basis for 'Infrastructures for disorder' is the allegation that disorder can encourage social interaction and unplanned activities (Sennett, 1970). Furthermore, the contradiction: 'How can we design disorder if design itself tends to introduce more order?' (Sendra & Sennett, 2020: 53). Sendra and Sennett suggest initial interventions in a public space's existing infrastructure to create more room for unplanned activities and flexible use. One example is interventions to access running water and electricity to facilitate an improvised community kitchen or a pop-up café. These interventions can enable neighborhood initiatives and citizen-driven interventions to arise, develop and change over time.

This study investigates this infrastructural approach's potential as urban planning and design tool. A literature review explores available research on public space interventions in place's existing infrastructure. The aim is to understand how these initial interventions can successfully provide more vibrant and inclusive urban public spaces that allow for spontaneous activities and social interactions in spaces previously perceived as unsocial, monotonous, and over-programmed.

Keywords: urban design; public space; space interventions; critical urbanism; social interaction

### References

Bjerkeset, S., & Aspen, J. (2016). Private-public space in a Nordic context: the Tjuvholmen waterfront development in Oslo, *Journal of Urban Design*, 22:1, 116-132, <https://doi.org/10.1080/13574809.2016.1240010>

Franck, K., & Stevens, Q. (2007). *Loose Space: Possibility and Diversity in Urban Life* (K.

Franck & Q. Stevens (eds.)). Routledge.

Mitchell, D. (1995). The End of Public Space? People's Park, Definitions of the Public, and Democracy. *Annals of the Association of American Geographers*, 85(1), 108–133.  
<https://doi.org/10.1111/J.1467-8306.1995.TB01797.XA>

Sendra, P. (2016). Infrastructures for Disorder. Applying Sennett's notion of disorder to the public space of social housing neighbourhoods. *Journal of Urban Design*, 21:3, 335-352,  
<https://doi.org/10.1080/13574809.2015.1133223>

Sendra, P., & Sennett, R. (2020). *Designing Disorder: Experiments and Disruptions in the City*. Verso Books.

Sennett, R. (1970). *The uses of disorder: Personal identity & City life*. Knopf.

85226

## The road, from a mobility space to a new place for socializing. The case of measures for temporary squares and dehors in Italy

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The paper investigates the role of public space's temporary occupations in creating new places able to activate social interactions in neighborhoods.

It focuses on the cases of the Italian cities Milan, Bologna, and Bari. In recent years these cities, like others in western countries, developed several public programs for public space to increase the amount of space for pedestrians and social activities, enhance its quality, or just reclaim space for social life instead of cars. The Covid-19 pandemic accelerated this trend. During the post lockdown period in 2020, they established some adaptation strategies to cope with the complex social, health, and economic conditions due to the pandemic. Between others, they set extraordinary measures to facilitate public land occupations and provide more open space for economic activities. Their programs, inspired by tactical urbanism principles (Lydon et al. 2011), called Bari Open Space, Adaptation Strategy Milan 2020 and Piazze aperte, also fostered the temporary realization of bars and café dehors on roads and parking lots, rethinking the role of the street as a public space (UN-Habitat 2013). The measures boosted the local economy, while bars and café could work outdoor, and played an essential role in bringing people "out" after the lockdown. Not only. Many temporary new spaces, realized with these measures, have resulted from specific requests of urban actors like citizens, associations, economic realities. Who use and animate the public space. From this perspective, the measures that made those spaces in the street finally available created new places by gathering people and improving the neighborhood's social life (Hajer, Reijndorp 2001; Gehl, 1987, 2010).

After analyzing the case studies, the paper proposes considerations on different aspects. Firstly, on the contents of these temporary spaces, the planning tools, and procedures necessary to make them. The goal is to critically describe what kind of emergency measures have been adopted by public administrations, what conditions made them possible, what issues they have had now and will have in the future when the emergency phase is over. Secondly, on the significance of these public spaces and their role in transforming, or not, the areas where they are into meaningful places. Here, the goal is to discuss which kind of people's involvement in the design, construction, and maintenance is necessary to preserve these places over time.

Keywords: public space, tactical urbanism, adaptation strategies, places, social interaction, pandemic

### References

- Carmona M., Tiesdell, S., Heath, T. (2010) *Public Spaces, Urban Spaces*, Oxford: Architectural Press.
- Carmona M. (2018) "Place value: place quality and its impact on health, social, economic and

environmental outcomes", *Journal of Urban Design*

Gehl, J. (1987), *Life Between Buildings: Using Public Space*, translated by Jo Koch, Van Nostrand Reinhold, New York

Gehl, J. (2010), *Cities for People*, Island Press.

Hajer M., Reijndorp A. (2001) *In search of new public domain*, Rotterdam: Nai Publishers,.

Lydon M., Bartman D., Woudstra R.,(2012) *Tactical Urbanism 2: Short-term Action, Long-term Change*. Miami: Next Generation of New Urbanists.

Whyte W.H. (1980) *The Social Life of Small Urban Spaces*, Washington, D.C.:The Conservation Foundation.

UN-Habitat (2013) *Streets as public spaces and drivers of urban prosperity*, Nairobi

84262

## Heap Development in the Ruhr Metropolis - The 'mountains of the Ruhr' as places of identity

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For decades, the Ruhr region (Germany) was shaped by coal mining. In the late 19th and early to mid-20th century, industrialization and accompanying urbanization processes turned small villages into large cities. In consequence, the Ruhr region became the largest industrial agglomeration in Europe with coalmines being both the main employer and an essential identity-forming feature.

As of today, the Ruhr region has undergone another set of decades of structural change. Former industrial sites were used for recultivation and renaturation and by now, the region no longer understands itself as the 'Ruhr region' but as the 'Ruhr Metropolis'. Within all the change, however, there is one constant – a special kind of PLACE that remains: the heaps. As former collection points for the collieries' slag, they are now the 'mountains of the Ruhr', a vital element of Green Infrastructure (GI) of the 'Metropole Ruhr' and still a foundation of identity for 5.1 million people.

The regional planning authority of the Ruhr region, the Ruhr Regional Association (RVR), is responsible for the preservation and development of open space and GI. Currently, the RVR develops 46 slagheaps and will take over several more in the near future (cf. Website RVR, 2022). The (beautiful) challenge of the RVR is now to make the 'mountains of the Ruhr' usable for the region's inhabitants, to anchor the ecological value of this special GI in the open space system and to bring together cultural preservation and semantic change.

This presentation offers insights into the transformation process of the Ruhr region, the change in identity of its slagheaps and the planning and development of heaps as an anchor of urban GI. Recent findings on the narrative and place-making of heaps will be presented, highlighting both the storyline for the 'mountains of the Ruhr' as a whole and the individual character of the heaps (cf. RVR, 2022). Thus, this presentation offers an empirical example of the shift in meaning of PLACE, which creates identity, drives ecological restoration, and is one anchor of the 'Ruhr Metropolis' becoming the greenest industrial region in Europe (cf. RVR, 2021).

Keywords: heap development, regional identity, place-making, ecologic restoration, green infrastructure

### References

RVR- Regionalverband Ruhr (2022): Nutzungskonzept Touristische Halden. In press.

RVR – Regionalverband Ruhr (2021): People.Nature.Space. Green infrastructure in the Ruhr metropolis. Factbook Green Infrastructure. Website:

[https://www.rvr.ruhr/fileadmin/user\\_upload/01\\_RVR\\_Home/02\\_Themen/Umwelt\\_Oekologie/Offensive\\_GI/AbschlussberichteOGI2020/2021\\_Factbook\\_GI\\_engl.pdf](https://www.rvr.ruhr/fileadmin/user_upload/01_RVR_Home/02_Themen/Umwelt_Oekologie/Offensive_GI/AbschlussberichteOGI2020/2021_Factbook_GI_engl.pdf) (last accessed 10 January 2022).

Website RVR (2022): Halden und Landmarken. Abraumhalden werden zu Orten für die Freizeit. <https://www.rvr.ruhr/themen/tourismus-freizeit/halden-landmarken/> (last accessed 14 January 2022).

84689

## Spatial assessment of Indian Religious Street: A study of streets of Udupi

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Streets determine the spatial characteristics of a city and are its most substantial element. Street plays an important role in connecting people, and acts as a public space where people walk, talk, meet family and friends, eat, seat, shop etc. Streets maintain their unique identity by depicting their sense of place and providing psychological and functional meaning to people's lives. However, streets where religious buildings are situated, are visited by numerous pilgrims daily and high temporal spectrum. These should be assessed for their temporal activities, physical features and spatial qualities. This study aims to investigate the character of one of such streets, Car Street Udupi, which is a commercial street situated in the temple complex of the famous Sree Krishna Temple in Udupi, Karnataka. This study desires to uncover the spatial qualities of the street in terms of its physical characteristics based on the tool given by Reid Ewing, Clemente, and Handy, which includes imageability, enclosure, human scale, transparency, and complexity, and to establish the relevance of these qualities in Indian religious streets. Literature reviews, on-site documentation -field notes, photographs, and videos, visual assessment, and questionnaire surveys are methods used for data collection.

Keywords: Streets, Spaces, Spatial assessment, character of a street, Imageability.

### References

Tandon, M., & Sehgal, V. (2017). Traditional Indian religious streets: A spatial study of the streets of Mathura. *Frontiers of architectural research*, 6(4), 469-479.

Ewing, R., & Handy, S. (2009). Measuring the unmeasurable: Urban design qualities related to walkability. *Journal of Urban design*, 14(1), 65-84.

Carmona, M., Heath, T., Tiesdell, S., & Oc, T. (2004). Public Places Urban Spaces. *URBAN DESIGN QUARTERLY*, 90, 40.

Jacobs, A. B. (1993). *Great Streets* Cambridge.

84428

## Measuring GI multifunctionality

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Green Infrastructure (GI) has been well recognized as vital solution for building sustainable cities that can contribute to climate change mitigation and adaptation. According to European Commission (2013), GI is essential for promoting environmental sustainability, biodiversity and a wide range of ecosystem service while also serve public needs through its physical facilities and systems. Multifunctionality ensures the sustainable impact of green infrastructures for cities based on past studies. More specifically, GI multifunctionality aims at protecting environment and biodiversity through infrastructure development. The current challenge however is that many infrastructures are not always designed to accommodate the changing climatic and environmental conditions, as well as the rapid expansion of urban population. Although GI has been researched over the past few years, the multifunctionality of GI is still understudied. The present study aims at proposing a model for measuring the level of multifunctionality of green spaces/infrastructures. Multifunctionality in this study refers to a range of functions including recreation and provisioning of habitat, accounting in total 19 functions. The dataset consists of some GI units in Stavanger ranging from small neighborhood green spaces to large urban forest. Indicators has been recorded for each GI unit and the importance of them is investigated using recursive feature elimination technique. Some of the indicators were extracted using ArcGIS tool, after mapping and visualizing different layers, e.g., tree height layer. The remaining indicators have been quantified based on primary and secondary sources. The model was trained using Support Vector Machine (SVM) classifier and was evaluated according to common performance metrics such as accuracy and precision. The final model is developed specifically for the case of Stavanger city in Norway, but transferability of it will be tested to other cities in the future. The resulting model serves as a base for multifunctionality evaluation and as an information provider of possible missing functions for a specific GI unit so that the urban planners can design multifunctional green spaces more effectively.

Keywords: Green Infrastructure, multifunctionality, indicators, SVM, ArcGIS

### References

1. Madureira H., Andresen T., 2014. Planning for multifunctional urban green infrastructures: Promises and challenges. *Urban Design International* 19(1).
2. Meerow S., Newell J., 2016. Spatial planning for multifunctional green infrastructure: Growing resilience in Detroit. *Landscape and Urban Planning* 159, 62-75.
3. Hansen R., Rall E., Chapman E., Rolf W., Pauleit S., 2017. *Urban Green Infrastructure Planning: A Guide for Practitioners*. GREEN SURGE.
4. Badiu D.L., Nita A., Ioja C.I., Nita M.R., 2019. Disentangling the connections: A network

analysis of approaches to urban green infrastructure. *Urban Forestry and Urban Greening* 41 (2019) 211–220.

84888

## Working from place and potential: reconsidering the role of public space in regenerative development and design

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The 21st century is characterised by unpredictable change occurring at an unprecedented pace and on an unparalleled scale. Many of these transitions occur in cities and have a profound impact on the way people conceive of and use the urban environment. For example, while the Covid-19 pandemic restricted the use of space, it also highlighted the need for social interaction and access to nature. As cities are finding ways to cope with the pandemic, the question is how can we harness this change to create a new trajectory for development that are more responsive to global environmental and social challenges?

This paper focuses on the value of regenerative development and design to harness change and create new opportunities through the development of public space. Regenerative development and design centres on the notion of evolutionary sustainability and aims to promote and enable the co-evolution of humans and nature. A critical part of the process is working from place and potential. Given this, harnessing change, need to move beyond a mere understanding of how public spaces transform over time, to an understanding of the evolution of public space.

Following a brief overview of a framework of changing and evolving public space, the paper proceeds to discuss the first part of the process towards evolving public space as related to a particular inner-city space in Pretoria, the capital city of South Africa. The author argues that in dealing with the aim of co-evolution, the process of public space needs to transcend to a higher level, which requires detailed knowledge of the place and the common knowledge base.

Uncovering the story of place will highlight the potential - what a place wants to be. This then opens the way to restructure the environment through form and function so that the potential can be actualised by aligning the place and people through an understanding of the ecological and cultural systems in a specific geographic setting while facilitating ecological diversity and social cohesion in cities.

**Keywords:** Urban transformation, public space, regenerative development and design, place and potential.

### References

- Hes, D. & du Plessis, C. (2015). *Designing for Hope: Pathways to Regenerative Sustainability*. London: Earthscan Routledge.
- Landman, K. (2019). *Evolving Public Space in South Africa: Towards regenerative Space in the Post-apartheid City*. London: Routledge
- Mang, P., Haggart, B. & Regensis. (2014). *Regenerative Development and Design: A Framework for Evolving Sustainability*. Hoboken, NJ: John Wiley & Sons.
- Mang, P. & Reed, B. (2012). Designing from place: A regenerative framework and methodology. *Building Research and Information*, 40 (1): 23-38.

84889

## Building adaptive capacity and evolutionary potential through public space development

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Cities are changing and so are the spaces within. The Covid-19 pandemic and many protests around the world changed how people regarded and used public space. Yet, change is the only constant. According to resilience thinking, things will always change and thus to resist it, is to increase our vulnerability, miss opportunities and limit our options (Walker & Salt 2006). The challenge is therefore not to return to our prior conceptualisation of public space but to reconsider the nature and use of public spaces in the future.

This paper focuses on building adaptive capacity and evolutionary potential through public space development. Adaptive capacity refers to the ability of the system to respond to changing circumstances. Evolutionary potential, however, is the ability of the system to build better, to move to higher orders of complexity, to transform, improve, and create new structures and conditions for a healthier system. The discussion centres on several case studies from South Africa, which included detailed spatial analysis, semi-structured interviews, participant observation and documentation review. Drawing from resilience and whole-systems thinking, the analysis shows that it is counterproductive to negate urban transformation and demonstrates the need to work with change. This will not only increase the adaptive capacity of the urban environment but also create new opportunities to revisit the public realm in the light of recent global events to support both residents, temporary workers and tourists through resilient approaches. The paper argues the redevelopment and reconceptualization of public space in rapidly changing cities can enable urban planners and designers to build adaptive capacity and evolutionary potential in the urban system, that is not only likely to benefit the users of public space, but also to have many uplifting ripple effects within the broader environment. It also offers a way to readdress cultural misrepresentation and spatial injustices.

Keywords: adaptive capacity, resilience, evolutionary potential, public space, change

### References

- Hes, D. & du Plessis, C. (2015). *Designing for Hope: Pathways to Regenerative Sustainability*. London: Earthscan Routledge.
- Landman, K. (2019). *Evolving Public Space in South Africa: Towards regenerative Space in the Post-apartheid City*. London: Routledge.
- Mang, P., Haggart, B. & Regenis. (2014). *Regenerative Development and Design: A Framework for Evolving Sustainability*. Hoboken, NJ: John Wiley & Sons.
- Walker, B. H. & Salt, D. (2006). *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*. Washington, DC: Island Press.

84381

## Role of Public Spaces Between Built Heritage and Living City: the case of Changle Gate in Zhengding, China

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For historic cities in contemporary China, urban public spaces are not only essential to residents' everyday life but are also entitled to the power of shaping and manifesting local identity. Public spaces, heritages, and their urban context should constitute a correlated entirety that can be read as a unique historic urban landscape (HUL). However, it is now a global phenomenon that heritage-related public spaces are regarded as resources for tourism. Capital and policies, the two primary forces affecting public spaces in China, tend to selectively manipulate history and public life in favor of mass tourism, which could potentially cause spatial injustice in public spaces. Changle Gate, dating back to the Ming Dynasty (1449 A.D.), is the south gate of Zhengding, China. It was listed as a "Major Historical and Cultural Site Protected at the National Level" in 2013 when a series of urban redevelopment projects aimed at boosting tourism was launched and produced many new public spaces around the gate.

From different stakeholders' perspectives, including the tourism business, local community, local government, and heritage preservation authority, this paper analyzed the quality of these new public spaces around Changle Gate on their spatial form, dimension, function, and relationship with the city. The aim was to examine whether these public spaces, in addition to their roles in mass tourism, are equally adequate to provide the local community with suitable conditions for public life and to manifest and preserve the local identity through HUL.

The paper found that these themed public spaces put too much emphasis on mass tourism and policy agendas. The selective interpretation of history and urban form, which lacked in-depth typo-morphological studies and public involvement, has led to estranged and simple forms and functions in these public spaces, weakening their roles in diversified local public life and HUL. As a result, these public spaces subtracted the heritage from the living city instead of being an integration medium.

**Keywords:** themed public space, small historic city, mass tourism, historic urban landscape, public life

### References

- Chen, Shuisheng (2018): The Three Logics of Urban Public Space Production in China and Their Balance. In *Academic Monthly* 50 (05), pp. 101–110.
- Daugbjerg, Mads; Fibiger, Thomas (2011): Introduction: Heritage Gone Global. Investigating the Production and Problematics of Globalized Pasts. In *History and Anthropology* 22 (2), pp. 135–147. DOI: 10.1080/02757206.2011.558585.
- Liu, Qian; Pezzetti, Laura (2021): Tourism-boosting Rebuilding of Historic Buildings and Urban Form: The Case Study of Yanghe Tower and Its Urban Morphology in Zhengding, China. In : *ISUF 2021: Urban Form for Sustainable and Prosperous Cities*. Glasgow, 28, June 2021 - 03, July 2021.

Meng, Chao (2017): Transformation and Reconstruction. Research on the Change of Public Space and Public Life in Contemporary China. Beijing: Economic Press China.

Pezzetti, Laura Anna (2019): Layered Morphologies and Latent Structures. Reading, Decoding and Rewriting to Enhance Historic Rurban Landscape. Shanghai: Tongji University Press.

Van Melik, Rianne; Van Aalst, Irina; Van Weesep, Jan (2007): Fear and Fantasy in the Public Domain: The Development of Secured and Themed Urban Space. In *Journal of Urban Design* 12 (1), pp. 25–42. DOI: 10.1080/13574800601071170.

Xu, Conghui (2018): Protection and Display of Zhengding City Wall and South Gate Barbican Platform. In *Wenwu Chunqiu* (3), pp. 46–51.

85067

## Sustaining marginal places: site-specific design for reanimating neglected courtyards in post-war urban neighbourhoods

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In this research, we examine how places can be identified in two disused courtyards in the post-war urban neighborhood Den Haag Zuidwest which is facing drastic urban transformation in upcoming years. Temporarily neglected, unused, or ill-functioning urban spaces—urban interstices—can be considered as laboratories for alternative ways of engaging urban realities and experimenting with new urban processes (Sola-Morales, 1995; Franck and Stevens, 2007; Levesque, 2013). Recent studies in the field of urban design expose how design can facilitate spontaneous social practices in these overlooked urban areas (Oswalt et al., 2013; Lokman, 2017). Nevertheless, hardly any academic discussions have scrutinized how those emerging social appropriations contribute to, the perception and interaction with specific places in the context of drastic urban transformation. In this research, we discuss the notion of place as both the spatial-physical components inherent to a specific geographical location (de Wit, 2014), and the social-cultural constructed entity that continually evolves with ongoing stories and events (Trancik, 1986; Massey, 2005). To recognize specific places one needs to firstly orient oneself in a space and architecture is able to provide the sense of unity that can provide the key for such orientation (Moughtin, 2007). Through landscape architectonic design, site-specific spatial-physical components can be recovered in interstitial spaces (de Wit, 2015). In this research we depart from this position to ask the question if the manifestation of specific places can invite continuing social practices to nourish the neglected spaces of deprived urban neighborhoods, and whether this newly established bond between people and place could secure continuity in the urban redevelopment process.

These questions are explored using the research through designing method. Through designing we analyze site-specific morphological, material, social and ecological qualities, and further examine how design experiments may lead to alternative scenarios in the urban transformation. Photographs and interviews were translated into different analytical drawings that expose site specificities. Two design experiments show how highlighting site-specific characteristics and inviting spontaneous social and ecological processes would transform the courtyards into places of encountering: where people and wildness, and old and new residents converge, and where the sense of place is amplified. The habitat condition of one courtyard was diversified with a minimal design intervention, the other courtyard provides a playful meeting point with movable pallets and urban agricultural planting boxes. Consequently, the design experiments pose an alternative scenario for the urban reconstruction: the in-between courtyards are to be preserved, as a morphological reference of the orthogonal urban grid in the new plan. At the end of the research, we plea for a re-engagement of urban interstices in postwar urban neighborhoods with special attention to the potential of manifesting and nourishing specific places. We conclude two design lessons from this research through design: disclosing and founding. Disclosing means to

identify existing site specificities, both on spatial-physical aspects and on social-ecological aspects; Founding foregrounds a design mindset that considers the intervention as an initiation: to establish the beginning of a place-bound transformation, leaving the endpoint open to the practices of its inhabitants.

Keywords: Place-making; Urban regeneration; Urban interstices; Landscape architecture design; research through design

#### References

- de Solà-Morales, I. (1995). Terrain Vague. In C. Davidson (ed.), *Anyplace* (pp. 118–123).
- de Wit, S. (2013). Metropolitan gardens: gardens in the interstices of the metropolitan tissue. *SPOOL*, 1(1). <https://doi.org/10.7480/spool.2013.1.630>
- Franck, K. A., & Stevens, Q. (2007). *Loose space : possibility and diversity in urban life*. Routledge.
- Lévesque, L. (2013). Trajectories of Interstitial Landscapeness: A Conceptual Framework for Territorial Imagination and Action. In A. Mubi Brighenti (ed.), *Urban interstices: the aesthetics and the politics of the in-between* (pp. 21–65). Ashgate Pub.
- Lokman, K. (2017). Vacancy as a laboratory: design criteria for reimagining social-ecological systems on vacant urban lands. *Landscape Research*, 42(7), 728–746. <https://doi.org/10.1080/01426397.2017.1355446>
- Moughtin, C. (2007). *Urban Design Street and Square*.
- Oswalt, P., Overmeyer, K., & Misselwitz, P. (2013). *Urban catalyst: the power of temporary use*. Dom Pub.
- Trancik, Wiley & Sons., R. (1986). *Finding lost space: theories of urban design*. John Wiley & Sons, Inc.

84155

## Singles in Cities: Meaning of Neighborhood and Community Participation among Single Women in Tokyo

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In the past several decades, the number of single-person households in the city centers of large metropolitan areas has significantly increased around the world (Klinenberg, 2012). Tokyo, the largest city in Japan, is no exception. The phenomenon is mainly due to an influx of younger generations from outside the region, given the city's high concentration of businesses and higher educational institutions (Ronald & Hirayama, 2009). In addition, an increased number of women in the workforce and growing economic uncertainty (given that man can no longer support an entire family as a solo breadwinner) are the major reasons for females and males in Japan staying single; marriage is no longer economically essential (especially for women), and can even be considered a burden/risk (Retherford, Ogawa, & Matsukura, 2001).

Though socioeconomically and generationally diverse, individuals in such single households are often considered temporary residents with weaker ties to their neighbors and are viewed as being unengaged in neighborhood activities (Putnam, 1995; Rohe & Stewart, 1996). These actions may hurt neighborhood well-being. Through an examination of singles in Tokyo, Japan, this paper explores the social relationships singles have within and outside of their neighborhoods and how the nature of such relationships influences a neighborhood's condition. Using a recent survey and interviews with singles in central Tokyo, the paper tries to shed light on their daily lives, especially single women's social relationships and the meaning of neighborhood activities. The results indicate that social relationships are influenced by a single person's gender and age cohort. While single women aged 50–64 have relatively active social relationships, both within and outside of the neighborhood, and feel less fear regarding the future, younger women between 35 and 49 tend to withdraw from neighborhood activities and worry more about finances, housing, and isolation. Uncertainty about the future related to social change (including loss of jobs), the threat of natural disasters, and negative social perceptions associated with being singles prevent the younger group from participating in neighborhood activities and expanding their social networks. At the same time, younger single women do not entirely avoid participating in neighborhood activities, as men often do, and remain open to the idea of staying in the neighborhood as long-term residents.

Based on the results, this paper advocates for the engagement of local governments and neighborhood organizations in efforts to include singles—especially younger women—in neighborhood activities. It also highlights the elimination of economic gender gaps and a shift in social norms regarding family composition as key to neighborhood well-being.

Keywords: singles, women, community participation, neighborhood well-being, gender, Japan

### References

Klinenberg, E. (2012). *Going Solo*. London, UK: Penguin Books.

Putnam, R. D. (1995). Bowling Alone: America's Declining Social Capital. *Journal of Democracy*, 6(1), 65–78. <https://doi.org/10.1353/jod.1995.0002>

Retherford, R. D., Ogawa, N., & Matsukura, R. (2001). Late Marriage and Less Marriage in Japan. *Population and Development Review*, 27(1), 65–102.

Rohe, W., & Stewart, L. S. (1996). Homeownership and neighborhood stability. *Housing Policy Debate*, 7(1), 37–81.

Ronald, R., & Hirayama, Y. (2009). Home alone: the individualization of young, urban Japanese singles. *Environment and Planning A*, 41, 2836–2854. <https://doi.org/10.1068/a41119>

84669

## Urban transformation: manifold and multifaceted processes in formerly working-class neighbourhoods of Prague

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The paper is a theoretical and empirical contribution to urban transformation processes occurring in two formerly working-class neighbourhoods, Karlín and Smíchov, in the inner-city of Prague. Urban transformation is a process that involves various and simultaneously occurring subprocesses, which make it broad, multi-dimensional and complex. The study seeks to identify and contextualise those subprocesses (e.g. gentrification, regeneration, internationalisation, commercialisation, hipsterfication, etc.) and analyse their impact on the urban environment and identity construction. Due to the complexity and extent these impacts have, a more inclusive and interdisciplinary approach is necessary, the socio-spatial approach. The key idea of the socio-spatial approach is to scrutinise the mutual influence of urban space and society (the continuous two-way process in which people influence and modify urban spaces and, at the same time, are affected and conditioned by the urban space).

The research aims to bring together mainly qualitative but also a quantitative approach in analysing urban transformations. The study employs different methods such as analysis of population data, ethnographic and participatory observation, photo documentation, mapping, policy and development plan analysis, surveys and media discourse analysis.

Finally, the paper will delineate the identified urban transformation subprocesses and explain them in their context.

Keywords: Urban transformation processes, inner-city neighbourhood, post-socialist city, socio-spatial approach

### References

- Gottdiener, M., Hutchison, R., & Ryan, M. T. (2011). *The new urban sociology*. 4th Ed. Westview Press. Boulder. ISBN 978-0-8133-4425-6.
- Hamnett, C. (1991). The blind men and the elephant: the explanation of gentrification. *Transactions of the Institute of British Geographers*, 173-189.
- Krstić, I. (2015). Gentrification of Prague, Budapest and Belgrade in the context of post-socialist transformation and globalisation. *Kultura*, (146), 86-103.
- Lefebvre, H. (1991). *The production of space* (Vol. 142). Blackwell: Oxford.
- Lees, L., Slater, T., & Wyly, E. (2013). *Gentrification*. New York, NY: Routledge.
- Ouředníček, M., & Temelová, J. (2009). Twenty years after socialism: the transformation of Prague's inner structure. *Studia Universitatis Babeș-Bolyai, Sociologia*, 54(1), 9-30.
- Soja, E. W. (1980). The socio-spatial dialectic. *Annals of the Association of American Geographers*, 70(2), 207-225.
- Sýkora, L. (1996). Economic and social restructuring and gentrification in Prague. *Acta Facultatis Rerum Naturalium Universitatis Comenianae (Geographica)*, 37, 71-81.

85286

## Revealing problems and potentials of public space in the future city: A systematic literature review

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The primary purpose of urban planning and design practices is to prepare cities for expected or unexpected future conditions. The world is changing fast, and the future is nearer than we think. Many scholars from different disciplines researched the "future of city" concept and assessed this raising topic according to their professional point of view. In this context, this study, which aims to define the new subject areas that will come to the fore in the future city and understand the function of the public space that is one of the handled topics in future cities, consists of two stages. In the first stage, to identify prominent topics related to the cities of the future, we conducted a literature search on the Scopus database, which covers only articles published between 2015 and 2022, using the keywords of "future city," "city of the future," "urban future," "city in the future," "future," "urban design," and "urban space." 1216 studies were obtained, and 537 of them were eliminated due to parallel independent assessments of the abstracts. We classified 643 articles according to their focused themes and keywords, like sustainability, smart city, COVID-19 pandemic, transportation & mobility, climate change, urban space, and public space. In this process, Bibliometric analysis was also conducted to give a general view of selected literature. In the second stage, public spaces, identified as a critical research topic in the future of cities, have been examined in depth. A full-text review was done for 138 articles using discourse analysis to evaluate the role of the public space in future cities, visionary approaches and alternative realities to public spaces, and to identify future's challenges related to public spaces and proposed solutions & policies for successful urban spaces. The first results show that public space in the future city is evaluated under six significant perspectives: sustainability & sustainable development, smart city & new technologies in urban design, COVID-19 pandemic & spatial design, social inclusion & design for everyone, green design & green infrastructure, climate change & energy use. Finally, we concluded with a discussion about research trends and future directions. The highlights of this literature review may encourage urban planners and urban designers to rethink the role of public space when designing vibrant, sustainable, and resilient cities of the future.

Keywords: Future city, urban design, public space, systematic literature review, bibliometric analysis

### References

- Nikitas, A., Tsigdinos, S., Karolemeas, C., Kourmpa, E., & Bakogiannis, E. (2021). Cycling in the era of covid-19: Lessons learnt and best practice policy recommendations for a more bike-centric future. *Sustainability (Switzerland)*, 13(9) doi:10.3390/su13094620
- Toolis, E. E. (2017). Theorizing critical placemaking as a tool for reclaiming public space. *American Journal of Community Psychology*, 59(1-2), 184-199.
- Glazebrook, G., & Newman, P. (2018). The city of the future. *Urban Planning*, 3(2), 1-20.

doi:10.17645/up.v3i2.1247

-Caprotti, F. (2019). Spaces of visibility in the smart city: Flagship urban spaces and the smart urban imaginary. *Urban Studies*, 56(12), 2465-2479.

-Porębska, A., Rizzi, P., Otsuki, S., & Shiotsuki, M. (2019). Walkability and resilience: A qualitative approach to design for risk reduction. *Sustainability*, 11(10), 2878.

-Vukmirovic, M., Gavrilovic, S., & Stojanovic, D. (2019). The improvement of the comfort of public spaces as a local initiative in coping with climate change. *Sustainability (Switzerland)*, 11(23) doi:10.3390/su11236546

85129

## Urban district model in energy transition

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Decarbonisation in the urban energy systems and urban districts is essential in delivering the European Green Deal. Urban energy transition involves phasing in innovative smart technologies, testing new forms of public participation, raising awareness of energy consumption, and promoting behavioural change.

Smart cities have been rooted in marketing and ICT-driven instrumental discourses rather than in those of social rights, social-spatial behaviour and the common good (Cardullo and Kitchin, 2018). Recently, smart city governance has moved from narrow techno-orientation to broader holism (Soe et al 2021). Studies on technology-embedded urbanism provide a wider view on smart urbanism (Aurigi and Odendaal, 2021). Citizens' settings and user experiences should be the centrepiece of urban energy innovation.

The comparative study focuses on multi-actor urban cases achieving the energy efficiency of buildings through deep renovation interventions with intelligent ICT support. Energy transition has been tested and implemented at the level of urban districts in Tartu and Kohtla-Järve (Estonia), Tampere (Finland) and St. Petersburg (Russia). The cases focus on integrated energy planning aiming to implement innovative engineering solutions in cooperative practices. Pilot districts as territorial, technological and social entities are assessed on their urban structure, qualities and functionalities based on local energy systems, environments, socio-economic conditions, etc. This is the basis for developing benchmarks and setting carbon emission targets. Citizen involvement in energy planning was supported by the energy monitoring tool used to optimise energy use and select energy efficiency measures.

Testing the tool involved a multi-actor approach from households to maintenance and engineering firms, energy operators and municipal bodies. While environmental and sustainability dimensions have dominated in Tampere; Tartu has developed a pragmatic project-based approach. The case of the shrinking Kohtla-Järve is dominated by the property market failure and marginally low prices. St. Petersburg was a case of university campus transition. The process of smart energy applications builds on the holistic, exploratory, participatory and educational domains. On community and household level, smart living and urban environment are prioritised over smart governance and smart economy. Strong leadership and clear ownership on the district level is need to speed up urban energy transition.

Keywords: energy transition, urban district, smart city, urbanism

### References

- Aurigi, A. & Odendaal, N. (2021) From “Smart in the Box” to “Smart in the City”: Rethinking the Socially Sustainable Smart City in Context, *Journal of Urban Technology*, 28:1-2, 55-70.
- Cardullo, P., Kitchin, R. (2018) Smart urbanism and smart citizenship: The neoliberal logic of ‘citizen-focused’ smart cities in Europe. *Environment and Planning C: Politics and Space*, 37 (5), pp. 813-830.
- Soe, R.-M., et al (2021), Institutionalising smart city research and innovation: from fuzzy

definitions to real-life experiments, Urban Research & Practice, DOI:  
10.1080/17535069.2021.1998592.

84545

## Public open and green spaces in industrial large housing estates – places of encounter, adoption and sustainability transformation

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The paper will discuss the role of spaces as places of encounter, as precondition for integration and social cohesion, and the adoption of places as precondition for arrival and identification in urban neighbourhoods. In particular, the linkage of adoption of space and sustainable behaviour, practices and ecological issues will be examined. By addressing public open and green spaces by the perspectives of space as 'built spaces' and 'lived spaces', findings regarding potentials and limits of open and green spaces in large housing estates and recommendations for future urban development will be presented.

The industrial large housing estates in Eastern Germany have been faced several challenges in the last three decades, all meaning fast changing paradigms and specific needs to be addressed by urban development and regeneration policies and urban planning: population loss and demolition, segregation, in-migration, growth, accumulation of diverse socio-economic challenges (childhood poverty, youth unemployment, ageing, ethnic conflicts), and finally overarching needs for sustainability transformation means manifold needs and threats for future development of these neighbourhoods.

Within the project StadtumMig case studies in three neighbourhoods in Eastern German have been conducted to assess the potential and limits of urban structure, buildings, public and green spaces, supply, social and cultural infrastructure facilities (1) to address the needs of the residents as a pre-condition to stay in the areas and (2) to support issues of sustainable urban regeneration. Criteria as spatial/physical diversity, opportunities for adoption, encounter locations, security of living, and sustainable regeneration have been evaluated using methods as on-site observations, mappings, digital walks, interviews, document and data analysis, and surveys.

The findings are covering the following cross-cutting issues: Standardised urban neighbourhoods and monotonous open spaces limit the adoption of space to meet diversifying needs. The abundance of green areas means potentials for use, but also problems of adoption. Besides a provision of basic facilities, the neighbourhoods are missing a diverse infrastructure which allows urban life and occasions to meet. Small scale neighbourhood centres are hidden anchors for supply, infrastructure facilities and as public places for encounter. The neighbourhoods offer specific opportunities for sustainability transformation, in particular linking the empowerment of local communities and residents with sustainability practices.

Finally, approaches to improve the capacities of public open and green spaces both to allow adoption and encounter and to implement measures to improve ecological sustainability of these neighbourhoods are discussed.

Keywords: urban regeneration, shrinkage, migration, urban space, social cohesion, ecological urban development

#### References

Beebeejaun, Y. 2017. Gender, urban space, and the right to everyday life. In: *Journal of Urban Affairs* 39, 3. 323–334. DOI: 10.1080/07352166.2016.1255526.

Egoz, S., Nardi, A. de. 2017. Defining landscape justice: the role of landscape in supporting wellbeing of migrants, a literature review. In: *Landscape Research* 42, 1. 74-89. DOI: 10.1080/01426397.2017.1363880.

El-Kayed, N., Bernt, M., Hamann, U., & Pilz, M. (2020). Peripheral Estates as Arrival Spaces? Conceptualising Research on Arrival Functions of New Immigrant Destinations. *Urban Planning*, 5(3), 113-114. doi:<https://doi.org/10.17645/up.v5i3.2932>

Friedrich, K. (2018): Vom Gebrauch her denken – um selbstbestimmte Raumanweisung zu ermöglichen. In: Ammon, S.; Baumberger, C.; Neubert, C.; Petrow, C. A. (Hrsg.) *Architektur im Gebrauch. Gebaute Umwelt als Lebenswelt*. Universitätsverlag der TU Berlin, S. 290-313.

Haase, A., Schmid, A. 2019. Grüne Freiräume in Ankunftsquartieren: Funktionen und Herausforderungen für ihre kooperative Entwicklung. *UFZ Discussion Papers* Nr. 4. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-63120-4>.

Haase, D., M. Wolff, and N. Schumacher. 2021. Mapping mental barriers that prevent the use of neighborhood green spaces. *Ecology and Society* 26(4):16. <https://doi.org/10.5751/ES-12675-260416>

84505

## Cosmopolitan identity, places and networks

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The ecological diversity of cities and regions influence the identity of places. Many populations, their customs and cultures have succeeded each other by shaping urban spaces and developing open habitats (Schröder 2018). Cities are made up of networks and nodes of people, socio-cultural activities, economies and places. They all contribute to the development of an intriguing identity characterised by diversity and similarities. There is no society with an unchanged primordial culture that resists change and is not transformed by others (Jullien, 2016). This research aims to show the ecological diversity of the cities, and how the local identity is perceived by foreigners and temporary inhabitants (Scaffidi, 2021). Contemporary cities are cosmopolitan spaces, where people from different countries live together (Craig, 1999; Linklater, 2002). For this reason, it is increasingly important to discuss the ecological balance of cities and social cohesion. This research examines the cosmopolitan identity of two medium size European cities characterised by international activities, migratory flows, and urban and social diversity. Palermo and Hannover are the selected cities studied under the DAAD funded research programme. The research adopts a qualitative methodology with semi-structured interviews with selected interviewees from different countries, such as New Zealand, Brazil, Bangladesh, Indonesia, Italy, Taiwan, Greece, Pakistan, Lithuania, Turkey and France. The findings show that Palermo and Hannover are perceived as places of culture, where many international people live, where the urban space is influenced by different communities, where there are cosmopolitan networks, and the local identity is the result of an ecological balance of many cultures. Moreover, the findings show both positive and negative aspects. In conclusion, this research offers valuable insights into the topic of the identity and transformation processes of cities and regions. Furthermore, this research should be considered as a starting point for further researches in this field, extending the methods adopted to other places and communities.

Keywords: Cosmopolitan, Identity, Social cohesion, Cities, Palermo, Hanover

### References

- Böhme, G. (2005). Atmosphere As The Subject Matter of Architecture. In: Ursprung, Philip ed. (2005), Herzog & DeMeuron: Natural History. Zurich: Lars Müller Publishers pp. 398-406.
- Carta M. (2019) "Palermo, Aziz. The archipelago city of diversity and creativity". In: Carta M. ed. Futuro. Politiche per un diverso presente. Soveria Mannelli, Rubbettino, 2019.
- Craig J. T., Siok Kuan Tambyah (1999) "Trying to Be Cosmopolitan". In: Journal of Consumer Research 26/1999, pp. 214-241
- Jullien F. (2016) *Il n'y a pas d'identité culturelle*. Paris, Éd. de l'Herne.
- Linklater A. (2002) "Cosmopolitan Citizenship". In: Isin E. F., Turner B. S. (2002) *Handbook of Citizenship Studies*. London, SAGE Publications Ltd.
- Scaffidi F. (2021) Palermo-Hannover: Urban stories from cosmopolitan people. In: Schröder J., Carta M., Scaffidi F., Contato A., eds. (2021) *Cosmopolitan Habitat. A research agenda for*

urban resilience. Berlin, Jovis. pp. 136–141

Schröder J. (2018) “Open Habitat”. In: Schröder J., Carta C., Ferretti M., Lino B., eds. (2018) Dynamics of Periphery. Atlas of Emerging Creative and Resilient Habitats. Berlin, Jovis. pp. 10–29.

84202

## New Language for Open Spaces in the Peripheries

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In Europe, 39.54% of the land surface is covered by areas of intermediate population density (Eurostat, 2020) characterized by urban peripheries. This scattered urban landscape with its important infrastructures affects the urban life but also the quality of open spaces. While urban sprawl fragments physical and social spaces, its intensive demand on environmental resources (OECD 1990) also weakens these open spaces against urban heat islands and heavy rainfalls. These open spaces are however fundamental elements to structure and improve the socio-morphological conditions of these urban environments (Guinand et al, 2022; BlueGreenStreets, 2020; Atkins, 2018)

Drawing from qualitative data from fieldworks conducted in Graz, Austria, and Tirana, Albania, this paper aims at raising attention on peripheral open spaces and increase our understanding of the qualitative potentials of these spaces through a categorization. The paper takes its inspiration from Carmona's open spaces categories (2010a, 2010b). It argues however that if this typology and the characteristics found in other works (Metha, 2014; Wang & Stevens, 2018; Pralyia & Garg, 2019) are helpful, there is a crucial need to revisit them in the context of urban periphery as their complexities get lost in the traditional discourse associated with city centre morphology. These new typologies offer insights on physical, social and environmental potentials to structure peripheral environment.

Our two peripheral areas located in Graz and Tirana were chosen according to their importance in current urban development dynamics and their similarity in terms of function and meaning within the urban context. Graz and Tirana are not referred metropolises or case studies from which urban theory is usually generated and disseminated. However, following Schuermans' line commenting Robinson's approach on ordinary cities (2009), we aim at elaborating an understanding of open spaces in peripheries by moving out from paradigmatic cities and looking, instead, at less common or overlooked places. The research is based on empirical data taken from several non-intrusive observations across the time of day, week and year of our two studied areas. These observations were structured around psychogeographic walking and urban photography. It followed a "dérives" principle (Debord, 1958). This approach, which attempted at "articulating the modern city" (Debord, 1958: 5) fit particularly well within the context of metropolisation and growing urban peripheries.

Our empirical observations, data collection and our analysis (open and focused coding) (Suchar, 1997) have stressed the potential for a new "language" that fits the specific context of open spaces located in peripheral areas. We have come up with eight specific types of open spaces that can be found in our periphery, offer a new reading and qualitative potentials to structure and enhance the life quality of these environments.

Keywords: Open spaces, Peripheries, Categories, Quality, Potentialities, Epistemology

### References

Atkins, E. (2018). Green Streets as Habitat for Biodiversity. In *Nature Based Strategies for Urban and Building Sustainability* (pp. 251–260). Elsevier. <https://doi.org/10.1016/B978-0-12->

812150-4.00023-9

- Carmona, M. (2010a). Contemporary Public Space: Critique and Classification, Part One: Critique. *Journal of Urban Design*, 15(1), 123–148. <https://doi.org/10.1080/13574800903435651>
- Carmona, M. (2010b). Contemporary Public Space, Part Two: Classification. *Journal of Urban Design*, 15(2), 157–173. <https://doi.org/10.1080/13574801003638111>
- Guinand, A., Llubani, S., Bauer, S. Schwab, E. (2022). Nachhaltige Stadtentwicklung an der urbanen Peripherie durch die Qualifizierung von Freiräumen“, *Stadt und Grün*, 1, Berlin: Patzer Verlag, 20-25.
- Mehta, V. (2014). Evaluating Public Space. *Journal of Urban Design*, 19(1), 53–88. <https://doi.org/10.1080/13574809.2013.854698>
- Praliya, S., & Garg, P. (2019). Public space quality evaluation: prerequisite for public space management. *The Journal of Public Space*, Vol. 4 N. 1 | 2019 | FULL ISSUE, 93–126. <https://doi.org/10.32891/jps.v4i1.667>
- Schuermans, N. (2009). J. Robinson, *Ordinary cities : Between Modernity and Development.*: London, Routledge, 2006, xiv + 204 p. *Belgeo*, 1. <https://doi.org/10.4000/belgeo.8184>
- Wang, Z., & Stevens, Q. (2020). How do open space characteristics influence open space use? A study of Melbourne’s Southbank Promenade. *Urban Research & Practice*, 13(1), 22–44. <https://doi.org/10.1080/17535069.2018.1484152>

84963

## New urban-rural structures in the pandemic - towards hybridization

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Since the beginning of the Covid19-pandemic rural areas did receive a lot of media attention. Almost everyone had probably noticed that Parisians had left their city in March 2020 to go to their second homes; or Milanese stormed the trains to the south of Italy shortly before the lockdown. As a counterpoint to supposedly urban centres of infection, the countryside was seemingly stylised as a safe place. The British planner Nick Gallent described the flight to second homes in rural areas even as “a defining image of the 2020 coronavirus crisis” (Gallent 2020, p. 141) and expressed the assumption that rural housing is about to change, especially in second-home hotspots (Gallent and Hamiduddin 2021). With the sudden call to work remotely at home for infection control, it has also become possible for more and more people to work and live outside of cities or far away from their employer in the last two years.

However, so far only few scientific papers dealt with the pandemic’s effects on rural areas (e.g. Luca et al. 2020; Phillipson et al. 2020). Research debates put – understandably – much more attention on urbanisation, population density and globalisation as well as the virus’s spread in and between urban and rural areas (e.g. Boterman 2020; Connolly et al. 2021). The debate about a new significance of rural areas seemed to be driven much more by the media and everyday life conversations, although a new meaning of rural has long been discussed. At the same time, there seems to be a long consensus especially among planners that the dichotomous separation of city and countryside is no longer tenable and is being replaced by an increasing hybridisation of spatial forms (Matern et al. 2020, p. 2065).

These rather loose hints led me to pursue more systematically the question of what had actually happened to rural areas during the Covid19 pandemic, and what does this mean for the hybridization of city and countryside long assumed on a theoretical level. How are rural spaces discursively constructed? To what extent are concrete spaces (places, regions, etc., and if so, which ones) at the core of the discourse? To what extent are rural areas undergoing change and what new needs of hybrid spaces would planning have to address?

Keywords: new rurality; countryside; urban-rural polarization; Covid19; remote work; planning challenges

### References

Boterman, W.R. (2020) Urban-Rural Polarisation in Times of the Corona Outbreak? The Early Demographic and Geographic Patterns of the SARS-CoV-2 Epidemic in the Netherlands. *Tijdschrift voor economische en sociale geografie* 111 (3) pp. 513–529

Connolly, C., R. Keil and S.H. Ali (2021) Extended urbanisation and the spatialities of infectious disease: Demographic change, infrastructure and governance. *Urban Studies* 58 (2) pp. 245–263

Gallent, N. (2020) COVID-19 and the flight to second homes. *Town & Country Planning* (April/Mai) pp. 141–144

Gallent, N. and I. Hamiduddin (2021) COVID-19, second homes and the challenge for rural amenity areas. *Town Planning Review* 92 (3) pp. 395–401

Luca, C. de, S. Tondelli and H.E. Åberg (2020) The Covid-19 pandemic effects in rural areas. Turning challenges into opportunities for rural regeneration. *TeMa - Journal of Land Use, Mobility and Environment* pp. 119–132

Matern, A., J. Binder and A. Noack (2020) Smart regions: insights from hybridization and peripheralization research. *European Planning Studies* 28 (10) pp. 2060–2077

Phillipson, J., M. Gorton, R. Turner, M. Shucksmith and K. Aitken-McDermott et al. (2020) The COVID-19 Pandemic and Its Implications for Rural Economies. *Sustainability* 12 (10) p. 3973

85324

## Planning for sustainable place-development – from rituals and indicators to realities and solutions

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Even if environmental issues were put on the planning agenda in the 1960s and 1970s and the UN's 17 global sustainability goals are increasingly used as overall goals and strategies for planning, there is a lack of consistency between the main aims of the legal framework and the tools available at local level.

In Norwegian planning, place-development has been a basic concept. In the 1980s, the term conveyed ambitions for local industrial development in remote rural areas, and in later years place-development often is formulated as an 'attractivity model', focusing on competition between places about in-migration. Another approach is different architectural site analysis (Lynch, 1960; Cullen, 1971; Rossi, 1982) and landscape analyses (McHarg, 1969). In addition, there are sociocultural site analyses based on space theories (Massey, 2005; Akershus County Municipality, 2007). Nevertheless, it is striking how the increasing recognitions of the need for strengthened sustainable place development are not reflected in the methods for analyses and planning.

The aim for the project is to develop the knowledge base for planning according to the Planning and Building Act (PBA), under different societal and natural conditions, to realize ambitions for sustainable place-development. The research questions require case studies by choosing places in municipalities with a low, medium, and high level of centrality in Norwegian regions. The project will strengthen the knowledge basis for planning according to the PBA, especially concerning place-development and how theories of sustainability and theories of regional and local change processes can be operationalized and used at the local level in models for sustainable-place development. The project will provide specific results and substantial solutions for land-use changes and urban design.

Keywords: Place-development, sustainability, site analysis, land-use planning, local

### References

- Akershus County Municipality. 2007. Socio cultural site analyses. Guide. Akershus County Municipality, Oslo.
- Cullen, G. 1971. *The Concise Townscape*. Architectural Press, London.
- Lynch, K. 1960. *The image of the City*. MiT Press
- Massey, D. 2005. *For Space*. Sage, Thousand Oaks.
- McHarg, I. 1969. *Design with Nature*. Natural History Press, New York.
- Rossi, A. 1982. *The Architecture of the City*. MiT Press.

84228

## Place Identities of Japanese Social Housing: The role of urban design in creating a “place”

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“Danchi” – suburban residential community with multi-family apartment blocks – became a symbol of modernisation amid post-war economic growth and rapid urbanisation in Japan through late 1950s to early 1970s (Hirayama & Ronald, 2017). For its efficiency, they were generally developed into uniform homogenised forms. In reference to Relph's (1976) concept, a typical “danchi” is more likely to represent “placelessness” than “place.” Today, many “danchi” across Japan face issues of weakened social structure and degraded physical environments due to ageing of population, buildings, and infrastructure; however, Kanazawa Seaside Town differentiates itself from these general trends, more likely representing a “place.” Alongside being a pioneering “danchi” development with an emphasis on urban design, residents’ strong place attachment have been found in precedent studies (Altman & Low, 1992; Tomioka Namiki Investigation Team, 2003). Moreover, there is active usage of semi-public spaces, which are human behaviours known to have positive influence to the neighbourhood community (Aoki et al., 1994; Suzuki, 1984).

The central question in this research asks what factors create a thriving “danchi” and the role of urban design in mass-produced housing developments that encourage a “place” to evolve. A combination of qualitative approaches (questionnaire survey to residents, interviews to residents/community leaders, observations of resident activities) was adopted for the case study to analyse the identities of place, namely the (1) physical features or appearance, (2) activities and functions and (3) meanings or symbols, and its interrelation. Results found the variability in conditions of “place,” specifically of the roles of each “place identity” and its interrelation. Some activities (e.g., placement of flowerpots in alley spaces) followed the designer-intended functions and meanings of space while others saw residents’ activities (e.g., placemaking by residents) transform physical features, subsequently redefining its accompanied meanings. As found, semi-public spaces that were less strictly defined, spatially and literally, and open to interpretation allowed residents to develop their own activities and redefine the “place.” This paper aims to offer some important insights into the process of how “place” forms and the role of actors like architects and urban planners in creating housing developments that will mature successfully over the years.

Keywords: Urban design; Place; Placelessness; Place attachment; Social housing; Housing complex

### References

Altman, I., & Low, S. M. (1992). *Place Attachment* (I. Altman & S. M. Low (eds.); 1st ed. 1992.) [Book]. Springer US. <https://doi.org/10.1007/978-1-4684-8753-4>

Aoki, Y., Yuasa, Y., & Osaragi, T. (1994). Socio-Psychological Effects of Private Use in Alley-space: Hypotheses and Tests of Planning Concepts through the Field Surveys on Alley-Space Part 2. *Journal of Architecture and Planning (Transactions of AIJ)*, 457, 125–132.  
[https://doi.org/10.3130/aija.59.125\\_1](https://doi.org/10.3130/aija.59.125_1)

Hirayama, Y., & Ronald, R. (2017). Housing and Social Transition in Japan. In Y. Hirayama & R. Ronald (Eds.), *Housing and Social Transition in Japan*. Routledge.  
<https://doi.org/10.4324/9780203967423>

Relph, E. (1976). *Place and Placelessness*. Pion Limited.

Suzuki, S. (1984). *Ie to machi: jukyo shugo no ronri* (in Japanese) [House and Town: Logics of Housing Complexes]. Kajima shuppankai.

Tomioka Namiki Investigation Team (Ton-nan-tai). (2003). *Kanazawa Seaside Town Ju-min Ishiki Chousa Houkokusho* (in Japanese) [Kanazawa Seaside Town Residents' Awareness Survey Report]. Tomioka Namiki Investigation Team.

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## Creative Place making planning for overturn shrinking in Danube cities. The case of Romanian Lower Danube small and medium size cities

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Already well-defined theoretically, the innovative field of place-making tends to become a potentially autonomous one able to overturn the "negative entropy" (Friedmann, 2010) of shrinking phenomenon. The place making domain encompasses both interdisciplinarity and creativity (Palermo, Ponzini 2014), in addition to a critical and pragmatic approach to urbanism, much closer to the needs of the people in these types of cities, and to the real possibilities of solving them.

The paper will show that place making applied to shrinking cities situated on Danube is a viable solution applicable from the strategic spatial visioning level to action level, following the approaches of the Interreg Danube project DANURB+ (Danube Urban Brand + Building Regional and Local Resilience through the Valorization of Danube's Cultural Heritage). The paper shows the 5 specific conceptual areas in which place making strategic planning acts for the benefit of communities: 1) Sensing the places: shrinkage offer high opportunities to achieve goals associated with environmental quality sustainability and social cohesion (Neill, Schlappa, 2016), adopting tools oriented towards a deep understanding of landscape quality, and ecological values; 2) Engaging people: creative tools for participatory planning as integral part of place-making processes and planning, confirming the importance of the creative participatory processes to attract stakeholders and enhance their willingness; 3) Make it flexible: a conceptual direction to orientate the planning and design process towards flexible and temporary use of abandoned urban spaces. Shrinking processes need a treatment of cultural diffusion through unconventional ways, through the contribution of actors from the creative industries, by interim uses, pop-up uses, temporary art installations, temporary restaurants, play-spaces etc; 4) Make it beneficial: not only stakeholders engaging is necessary, but also the local involvement in economically and viable processes (small business involvement, local food production etc) otherwise the planning remains at a level of stimulation without completion, which has no strength in long-term implementation (Parham, 2014); 5) Co-operate: the local level cannot overturn alone the shrinkage global phenomenon, without the synergistic support of regional level, including a marketing strategy for small and medium-sized cities.

Keywords: shrinking, methods, sensing, flexible, beneficial, cooperative

### References

Herrmann L, Dustin, Schwarz, Kirsten, Shuster D, William, Berland, Adam, Chaffin C, Brian, Garmestani S, Ahjond, Hopton E, Matthew. 2016. Ecology for the Shrinking City , in BioScience, Volume 66, Issue 11, pages 965–973, <https://doi.org/10.1093/biosci/biw062>

Cilliers J, Elizelle, Timmermans, Wim. The Importance of Creative Participatory Planning in the Public Place-Making Process. 2014. in Environment and Planning B: Planning and Design,

Volume: 41 issue: 3, page(s): 413-429. <https://doi.org/10.1068/b39098>

Palermo, P, Carlo, Ponzini, Davide. 2014. Place-making and Urban Development. New challenges for contemporary planning and design. Routledge. DOI <https://doi.org/10.4324/9781315885469>

Neill, J.V. William, Schlappa, Hans. 2016. Future Directions for the European Shrinking City. Routledge, ISBN 9781138814707

84181

## The influence of moral knowledge on urban villages in Shenzhen, China

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Moral knowledge, and its spatial articulation, are being ignored in the rapid urban growth that results from globalisation. UNESCO's Recommendation on the Historic Urban Landscape (2011) and its first decade's implementation (UNESCO, 2019) urge us to learn from tradition and integrate urban heritage values into the wider framework of sustainable development and citizen engagement. This paper explores the concept of moral knowledge, and its influence on the spatial configuration of the urban village of Huaide in Shenzhen, China. Chinese moral and aesthetic knowledge (informed by Confucianism) can be back traced to before the Qin dynasty (221 BCE). This knowledge was practised and enforced throughout the imperial period via rituals, writing and painting, agriculture and garden design, and city governance (Li, 1988). Although globalisation's dominant Western paradigms are challenging traditional Chinese practices, Shiqiao Li's work (Li, 2014) affirms that moral and aesthetic knowledge can serve as cultural forces shaping the distinct characteristics of Chinese cities. Shenzhen stands at the crossroads of different realities: its rapid growth into a 'global' city since 1979's reforms and opening-up policy has seen the urban village act as a space of resistance to homogenised urban spaces (Herrmann-Pillath, 2018). Huaide village, like many urban villages in Shenzhen, fitted into its landscape and embedded traditional Chinese moral knowledge. Sitting at the foothills of Wangniuting, facing the Pearl River Estuary, this place developed into an urban village after the reforms. Offering social opportunities to migrants, including the facilitation of temporary practices that meet their aspirations and needs, Huaide village still retains spaces such as clan houses, temples, and courtyards that harbour moral and cultural traditions, like social connections and kinship. This paper portrays how moral knowledge shapes the urban village and its social-ecological values, including citizen engagement. Using ethnographic mapping supplemented by fieldwork photographs the findings will add to the discourse on urban villages by enriching our understanding of their lived spaces while also providing insights for possible future urban renewal strategies that engender better citizen engagement.

Keywords: culture, urban heritage, social-ecological values, urban regeneration, China

### References

Herrmann-Pillath C (2018) Is Shenzhen emerging as a global city with distinct cultural roots? Available at: <http://en.cdi.org.cn/component/k2/item/563-beyond-greater-hong-kong-is-shenzhen-emerging-as-a-global-city-with-distinct-cultural-roots> (accessed 23 December 2021).

Li S (2014) *Understanding the Chinese City*. London: SAGE Publications Ltd.

Li Z (1988) *The Path of Beauty: A Study of Chinese Aesthetics*. Beijing: Morning Glory Publishers.

UNESCO (2011) *Recommendation on the Historic Urban Landscape*. 10 November. Paris.

Available at: <https://whc.unesco.org/en/hul/> (accessed 23 December 2021).

UNESCO (2019) The UNESCO Recommendation on the Historic Urban Landscape: Report of the Second Consultation on its Implementation. Paris. Available at: <https://whc.unesco.org/en/hul/> (accessed 23 December 2021).

85351

## Placemaking through Participatory Budgeting: Challenges Addressed

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The role of public space and placemaking in economically, socially, and environmentally responsible urban development is emphasized in both urban research and city development practice (Ellery & Ellery, 2019). Dimensions of public space, such as sociability, diversity of use and activity, comfort and identity, as well as access and connections, are considered essential to people's physical, mental and social well-being. Placemaking initially emerged as a top-down approach involving professional architects and urban planners, but in recent decades it has focused mainly on public participation (Strydom et al., 2018). Participatory budgeting (PB) is considered to be one of the most successful participatory tools in recent decades which allows citizens to participate in the adoption of the municipal budget either directly or through different PB representatives (NGOs, community groups, etc.) (Gherghina & Tap, 2021; Cabannes, 2015). As a method of a real civic involvement, it is being implemented more and more by local governments, so the understanding of the PB and the tools used have local peculiarities. Digitalisation of PB aims more democratic and inclusive public participation. Restrictions caused by the global pandemic have fostered a rapid shift from a traditional or a hybrid PB towards a fully digital PB process. Various cities across Europe face digitalisation of citizen engagement, with introduction of interactive digital urban planning tools, apps to enable identification and mapping of cultural values or nature habitats, interactive web platforms, which enable submission, discussion and voting on urban development proposals, etc. (Ciasullo et al., 2020; Hoop et al., 2022). In Riga the whole PB process is organised through a digital platform, which enables submission of ideas, an online voting and dissemination of results. Thus, the relationship between the digital space, which accomodates the placemaking process, and the physical urban space, where the projects are realised becomes crucial. Based on the case study in Riga, using surveys with community representatives, this paper explores whether the current digitalised PB practice allows equitable, democratic and inclusive placemaking process. Results show, that citizens prefer a hybrid approach, which allows certain phases of PB being realised on-site, so affording connection between the digital process and the physical space.

Keywords: placemaking, participatory budgeting, digitalisation of citizen engagement

### References

1. Ellery, P. J., & Ellery, J. (2019). Strengthening community sense of place through placemaking. *Urban Planning*, 4(2 Public Space in the New Urban Agenda: Research into Implementation), 237-248. doi:10.17645/up.v4i2.2004
2. Strydom, W., Puren, K., & Drewes, E. (2018). Exploring theoretical trends in placemaking: Towards new perspectives in spatial planning. *Journal of Place Management and Development*, 11(2), 165-180. doi:10.1108/JPMD-11-2017-0113
3. Gherghina, S., & Tap, P. (2021). Ecology projects and participatory budgeting: Enhancing citizens' support. *Sustainability (Switzerland)*, 13(19) doi:10.3390/su131910561

4. Cabannes, Y. (2015). The impact of participatory budgeting on basic services: Municipal practices and evidence from the field. *Environment and Urbanization*, 27(1), 257-284. doi:10.1177/0956247815572297
5. Hoop, E., Moss, T., Smith, A., Löffler, E. (2022). Knowing and governing smart cities: Four cases of citizen engagement with digital urbanism. *Urban Governance*, 2022, <https://doi.org/10.1016/j.ugj.2021.12.008>
6. Ciasullo, M. V., Troisi, O., Grimaldi, M., & Leone, D. (2020). Multi-level governance for sustainable innovation in smart communities: An ecosystems approach. *International Entrepreneurship and Management Journal*, 16(4), 1167-1195. doi:10.1007/s11365-020-00641-6

84038

## Building the Buzz in Blakelaw: Re-Igniting the Public Realm of Britain's Peripheral Urban Estates in the 'New Normal'

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Covid19 transformed our world. It slowed urban life to a trickle. And the measures required to manage it disrupted the vibrant, enriching and healthy social interactions most humans crave. Almost overnight, we moved from each 'stranger' being a potential new social encounter, to a situation where 'others' became a potential 'threat' to our health. And even our survival. As a result, the street ballet of which Jane Jacobs wrote that is vital for well working cities, became more akin to a dystopian still life. In the UK context, the pandemic followed an epidemic of austerity, engineered by successive Neoliberal governments, over a decade, from 2010. So that by mid-2021, the landscape is grim: public services have seriously declined, privatisations and outsourcing have battered the public realm, and public infrastructures across Britain have been damaged.

In this work we go beyond current Government rhetoric, and its instrumentalised, thinking, exemplified by the 'build back better' soundbite seeded through the new Planning White Paper (MHCLG, 2020) and National Model Design Code. Instead, we look at urban places that have been left behind: those suffering in terms of overall place quality, and poor public realm. We try to understand both local conditions and contexts through a (power) networks analysis. And we seek to consensually and collaboratively embed our findings to help drive improvement. Our methodology centres on location specific 'experiments,' co-designed with the local community in the suburb of Blakelaw, in Newcastle Upon Tyne, in Northern England.

In this context, we turn our attention to Blakelaw Ward, on the Western fringe of Newcastle upon Tyne, in Northeast England, a peripheric, 'forgotten area', and a playground for various modernist housing interventions in the 1960s and 70s. We are driven here by the question if the recent CoVid19 lockdown experiences have led people to care more about their public realm, and local public spaces, and if it has increased their desire to engage in a more active public life, and as such, become more involved 'citizens of place'? To answer this, we propose to work with the conceptualisation of place as 'dwelling, affinity, immanence, relationality, multiplicity and performativity' (Healey, 2005) and we believe we needed to adopt a more radical, disruptive, and experimental urban design methodology, co-produced with the local community and key local actors. As such, we hope to help re/ignite a sense of 'citizenship of place' and reflect on as well as learn from how peripheric, left behind places like Blakelaw can become more inclusive, sociable and comfortable for their local inhabitants in the 'new normal'.

Keywords: urban design, public space, quality of place, experimental approach, disruptions, politics of recovery

References

Jacobs, J (1961) *The Death and Life of Great American Cities*, Random House, New York  
Hillier J. Straddling the Post-Structuralist Abyss: Between Transcendence and Immanence?  
*Planning Theory*, 4(3), pp. 271-299.

Ministry of Housing, Communities and Local Government (2020) *Planning for the Future*,  
accessed at

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/958420/MHCLG-Planning-Consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/958420/MHCLG-Planning-Consultation.pdf)

Ministry of Housing, Communities and Local Government (2021) *National Model Design Code*

84029

## Operationalizing the concept of 'liveability' in urban streets

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Improving liveability of the public spaces in existing neighbourhoods is attracting increasing attention from residents and local authorities alike. The conditions for 'liveability' include space and facilities for climate adaptation, active mobility (walking, cycling), meeting, resting, and playing. Although in most cases residents agree with the aim for more liveability, its spatial claims often conflict with an existing and still growing demand for the parking of private cars. Balancing these societal demands in a 'fair' discussion proves however to be problematic, since the demand for parking is expressed in consolidated norms and clear-cut numbers, while liveability as a concept has a more emergent and qualitative character. In order to provide ground for a fairer discussion, this paper 1) defines the physical values of liveability; 2) translates these values into generic spatial claims; 3) confronts these claims with the demand for parking places in existing urban neighbourhoods; and 4) explores how this information could inform public debate and policy. We selected four neighbourhoods in the city of Maastricht, offering a mixture of apartments and terraced housing, and being in that sense representative for many urban environments in European mid-sized cities.

Our findings show that the spatial claims for liveability would result in the removal of between 6% and 13% of parking places. Furthermore, it appears that, given current car ownership levels, in all cases there still is a reserve capacity for residential parking on the scale of the neighbourhood.

Next, we show how this information can: 1) provide input for discussions with and between residents about the future arrangement of 'their' street; 2) help assessing the impact of temporary experiments for short-term 'placemaking' arrangements; and 3) give insight in the maximum 'carrying capacity' of a liveable street for parking cars, and thus in the maximum of parking permits to be allowed per area. Finally, we discuss three possible pathways to handle situations where the demand for residential parking exceeds the maximum carrying capacity for parking. Overall, the exploration suggests that the stepwise creation of liveable streets can be an instrument in the transition of urban areas as a whole.

Keywords: Placemaking, Liveability, Mobility, Urban Design

### References

Bertolini, L. (2020) From "streets for traffic" to "streets for people": can street experiments transform urban mobility? *Transport Reviews* Volume 40, 2020

Dumbaugh, E., & King, M. (2018). Engineering Livable Streets: A Thematic Review of Advancements in Urban Street Design. *Journal of Planning Literature*, 33(4), 451-465.

<https://doi.org/10.1177/0885412218783471>

Gemeente Groningen (2021) Leef- en klimaatstraten, een nieuw perspectief op de straat, Groningen Gemeente Groningen

De Groot Volker (2019) Parkeeronderzoek 10 deelgebieden Maastricht. Maastricht, Gemeente

Maastricht

Guzman, L., Oviedo, D. Arellana, J. c, Cantillo-García,V. (2021) Buying a car and the street: Transport justice and urban space distribution Transportation Research Part D 95 (2021) 102860

Kips,E., Kramer,M., Schepel,S., Schouten, M., Zomervrucht,J. (2007) Spelen op straat, Delft, IIUE

Nello-Deakin, S. (2019). Is there such a thing as a 'fair' distribution of road space?. Journal of urban design, 24(5), 698-714.

## TRACK 2: CULTURE

85099

### (re)Calibrating Heritage Between Past, Present, and Future: Reading Al-Jdeideh Post Conflict Transformations in Aleppo, Syria

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Aleppo's Old City, the UNESCO world heritage site since 1986, is a recent case of how armed conflict ruptures generationally (re)articulated urban and cultural fabric. In parallel to the physical destruction of the city, the conflict aftermath has fragmented its space-time continuities, altering its social and economic dynamics between absence and presence. Al-Jdeideh area, a significant architectural and urban materialization of religious coexistence for centuries and a tourist destination has been the stage for dramatic destruction. Its churches, courtyard houses, unique compact urban morphology, and craftsmanship heritage, consequently suffered incremental disappearance of its multi-layered heritage and socio-economic significance. Since 2018, Al-Jdeideh has witnessed non-orchestrated top-down spatial reconstruction and voluntary private-funded individualistic recalibrations. However, as a representational space, Al-Jdeideh remains in a (re)interpretation dilemma of its spatial and cultural significance in after-war Aleppo, as its cultural and heritage values are lost in translation between different actors' visions and needs. Hence, to align the efforts and reposition al-Jdeideh as one of Aleppo city's images, a heritage-led regeneration approach is essential to its reconstruction and revitalization process. By observing the current dynamics conditioned by the past and present and changing societal and economic needs, this work aims to move beyond a historical reading and physical-needs patchwork reconstruction to propose a tailored -context-based conceptual framework for the post-conflict regeneration and reconstruction processes. Focusing on the pre-and post-war condition of Al-Jdeideh, this work delves into three layers of analysis. First, the authors conducted desk research, including historical and contemporary maps, documents, reports, and literature. Second, informal in-place field interviews registered the (partial) transformations of Al-Jdeideh's meaning and functions for its former and existing dwellers and users. Combining the former data with site visits and photo documentation, the authors accumulated a pre/after war spatial and socio-economic register creating a basis for an informed reconstruction strategy. Finally, the work introduces urban acupuncture intervention as a contextual tailored, and flexible approach to harness the existing reconstruction efforts and catalyze vision-oriented regeneration and revitalization processes.

Keywords: Heritage-led regeneration; post-war reconstruction; urban heritage; Aleppo

#### References

David, J.-C., & Cristofoli, F. (2019). *Alep, la maison Ghazalé: Histoire et devenir*. Parenthèses.  
Farnaz Arefian, F., Ryser, J., & Hopkins, A. (2021). *Historic Cities in the Face of Disasters: Reconstruction, Recovery and Resilience of Societies* (1st ed. 2021). Springer International

Publishing.

IACONESI, SALVATORE. P. & ORIANA. (2018). DIGITAL URBAN ACUPUNCTURE: Human ecosystems and the life of cities in the age of communication, information and knowledge. SPRINGER INTERNATIONAL PU.

Labadi, S., & Logan, W. S. (Eds.). (2016). Urban heritage, development and sustainability: International frameworks, national and local governance. Routledge/Taylor & Francis Group

85054

## The Role of Art and Culture in Contested Cities: Cultural Institutions as Socio-Political Actors in East Jerusalem

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Our research investigates the nexus of arts, culture and political engagement and their potential to strengthen local identity and promote cross-sectional dialogue in contested cities. Through a case study of East Jerusalem, we investigate how stakeholders in the arts and culture field perceive their agency, efficacy and responsibility as political actors in a contested urban space. Subsequently, we focus on the following research questions: What role do arts and culture institutions play in an urban setting which lacks formal political institutions? How do the different stakeholders regard the role of art and culture institutions? To what extent do arts and culture institutions serve as meeting points between different populations and sectors of the city? In order to answer these questions, we employ a qualitative research design that builds on a case study methodology and includes in-depth interviews and ethnographic observations, complemented by a print and social media review. East Jerusalem, where national-level politics affect virtually every sphere of life, including the ability to produce, enjoy and engage with arts, serves as a unique and fascinating case study for investigating these questions.

Our initial findings suggest that in contested urban environments, like East Jerusalem, arts and culture institutions could not uphold a purely aesthetic approach and cannot escape political questions and participation. Nevertheless, urban and civic engagement is understood differently between the different stakeholders, on a spectrum that stretches between the ‘social’ and the ‘political.’ Moreover, our findings show that whether intentionally or not, most art and culture institutions in East Jerusalem serves as a platform for cross-sectional meetings (e.g. ethnic, religious, gender). We believe that findings from this research could serve to examine the role of arts and culture institutions in other politically charged, ethnically and religiously diverse cities.

Keywords: Artivism, Political Participation, contested cities, arts & culture

### References

Kaddar, M. et al. (2020) ‘Artistic City-zenship: How artists perceive and practice political agency in their cities’, *Journal of Urban Affairs*. doi: 10.1080/07352166.2020.1792312

Markusen, A. and Gadwa, A. (2010) ‘Arts and culture in urban or regional planning: A review and research agenda’, *Journal of Planning Education and Research*, 29(3), pp. 379–391

Zilberstein, S. (2019) ‘Space Making as Artistic Practice: The Relationship between Grassroots Art Organizations and the Political Economy of Urban Development’, *City & Community*, 18(4), pp. 1142–1161. doi: 10.1111/CICO.12458

85098

## Beyond modernization: aestheticization and artification as cultural and visual transformations of socialist housing estates in Poland

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Socialist housing estates are a characteristic element of the urban landscape in Poland. Their transformation, which was caused by developing technical and aesthetic problems, the occurrence of negative social phenomena and effects of the political changes after 1989 (Sailer-Fliege 1999, Turkington et al. 2004, Muliolytė 2013, Šimáček et al. 2015), is called modernization in the literature. The modernization processes have not completed the transformation of housing estates. Therefore, the aim of this paper is to show processes beyond the modernization of socialist housing estates, and to present their role in the transformation of socialist housing estates in Poland. These processes can be described as aestheticization and artification (Naukkarinen 2012). The aestheticization of socialist housing estates in Poland was an attempt to beautify the gray, monotonous buildings and to improve the space between buildings. The process of artification in these housing estates involves the introduction of public art, which not only beautifies this space, but also allows for the development of new ways of sharing and co-creating it and plays an important role in shaping the individual character of this space. In Poland, the artification of socialist housing estates has been revealed in the form of monumental painting (murals) on the walls of the buildings. There exists a vast literature which analyses and discusses the transformation of housing estates in Poland after 1989. However, not much space has been devoted to the changes that have occurred in the visual and cultural aspects of these neighborhoods. This study demonstrated the significant impact of aestheticization and artification on the image of the socialist settlement, as well as on its perception and socio-cultural development and on the quality of life of its inhabitants.

Keywords: modernization, aestheticization, artification, socialist housing estates, Poland

### References

1. Muliolytė J., 2013. Rediscovering large scale housing estates in post socialist cities. *Journal of Architecture and Urbanism* 37(1): 51-58.
2. Naukkarinen O., 2012. Variations on artification. *Contemporary Aesthetics Special Issue* 4.
3. Sailer-Fliege U., 1999. Characteristics of post-socialist urban transformation in East Central Europe. *GeoJournal* 49(1): 7-16.
4. Šimáček P., Szczyrba Z., Andráško I., Kunc J., 2015. Twenty-five Years of Humanising Post-Socialist Housing Estates: From Quantitative Needs to Qualitative Requirements. *Geographia Polonica* 88(4): 649-668.
5. Turkington R., van Kempen R., Wassenberg F. (eds), 2004. *High-rise Housing in Europe, Current Trends and Future Prospects*. Delft University Press, Delft.

84462

## Cultural practices as spaces of change. Exploring the social impacts of cultural initiatives in 6 European Cities

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For decades, research has emphasised the role of culture as an important vector of change in cities (Sacco and Tavano Blessi, 2009; Florida, 2002). Culture-led transformations in urban settings can be driven by cultural policies and strategies, or they can emerge within a constellation of more or less formalised cultural practices. Due to their transformative potential, cultural action can often move beyond sectoral impact generation in the cultural domain and intercept broader trajectories of change at the urban scale.

This study, elaborating on preliminary outcomes of the Horizon2020 MESOC Project, explores cultural practices as spaces for cross-fertilisation and social value generation, investigating the dynamics through which they contribute to the production of social impacts. Cultural practices are hereby conceived as capable of supporting a shift towards a "humane metropolis" (Pickett et al., 2013) and as key devices for cities to move towards people and nature positive futures (UNDP, 2021; Loorbach, 2021). In particular, the article explores some of the mechanisms through which cultural policies and practices contribute to the ideation, activation and rooting of social transformative dynamics in cities.

To investigate these spaces of change, the paper proposes analytical categories for observing culture-driven social impacts and their interaction with transformative dynamics in selected impact domains suggested by the New European Agenda for Culture (2018), namely: health and well-being, urban regeneration and social cohesion. Those domains are identified as crucial spheres for the emergence of social (and spatial) value in cities. The proposed analytical categories are then illustrated and tested by analysing 18 cultural initiatives from 6 European Cities.

Keywords: cultural practices, social impact, urban transformation, space of change, MESOC Project

### References

European Commission (2018). A New European Agenda for Culture. Bruxelles. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:267:FIN>

Florida, R. (2002). The rise of the creative class. Basic Books, New York.

Loorbach D. (2021). Creative transitions: governance, design and activism. Key lecture at the MESOC online Workshop Societal Impacts of culture. A transitional perspective. Creative transitions: governance, design and activism

Pickett, S.T.A., Christopher, G., Boone, B.P., McGrath, M.L. Cadenasso, D.L., Childers, L.A., Ogden, M., McHale, J., Grove, M. (2013). Ecological science and transformation to the sustainable city, *Cities*, 32(1), 10-20. <https://doi.org/10.1016/j.cities.2013.02.008>

Sacco, P., Tavano Blessi, G. (2009). The Social Viability of Culture-led Urban Transformation Processes: Evidence from the Bicocca District, Milan. *Urban Studies*, 46(5-6), 1115-1135.  
<https://doi.org/10.1177/0042098009103857>

UNDP, SCBD & UNEP-WCMC (2021). *Creating a Nature-Positive Future: The contribution of protected areas and other effective area-based conservation measures*. UNDP: New York, NY.

85333

## Tangible and intangible culture and places in experiential tourism

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Place is a system, that represents a large entity of different, complex, and interdependent tangible and intangible components, with heritage being among the most prominent ones. Tangible components of place include its heritage sites, infrastructure, architecture (Hanna & Rowley, 2011), whereas intangible components include customs and oral traditions, music, languages, poetry, dance, festivities, religious ceremonies as well as systems of healing, traditional knowledge systems and skills connected with the material aspects of culture, such as tools and the habitat. The intangible heritage is regarded as the larger framework within which tangible heritage takes on shape and significance (Bouchenaki, 2003). As experience economy came into the forefront of industries such as tourism (Pine II & Gilmore 1998; Stamboulis & Skayannis 2003), urban and regional spaces are promoted as spaces that offer multi-dimensional leisure experiences, while experiential tourism focuses on the active participation of the consumer in interaction with local people, cultures, and the place itself.

This paper builds upon qualitative research about the experiential tourism activities in two Greek Regions in Northern Greece (which conducted as part of the PRO-EXTOUR Project, (CSF 2021) and investigates the relationships between culture, place, and experience. The study regions have a rich and diverse stock of tangible and intangible heritage related to their long history and human presence in their territory from the pre-historic era to the modern years. Experiential activities documented in rural areas concern mainly products that focus on experiences from adventures, environmental concerns, and new aesthetic interests in nature as well as on education through the travelers' involvement in local economic and cultural activities. On the contrary, experiential activities that take place in urban areas have a distinct "theatrical" aspect as the cities through their historical background, their architectural reserve and their often-multicultural heritage become the "stage" where experiential activities take place. In general, it is argued that culture in experiential tourism sector in these regions sharpens the image of the place, strengthens its identity, enhances the value of the location, entertains, educates, boosts creativity, and contributes to local economic development and sustainability of the place (Deffner, 2017).

Keywords: culture, place, experiential tourism, tangible, intangible

### References

Bouchenaki, M. 2003. 'The interdependency of the tangible and intangible cultural heritage'. In: 14th ICOMOS General Assembly and International Symposium: 'Place, memory, meaning preserving intangible values in monuments and sites', 27 – 31 October 2003, Victoria Falls, Zimbabwe.

City\_Space\_Flux Research Group (CSF). 2021. T1. Setting strategic goals for the heritage and culture-based experiential tourism in the BSB, Regional Needs Assessment: Greece, Deliverable 1, PRO EXTOUTR: Promoting Heritage- and Culture-based Experiential Tourism in the Black

Sea Basin.

Deffner, A. 2017. Culture, Culture Where Are You Now? The Contribution of Culture in Urban Planning. *disP - The Planning Review*, 53:2, 54-55, DOI: 10.1080/02513625.2017.1340696

Hanna, S.; Rowley, J. 2011. Towards a strategic place brand-management model. *Journal of Marketing Management*, 27:5-6, 458-476, DOI: 10.1080/02672571003683797.

Kouri, M. 2012. Merging Culture and Tourism in Greece: An Unholy Alliance or an Opportunity to Update the Country's Cultural Policy?. *The Journal of Arts Management, Law, and Society*, 42, 63–78.

Pine, B. J.; Gilmore, J. H. 1998. Welcome to the experience economy. *Harvard Business Review*, 76, 97–105.

Smith, W. L. 2006. Experiential tourism around the world and at home: definitions and standards. *International Journal of Services and Standards*, 2, 1–14.

Stamboulis, Y.; Skayannis, P. 2003. Innovation strategies and technology for experience-based tourism. *Tourism Management*.24. 35-43.

85111

## Development strategies for 'green' urban heritage – urban design heritage conservation as a basis for the sustainable development of the existing building stock

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Since the 1970s monument preservation and careful urban regeneration became part of urban design and urban planning, in Europe as well as in other countries worldwide. Beginning as a countermovement against the demolition and rebuilding of historic city quarters, the existing building stock gained more value in urban regeneration strategies. Especially in the 1980s careful urban regeneration and monument preservation worked close together for areas of “monument ensemble protection”. In Germany, especially after the unification 1990, monument protection became part of the German planning system and of the urban regeneration programs with new planning methods and instruments. This was also a result of the urgent renewal of the historic city centres in the former GDR (East Germany). Especially with the program “protection of urban architectural heritage” (Städtebaulicher Denkmalschutz) this approach became an integrated part of urban regeneration fundings. With this the maintenance and careful modernization of the historical building stock is a basis for sustainable urban development.

Today topics like resilience and climate adaptation are more vital for a sustainable urban development than ever before. One of the 17 Sustainable Development Goals of the United Nations stresses “to protect and safeguard the world’s cultural and natural heritage” (United Nations 2015, p. 22), for which the existing building stock in inner cities plays an important role. Most recently the partnership on culture and cultural heritage of the Urban Agenda for EU stressed this vital role of the cultural heritage and its close links to the New European Bauhaus. (Kautz et al. 2021) Historical districts proved themselves to be resilient over the last centuries, they are saving the “grey energy” and adapting the new technological, economical and social circumstances. With regard to a future-oriented urban development the paper asks, to what extent the existing building stock can support a resource-saving urban development in the future. The topic is also part of the research project ‘StadtWende’ about the careful modernization of East German cities after 1990, funded by the German Federal Ministry of Education and Research. (Breßler et al. 2021, p. 157)

Keywords: urban heritage, conservation, existing building stock, sustainability, resilience, Urban Agenda for EU

### References

Breßler, Jana/Noeske, Jannik/Reinert, Wiebke/Wigger, Julia (2021): StadtWende? Altstadterneuerung in Ostdeutschland zwischen bürgerschaftlichem Engagement und Fachdiskurs, in: Böick, Marcus/Goschler, Constantin/Jessen, Ralph (ed.): Jahrbuch Deutsche Einheit 2021, Berlin: Ch. Links Verlag, pp. 157-176.

Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) (ed.) (2020): The New Leipzig Charter. The transformative power of cities for the common good, accessed 9 December 2021

Federal Ministry of the Interior, Building and Community (BMI) (ed.) (2020): Building Stock of High Conservation Value in Germany and Europe, accessed 9 December 2021, [https://ec.europa.eu/futurium/en/system/files/ged/cdr\\_201120\\_bebbroschuere\\_barrierefrei\\_002.pdf](https://ec.europa.eu/futurium/en/system/files/ged/cdr_201120_bebbroschuere_barrierefrei_002.pdf)

Kurth, Detlef (2021): Urbane Resilienz – Eine Herausforderung für die Stadtentwicklung, in: BMIHB, Memorandum Urbane Resilienz, Berlin, pp. 12-15.

Kautz, Gabriele et al. (ed.) (2021): Forum Urban Agenda for the EU. Culture and cultural heritage. 24.-25. Nov 2020. Conference Documentation, accessed 9 December 2021, <https://futurium.ec.europa.eu/en/urban-agenda/culturecultural-heritage/library/conference-documentation-digital-forum-urban-agenda-eu>

United Nations (2015): Transform in our world: the 2030 Agenda for Sustainable Development, A/RES/70/1, accessed 15 December 2021, [https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E)

United Nations General Assembly (2017): New Urban Agenda: Adopted by the UN General Assembly, accessed 9 December 2021, <https://habitat3.org/the-new-urban-agenda>

84852

## Regenerating Namaacha. Envisioning cultural heritage and agro-ecological systems as drivers of sustainable local development in Mozambique

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Namaacha is a small town in the south-eastern province of Mozambique, located on the main road to the capital city, Maputo, and in proximity to the border with eSwatini and South Africa. Its first modern urban settlement dates to the colonial time: thanks to the excellent climate, its natural amenities and geographical location, between the 1910s and the 1960s, Namaacha developed as a tourist destination for the Portuguese colonists, with high-quality, villas and hotels built to respond to the demand of the European population. In addition, a series of religious, educational institutions and missions were established, together with the renowned sanctuary of Nossa Senhora de Fátima (1944), which still retains its importance as a pilgrimage destination at a regional scale, and as a landmark at the urban level.

After Mozambican independence (1975) and in the aftermath of the civil war (1976-1992), the town went through increasing demographic shrinkage, material decline and marginalization. The current socio-spatial conditions of Namaacha and its territory are marked, from one side, by the persistence of relevant resources in agro-ecological, educational and heritage terms, and, from the other, by fragile socio-economic conditions, with a severe lack of basic services and job opportunities, the progressive decay and vacancy of the built heritage, as well as the low interconnectivity with Maputo and its province.

The paper presents a research-by-design exploration of the current challenges and potentials for Namaacha's sustainable and integrated local development, conducted in the framework of "Boa\_Ma\_Nhã, Maputo!" (Polisocial Award 2018), a research project based at Politecnico di Milano.

The research – carried out in cooperation with local partners and thanks to on-site interactions with local authorities and stakeholders – addresses specifically Namaacha's agro-ecological and food systems, as well as its rich architectural and natural heritage, building on its vocation as an important destination for religious, cultural, and eco-tourism.

By reconceptualizing and setting in synergy these valuable assets as resiliency drivers, the project proposes contextually sensitive planning and governance tools in the shape of guidelines, strategic scenarios, and pilot projects for an inclusive and sustainable regeneration of Namaacha and its community.

Keywords: sustainable urban development; urban regeneration; african cities; cultural heritage; eco-tourism; agro-ecological assets

### References

Abbott J (2012) Green Infrastructure for Sustainable Urban Development in Africa. Taylor and Francis

Andersen JE, Jenkins P, Nielsen M (2015) Who plans the African city? A case study of Maputo: part 1 – the structural context. *International Development Planning Review* 37(3):331-352

Boa\_Ma\_Nhã, Maputo! (2020) Polisocial Development Plan. Politecnico di Milano, Milan

Gouverneur D (2014) *Planning and Design for Future Informal Settlements: Shaping the Self-Constructed City*. Routledge, New York

Jenkins P (2013) *Urbanization, urbanism, and urbanity in an African city: home spaces and house cultures*. Springer, Cham

Macucule D (2016) *Processo-forma urbana: Reestruturação urbana e governança no Grande Maputo*. Dissertation, New University of Lisbon. Department of Geography and Regional Planning

Montedoro L, Buoli A, Frigerio A (2020) *Towards a metropolitan vision for the Maputo province*. Maggioli Editore, Santarcangelo di Romagna

85369

## Reimagining New Delhi's Kingsway

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India's capital city of Delhi has long held a unique position in the nation's historical geography. It continues to be a major gateway through which global capital and ideas seep throughout North India and beyond. The city has rapidly urbanized since the neoliberal reforms of the 1990's and since expanded its role in the global economy while embracing ideals of global modernity in design and planning. New Delhi—the portion built as colonial capital of British India and inaugurated in 1931—has maintained its role as the seat of Indian bureaucracy since independence in 1947. The city was conceived as a modernist Garden City that showcased the tenets of the City Beautiful movement, especially through its ceremonial boulevard, the Kingsway (now Rajpath) between the Viceroy's House (now Rashtrapati Bhavan) and All-India War Memorial Arch (now India Gate). This zone is not only the most imageable in the city but also the most used for a variety of activities, including leisure, rallies, festivals, parades and protests. Much of New Delhi, the least dense and most elite district in the metro area, has been eyed by city decision-makers for their ambitious growth and development plans. One recent plan, the Central Vista Avenue Redevelopment Project, reimagines the Rajpath corridor as a seat of power of a new modern India that has finally emerged from the shadows of its colonial past. The project is a large-scale redevelopment involving construction of numerous new buildings and demolition of existing ones, justified as supporting the expanding central administration. It has been aggressively pushed by the Prime Minister's Office, breezed through all design and environmental clearances, and been supported generously through public monies. Indeed, work on the project was only minimally disrupted during the Pandemic as it was deemed "essential". Project details have largely been kept under cover, leaving little room for public discourse. In this work I focus on the evolution of the colonial Kingsway through the postcolonial Rajpath and into the practice and tenets of the Central Vista Avenue Redevelopment Project. In particular, I explore the conflicting conceptualizations of the Project in relation to urban transformation. There are multiple lenses through which it can be viewed, including as an attempt by the current right-wing Hindu nationalist government to undermine India's non-Hindu past. Another view is that the project attempts to reclaim a space conceived by colonial oppressors and designed by a White architect of country estates who would be considered a racist by today's understanding of the term. Is the Project thus a form of adaptation or erasure? Sustainable practice, or neoliberal nationalist hegemony in a new guise? As Delhi stands (perpetually) at the crossroads between tradition and modernity, wrestling with a difficult past and an uncertain future, I explore these questions and their implications for post-colonial cities everywhere.

Keywords: India, New Delhi, post-colonial

References

Chakravarty, Surajit, and Rohit Negi. 2016. *Space, Planning and Everyday Contestations in Delhi*. Springer.

Dasgupta, Rana. 2014. *Capital: The Eruption of Delhi*. Penguin.

Hasan, et al. 2014. *From Ghalib's Dilli to Lutyen's New Delhi: A Documentary Record*. First edition. New Delhi: National Archives of India: Oxford University Press.

Irving, Robert Grant. 1981. *Indian Summer: Lutyens, Baker, and Imperial Delhi*. New Haven: Yale University Press.

Kumar, Ashok, Sanjeev Vidyarthi, and Poonam Prakash. 2020. *City Planning in India, 1947–2017*. Milton: Taylor and Francis. <https://doi.org/10.4324/9781003055969>.

Volwahren, Andreas. 2002. *Imperial Delhi: The British Capital of the Indian Empire*. Munich; New York: Prestel.

84361

## Research on the Evaluation and Improvement of Heritage Community Resilience in the Process of Culture Capital - oriented Regeneration— Examined Yangliuqing, a National Historical and Cultural Town in Tianjin, China

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Nowadays, China's urbanization is the most outstanding part during the process of global urbanization. As China's urbanization rate reached 63.89% in 2020, it entered the development stage from incremental expansion to stock-based development. With a long history and rich cultural heritage, there exist more contradictions in China's urban regeneration and construction activities. At the stage of rapid urbanization in the past, some cities conducted "protective destruction" to historical and cultural heritage. Although China established "Historical and Cultural Cities - Historical and Cultural Towns - Historical and Cultural Villages", the government's protection of heritage was restricted to the special gentrification transformation, resulting in the rupture of community context and the decline of community vitality after evicting the aborigines within the block to develop real estate or commerce. In addition, it also causes residents to have obstacles integrating themselves in new immigration areas. Recently, researchers use community resilience to analyze the heritage community and indigenous residents after the interaction of regeneration and construction activities. Community resilience is the ability to make effective use of various resources, successfully adapt to and deal with social and economic risks, quickly recover its functions and reach the past level. This study takes Yangliuqing, a national Historical and Cultural Town in Tianjin, China, as a case. With a history of 1,000 years, there are paper-cutting, brick carving, folding fans, and other folk-art forms, while retaining a large number of architectural remains in Ming and Qing Dynasties to form a unique cultural landscape. Since 2000, this town has experienced lots of construction. However, the rapid development of real estate and the creation of tourist spaces have led to the relocation of a large number of aborigines. The spatial texture of the original community has been destroyed, and the vitality of a single community with serious aging and commercial format has been greatly reduced. So, this study takes the heritage community as the research unit to explore the impact of urban construction and urban regeneration activities on community space and capital from the perspective of community resilience, and then evaluates the characteristics of community resilience under different regeneration modes, systematically analyzes the dynamic mechanism behind them, so as to optimize the indicators of mixed land use, community building and other suggestions. So the research results have certain theoretical and practical significance for enriching the world heritage preservation theory and guiding the spatial reconstruction and local cultural reconstruction in China's small towns in a new-round national urban regeneration.

Keywords: heritage preservation; community resilience; urban regeneration; land use; culture capital

## References

- Aryal, A., & Wilkinson, S. (2019). The role of social capital in the recovery of cultural built heritage: evidence from three heritage sites in Nepal. *International Journal of Disaster Resilience in the Built Environment*.
- Bo, M., Nan, L. I., & Fang, D. (2018). Attributes, challenges and future directions of community resilience. *Frontiers of Engineering Management*. DOI:10.15302/j-fem-2018030
- Bui, H. T., Jones, T. E., Weaver, D. B., & Le, A. (2020). The adaptive resilience of living cultural heritage in a tourism destination. *Journal of Sustainable Tourism*. Vol.28, No.07, 1-19.
- Carmit, R., Tzipi, H. L., Odeya, C., Mooli, L., Dima, L., & Limor, A. D. (2018). The relationship between community type and community resilience. *International Journal of Disaster Risk Reduction*, 31, 470-477.
- Cui, P., & Li, D. (2019). A sna-based methodology for measuring the community resilience from the perspective of social capitals: take Nanjing, China as an example. *Sustainable Cities and Society*, 53, 101880.
- Dai, T., Zheng, X., & J Yan. (2021). Contradictory or aligned? the nexus between authenticity in heritage conservation and heritage tourism, and its impact on satisfaction. *Habitat International*, 107, 102307.

85357

## Constructing Stronger Peripheries: Comparing Self-Assessed Cultural Activities Impacts Among Cultural Institutions in Europe

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Mechanisms used to measure the value and impacts of cultural activities are frequently quite unsatisfactory, often centred in the easiest and simplistic ways to measure it, and neglecting their territorial embeddedness and their effective importance in the development of the communities and the individuals. In order to address the complexity of value creation in a more effective way, a DINAMIA'CET-iscte research team developed a new conceptual grid to assess the impacts of creative and cultural activities, in all their diversity and multidimensionality. This results from an intense co-construction process, over the few past years, involving a variety of cultural agents, in several research projects.

A specific grid, comprising 5 main dimensions (cultural; economic; social; environmental; citizenship and participation), was developed enabling (self)assessment of the impacts of cultural activities, in a particular territory or community. This analytical framework (operationalized in 15 sub-dimensions, and 75 different indicators ) is available at CULTURE.IMPACTS DYI, a digital application that allows the systematization, self-assessment and self-awareness of value creation and their impacts by the agents of the cultural sector.

In this paper we analyze some of the results of the application of this tool within the research conducted in “Stronger Peripheries: a Southern Coalition”, a large cooperation project co-funded by the Creative Europe Programme of the European Union. This is being developed (2020-2024) through an informal network that gathers eleven arts management organizations and three research institutions, from ten European countries in southern and eastern Europe, being assumed as a space for dialogue, collaboration, and joint learning, questioning and discussing the notions of “south” and “peripheries” through diverse collaborative artistic strategies.

Drawing upon the application of this tool to representatives of the institutions partners of this project, as well as in the observation of their activity, a comparative perspective of the self awareness of their impacts is provided. Evaluating the 5 main dimensions of value creation considered, through the 75 indicators provided, the main differences between the different kind of institutions are identified and discussed, as well as the specificities that can be considered vis-à-vis institutions working in the “peripheries” of European “central” art worlds

Keywords: Value; Culture; Impacts Assessment; Territorial Development; European Peripheries; Cultural Organizations

### References

Belfiore, E., and O. Bennett. 2010. “Beyond the ‘Toolkit Approach’: Arts Impact Evaluation Research and the Realities of Cultural Policy-Making.” *Journal for Cultural Research* 14 (2): 121–142. doi:10.1080/14797580903481280

Bonet, L., G. Calvano, L. Carnelli, F. Dupin-Meynard, and E. Négrier. 2018. *Be SpectACTIVE!*

Challenging Participation in Performing Arts. Spoleto: Editoria & Spettacolo.

CAE. 2018. The Value and Values of Culture. Brussels: Culture Action Europe.

Costa, P. 2022. Valuing culture and creativity impacts in a global technological era: reshaping the analytical framework, *European Planning Studies*, DOI: 10.1080/09654313.2021.2023109

Dessein, J., K. Soini, G. Fairclough, and L. Horlings. 2015. Culture in, for and as Sustainable Development. Conclusions from the COST Action IS!007 Investigating Cultural Sustainability. Jyvaskyla: Jyvaskyla University Press

Duxbury, N., and M. Jeannotte. 2012. "Including Culture in Sustainability: An Assessment of Canada's Integrated Community Sustainability Plans." *International Journal of Urban Sustainable Development* 4 (1): 1–19. doi:10.1080/19463138.2012.670116

Gato, M., E. Tomaz, P. Costa, A. Cruz, and M. Perestrelo. 2021. "An Impact Assessment Tool for Creative Tourism: Insights from its Application to CREATOUR Project." In *Creative Tourism: Activating Cultural Resources and Engaging Creative Travellers*, edited by N. Duxbury, S. Albino, and C. P. Carvalho, 439–456, Egham: CABI

Tomaz, E., P. Costa, M. Gato, A. Cruz, and M. Perestrelo. 2020. Discussing Impact Assessment on Creative Tourism: A Theoretical and Analytical Model, *DINAMIA'CET Working Papers*, WP 2020/5, Setembro 2020. Lisboa: Dinamia'CET\_iscte.

84327

## Assessing the carrying capacity of historic centers, the case of Chania.

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Historic areas are places with tangible and intangible values that in the recent decades are developed with a high degree of dependence on tourism. This phenomenon has two different kinds of consequences. Tourism is an activity that is extremely profitable so it can lead to the historic area's regeneration and at the same time if it functions in term of exploitation it can lead to the areas downgrade.

The aim of the research is to assess the effects of tourism development in a historic area, the historic center of Chania. The research includes two sections-steps.

Initially it will analyze and evaluate the results of tourism development in Chania's historic center. It will analyze the changes in the area's economic functions, the new uses of historic structures and the role of public spaces. It will evaluate the conflict of economic development with historic preservation in order to analyze the basic effects of tourism in the historic area. It will investigate the theoretical background of tourism carrying capacity assessment in historic areas and it will proceed to the definition of the indicators which will be used. The research will combine environmental indicators, and indicators about the social and economic pillar of tourism development. The originality of the research is the combination of both quantitative and qualitative data for the recognition and the assessment of the area's tourism carrying capacity and the proposal of strategies in terms of historic urban conservation

In the second section the paper will proceed to the formulation of strategies for the conservation of Chania's historic center and its tourism development in terms of sustainability.

The aim of the research is with the assessment of the carrying capacity of Chania's historic center to propose policies that will safeguard Chania's historic center's morphology and its spatial characteristics and promote the development of tourism in terms of sustainability.

Keywords: Historic centers, Chania, urban conservation, tourism carrying capacity, assessment

### References

- Ashworth, G., & Tunbridge, J. (2000). *The tourist-historic city: Retrospect and prospect of managing the heritage city*. Oxford: Pergamon Press.
- Bandarin, F. (2006). *Towards a new standard -setting instrument for Managing the Historic Urban Landscape. Conservation in Changing Societies*. Leuven: Raymond Lemaire Centre.
- Bandarin, F., & Van Oers, R. (2012). *The Historic Urban Landscape: Managing Heritage in an Urban Century*, 1st ed. New Jersey: Blackwell Publishing Ltd.: Hoboken.
- Barrera-Fernández, D., Hernández-Escampa, M., & Balbuena, A. (2016). Tourism management in the historic city: The impact of urban planning policies. *Int. J. Sci. Manag. Tour.*, pp. 349-367.
- Diekmann, A., & Gillot, L. (2010). Heritage and tourism: A dialogue of deaf? The case of Brussels. *Riv. Sci. Tur.*, 1, pp. 263-280.
- Dimelli, D. (2019). Modern Conservation Principles and Their Application in Mediterranean Historic Centers—The Case of Valletta. *Heritage*, pp. 787-796.

doi:<https://doi.org/10.3390/heritage2010051>

Orbasli, A. (2000). *Tourists in historic towns*, Urban conservation and Heritage Management. London and New York: Taylor and Francis.

Pereira Roders, A., & Bandarin, F. (2019). *Reshaping Urban Conservation: The Historic Urban Landscape Approach in Action*,. Springer. doi:DOI: 10.1007/978-981-10-8887-2

Taylor, K. (2016). The Historic Urban Landscape paradigm and cities as cultural landscapes. Challenging orthodoxy in urban conservation. *Landscape Research*, Volume 41-Issue 4, pp. 471-480.

84477

## Actors, networks and ICT technologies: new models of territorial governance for the integrated management and promotion of cultural heritage and landscape tourism

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In a historical moment characterized by environmental and socio-economic challenges and imminent transition processes involving societies and territories, it is necessary to rethink and redesign territorial development from a resilient and adaptive perspective.

In this context, the landscape dimension, conceived as an ethical and cultural reality and as an expression of meanings and values linked to local identity (ELC, 2000), in which both the protection of local cultural heritage and the promotion of the tourist offer are integrated, can play a significant role for the construction of future sustainable scenarios and the increase of the resilience of territories.

In order to achieve these objectives, it is essential to develop innovative systems based on tourism-information services, discussed and designed with the active participation of local communities and relevant stakeholders, aimed at promoting and networking the cultural and landscape values of a given territory.

In this sense, the experiments performed within the European research programs, and in the ADRIALINK (Adriatic Landscape Interpretation Network) project, part of the Interreg ADRIAN Programme 2014-2020, aim to start from the enhancement and preservation of the landscape and heritage of the Adriatic-Ionian region, in order to promote sustainable tourism and the creation of new models of integrated management of tourism services. More specifically, starting from the recognition of the values important to local communities, these processes aim to define a new culture of landscape perception combined with innovative forms for its management.

In the attempt to implement a re-functionalization of the areas involved, aimed at combining tourism with natural, cultural and artistic heritage, the ADRIALINK project aims at the creation of a real network for landscape tourism, through the creation of a system of Landscape Interpretation Centers, conceived as nodal points of selected thematic routes and itineraries, digitally connected and equipped with smart technologies and innovative ICT solutions.

The new network, established and realized since the comparison with the interested stakeholders, is therefore aimed to improve the valorization, the promotion and the fruition of the cultural and natural heritage, contributing in a significant way to strengthen the local economy increasing the offer, reducing the tourist seasonality and creating new entrepreneurship linked to the territory.

The use of methods and solutions based on the involvement, participation and sharing of the multiple dimensions of the territory and landscape becomes a valuable and innovative support to future activities of management, programming and sustainable landscape planning in the Adriatic area.

Keywords: Landscape, cultural heritage, landscape tourism, ICT solutions, community mapping, bottom-up knowledge sharing

## References

- Batista, T., de Mascarenhas, J.M. & Mendes, P. (2015), Guidelines for the integration of biological and cultural values in a landscape interpretation centre: application in southern Portugal. *Biodiversity and Conservation* 24, 3367–3386
- Castiglioni, B., De Marchi, M. (2009), *Di chi è il paesaggio? La partecipazione degli attori nella individuazione, valutazione e pianificazione*, Coop. Libreria Editrice Università di Padova, Padova
- Council of Europe (CoE) (2000), *European Landscape Convention*. CETS No. 176., Florence and Strasbourg: Council of Europe
- Izquierdo Tugas P, Juan Tresserras J, Matamala Mellin (coord.) JC (2005) *Centros de interpretacion del patrimonio: Manual Hicira*.
- Nogué, J., Puigbert, L., Sala, P., Bretcha, G. (2010), *Landscape and Public Participation: The Experience of the Landscape Catalogues of Catalonia*, Landscape Observatory of Catalonia
- Voghera, A. (2011), *Pianificazione e progetto partecipato del paesaggio*, Agribusiness Paesaggio & Ambiente
- Zerbi, M. C. (2015), *Paesaggio e partecipazione*, Geotema

84661

## Retail change and gentrification in an overtourism city. The case of Lisbon

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Retail is a dynamic sector, whose analysis should not be limited to its understanding as a private economic activity. It is in the symbiotic relationship with cities that we find the basis for the geographies of retail. Although retail is characterized by its dynamism, the recent transformation of the commercial fabric of many city centres is particularly more intense and associated with globalization processes, with the intensification of financial and people flows.

In the last decade, the intensification of tourism, especially after the 2008 global economic crisis, is provoking a set of meaningful impacts in the cities most pressured by tourism activities. In academia, researchers have been analysing this evolution, mobilizing concepts such as gentrification, touristification, overtourism. These set of concepts are to be read as intertwined with each other, providing a broader understanding of the ongoing processes of urban transformation that arise with the excess of tourism in a given destination.

The impacts of overtourism are widely acknowledged in specific topics such as housing, where one witnesses the adaptation of housing from the long-term rental market to temporary accommodation made available in platforms – Airbnb and others – and the continuous constructions of new hotels and other facilities as a part of the adjustment of the city's urban landscape to the tourism industry. However, the way retail acts and interacts with these wide set of transformations is yet to be widely understood. There is an understanding that retail, as other urban elements, also adapts to overtourism cities. In this presentation, we will resort to the concept of retail gentrification that has been applied to interpret the replacement of older commercial establishments by new establishments associated with leisure and consumption, neglecting part of the most vulnerable population that is limited in its supply capacity.

Deriving from the broader concept of gentrification, the incorporation of retail gentrification in urban studies is still scarce and recent, although it has been standing out as relevant to apprehend the evolution of the commercial mix in certain urban districts. Based on the profound transformation that has been affecting Lisbon in the last decade, with touristification issues at the centre of academic and non-academic debate, in this communication we aim to analyse and discuss some of the elements of retail gentrification processes that are taking place in this city.

Keywords: Retailing; Retail Gentrification; Touristification; Lisbon

### References

- Cohen, E. (2007). 'Authenticity' in tourism studies: *Après la Lutte*, *Tourism Recreation Research*, 32(2), pp. 75–82.
- Gotham, K. (2005), "Tourism gentrification: the case of new orleans' vieux carre (french quarter)", *Urban Studies*, 42 (7), pp. 1099-1121.
- Gravari-Barbas, M. and Guinand, S. (Eds.) (2017), *Tourism and Gentrification in Contemporary Metropolises*. Routledge: London.

- Guimarães, P. (2021), “Unfolding authenticity within retail gentrification in Mouraria, Lisbon”, *Journal of Tourism and Cultural Change*.
- Guimarães, P. (2021), Retail change in a context of an overtourism city. The case of Lisbon, *International Journal of Tourism Cities*, 7 (2), pp. 547-564.
- Wang, N. (1999), Rethinking authenticity in tourism experience. *Annals of Tourism Research*, 26(2), pp. 349–370.
- Zukin, S. (2011). Reconstructing the authenticity of place, *Theory and Society*, 40(2), pp. 161–165.

85048

## Actor-Network of Public Space Production - A Platform for Optimizing the Public Space

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Public spaces have always been essential parts of cities, inextricably linked with basic routines in daily life and the culture of citizens. The city has shaped a unique social space that meets society's intertwined economic and social production requirements throughout history. The importance of public spaces to our quality of life is now being increasingly recognized due to the critical today's tackles of the cities such as climate change, resilience, massive immigration, epidemic health crisis, and wellbeing. These crucial elements forced urban designers to search for more resilient and practical solutions for creating and managing public spaces in cities more than before.

Public space as part of the 'space production' is based on three main pillars:

- Conceived space (produced by policymakers).
- Perceived space (made by creators).
- Lived space (experience by users).

Broadly Lefebvre defined 'conceived space' as the space which policymakers, decision-makers and planners theorize. The second is 'perceived space,' the space of 'spatial practice' defined as where ideas through the networks of actors develop and materialize. The third is 'lived space,' explained as the unconscious, non-verbal direct relation between people and space. Therefore, these three spaces make a network between three different actors.

This paper aims to introduce an intelligent platform as a new digital tool for public space that can engage the users of space (including the citizens, visitors, and workers) as the leading actor with other stakeholders such as policymakers, urban designers, planners, and other space creators.

This platform is based on the three criteria's of public space: social, environmental and structural aspects and, through different mediums such as online applications, questionnaires, interviews and observational surveys, gather together the information from the users.

The exchange of information through this platform by space creators and policy-makers will lead to an action plan for renovation or future public spaces, indicating quick wins, short or long term actions within an overall vision. This platform suggests a process is a bottom-up approach to the production of space by the active participation of users, creators, and policymakers.

Keywords: Public space, Actor-network, Space production, Urban tools

### References

Madanipour, Ali. (2016) Culture and tolerance in public space. In: Stefano Moroni and David Weberman (eds.) Space and Pluralism: Can contemporary cities be places of tolerance? Budapest: Central European University Press, pp.35-54.

May, Reuben A. Buford. (2014) *Urban Nightlife: Entertaining Race, Class and Culture in Public Space*. New Brunswick: Rutgers University Press.

Low, Setha M. (2003) *On the Plaza: the Politics of Public Space and Culture*. Austin: University of Texas Press.

Lefebvre, Henri. (1974) *The Production of Space*. Malden (Mass.): Blackwell publ.

85145

## Cultural heritage a driver of sustainable development in peripheral region? Observations from Austria

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Heritage, especially under the cover of Europeanisation, has become an essential strategy in EU place-based policies the recent years (e.g. Faro Convention). Its valorisation through tourism is no new concept, yet the focus recently seems to have shifted towards immaterial goods (Petronela, 2016). This offers new opportunities and prospects for the development of a society, for its identity and belonging (Gustafsson 2019). Especially regarding rural and peripheral regions, literature often ascribes the valorisation of cultural heritage an important role; both in the preservation of heritage and a more sustainable, general regional development (e.g. Yilmaz & Yilmaz, 2019).

Drawing on results from two Horizon projects, this article will re-assess the role of cultural heritage in regional development along a peripheral case-study region from Austria (Harfst et al., 2021). Here, industrial remains form an important part of cultural heritage, which affects potential visitors as well as inhabitants (Vargas-Sánchez, 2015). Based on a qualitative analysis, this contribution will discuss the importance of industrial heritage in the context of sustainable regional development. It will highlight especially, its social value for fostering regional identity and appreciation for its cultural heritage, which benefits social cohesion.

This contribution is based on the European Union's SPOT and ReInHerit projects, funded by the European Union's Horizon 2020 programme ([www.spotprojecth2020.eu](http://www.spotprojecth2020.eu) and <https://www.reinherit.eu/>).

Keywords: cultural heritage; peripheral areas; regional development; sustainability; industrial tourism

### References

- Gustafsson, C. (2019): Conservation 3.0 – Cultural heritage as a driver for regional growth. In: *Scientific Research and Information Technology*, 9, 1, p. 21-32.
- Harfst, J., Sandriester, J., Fischer, W. (2021): Industrial Heritage Tourism as a Driver of Sustainable Development? A Case Study of Steirische Eisenstrasse (Austria). *Sustainability*, 13, 3857
- Petronela, T. (2016): The Importance of the Intangible Cultural Heritage in the Economy. *Procedia Econ. Financ.*, 39, 731–736.
- Vargas-Sánchez, A. (2015): Industrial Heritage and Tourism: A Review of the Literature. In: Emma Waterton; Steve Watson (Eds.): *The Palgrave Handbook of Contemporary Heritage Research*. Basingstoke: Palgrave Macmillan, p. 219-233.
- Yilmaz, E., Yilmaz, E. (2019): The Role and Importance of Rural Tourism on the Development

and Promotion of Cultural Heritage Tourism. In: Surabhi Srivastave (Ed.): Conservation and Promotion of Heritage Tourism. Hershey: IGI Global, p. 108-126.

84529

## A rhythmanalysis approach to understanding the temporality of everyday heritage: The case of Ridley Road Market, London

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London's historical street markets are everyday spaces of economic and social interactions for the local community; meanwhile, they are places of cultural heritage (Watson, 2009; Evers & Seale, 2014). Yet these markets are increasingly under threats from privatisation and gentrification, within a global regime of temporal acceleration of production and consumption (González & Waley, 2013; Madanipour, 2017). To resist such challenges, local residents and street vendors flexibly mobilise the space and time of the market through alternative daily practices (Moore-Cherry & Bonnin, 2020). Their everyday negotiations on how the market operates perform the rhythms of adapting to new needs without losing place identity. These markets exemplify the concept of everyday heritage that highlights a continuous people-place engagement in heritage conservation. In contrast to the spatial perspective of existing research, this paper calls for a critical focus on temporality which produces ever-changing situational functions for adaption in transient manners.

This paper aims to explore the temporality of London's historical street markets as a living exemplar of everyday heritage, and how this temporality enables adaptability. Temporary urbanism provides a lens for its temporal dimension and evolutionary process. This paper develops a conceptual framework of the temporality of everyday heritage, which encompasses relations between the everyday heritage as place, product and approach. The framework explains the key processes by which the temporality of everyday heritage is shaped. Finally, the paper assesses in which ways temporality enables a market to adapt to changes. As to methodology, the paper is based on a single case study of the Ridley Road Market in East London. Empirical sources include the narratives of the different actors through interview and their patterns of behaviour through observation at a micro-level. Data are processed through thematic analysis and rhythmanalysis to formulate the answers to research questions. The findings reveal the important role played by temporary use activities in satisfying multiple needs while sustaining the community's everyday heritage. The paper contributes to the work of heritage conservation by adding the temporal dimension to it and opens up a promising research agenda that invites future studies on the temporality of heritage across different urban contexts.

Keywords: Street Market; Everyday Heritage; Rhythmanalysis; Temporary Urbanism; Temporal Acceleration; London

### References

- Evers, C and Seale, K (2014) *Informal Urban Street Markets: International Perspectives*, Routledge, London.
- González, S and Waley, P (2013) *Traditional Retail Markets: The New Gentrification Frontier?* *Antipode: a radical journal of geography*, 45(4), 965 - 983.

- Madanipour, A (2017) *Cities in Time: Temporary Urbanism and the Future of the City*, Bloomsbury, London.
- Moore-Cherry, N and Christine, B (2020) Playing with time in Moore Street, Dublin: Urban redevelopment, temporal politics and the governance of space-time, *Urban Geography*, 41(9), 1198-1217.
- Watson, S (2009) The magic of the market place: Sociality in a neglected public space, *Urban Studies*, 46(8), 1577–1591.

84594

## Sustainability beyond tourism: The role of local associations and communities in managing marginalised areas of World Heritage Towns. The case study of Mompox, Colombia.

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Since the early inscriptions of cities and towns in the World Heritage List, national and local governments have employed tourism as a mechanism for valuing and bringing cultural and economic sustainability to heritage conservation. However, these policies frequently marginalise practices that are not commodified and valued by social and economic elites, reducing the scope of conservation. Excluded communities create alternative spaces and processes to re-signify the meaning of heritage, and define the purpose of what to conserve, how, and why. This paper analyses the role of local associations and communities in managing rural areas and peripheral neighbourhoods in Santa Cruz de Mompox, Colombia. Based on interviews, focus groups and non-participant observations, this research argues that social networks, agency, and resistance to dominant economic and institutional drivers have encouraged community social action for places' management beyond the listed area. Activities include a program for trees' management, urban gardening, and flood and animal species control, which support ecosystems while promoting the social significance of places and landscapes. This paper concludes by suggesting ways to strengthen local processes and providing institutional inputs to encourage more thoughtful, contextualised, and inclusive policies.

Keywords: sustainability, local communities, heritage conservation, tourism

### References

TAYLOR, K., ST CLAIR, A. & MITCHELL, N. J. 2015. *Conserving cultural landscapes: Challenges and new directions*, Routledge.

PENDLEBURY, J. 2013. Conservation values, the authorised heritage discourse and the conservation-planning assemblage. *International Journal of Heritage Studies*, 19, 709-727.

ORBASLI, A. & WOODWARD, S. 2009. Tourism and Heritage Conservation. In: JAMAL, T. & ROBINSON, M. (eds.) *The SAGE Handbook of Tourism Studies*.

TWEED, C. & SUTHERLAND, M. 2007. Built cultural heritage and sustainable urban development. *Landscape and Urban Planning*, 83, 62-69.

84872

## Response of strategic spatial planning to the growth of urban tourism: Case of Central European cities

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Despite high levels of growth in years before the COVID-19 pandemic (ECM 2019), urban tourism is still lacking adequate consideration in spatial and urban planning (Galdini 2007; Nadin et al. 2018). Cities have been promoting development of tourism for its multiplicative impacts on the economy and urban development (Koens, Postma, and Papp 2018; Mason 2020; Heeley 2015), but measures addressing the potential negative impacts of unregulated (over) development of tourism remains fairly unaddressed. In this paper, we have aimed to identify the extent of consideration of urban tourism in spatial planning policy making and implementation. For this purpose, we have first performed a spatial analysis of tourism presence in ten selected mid-sized Central European case study cities. This is followed by policy analysis of strategic spatial planning and urban development policies regarding their inclusion of tourism development objectives and measures. In this way, the following hypothesis was tested: the growth of urban tourism corresponds to more comprehensive coverage of tourism in strategic planning plans and policies. Based on this, the responsiveness of spatial planning to rapid changes in urban development was assessed.

Based on comparative analysis we have detected that case study cities have similar urban structure, tourism offer and management issues (e.g. unrecorded bednights and tourist visits due to the shared economy options, seasonality, outdated infrastructure). High concentration of tourist attractions in historic city centres also represents a solid ground for touristification of the urban space and overtourism. Policy analysis of strategic documents shows these cities mostly approach tourism as (economic) development activity without a serious consideration of its spatial dimension. Increasing and high presence of tourism in cities is thus not reflected in the analysed spatial policies. Further to that, there is a clear lack of planned measures for mitigation of anticipated problems and negative impacts generated by unregulated urban tourism growth showcased in more (even overly) developed urban destinations. Thus, it can be concluded that at present the cities do not show sufficient responsiveness to urban tourism growth.

Keywords: spatial planning, strategic planning, urban tourism, responsiveness, Central Europe

### References

- Klepei, D. and Marot, N. 2022. *Mestni turizem v srednjeevropskem prostoru: pregled trendov in upravljanja skozi ukrepe prostorskega načrtovanja*. Ljubljana: University of Ljubljana, Biotechnical faculty.
- ECM. 2019. "ECM Benchmarking Report 2018-2019." Dijon: European Cities Marketing.
- Galdini, R. 2007. "Tourism and the City: Opportunity for Regeneration." *Tourismos* 2 (2): 95–111.
- Heeley, J. 2015. "Urban Destination Marketing in Contemporary Europe – What Does 'Good' Look Like?" *International Journal of Tourism Cities* 1 (1): 36–49. <https://doi.org/10.1108/IJTC->

08-2014-0003.

Koens, K., Postma, A. and Papp, B. 2018. "Is Overtourism Overused ? Understanding the Impact of Tourism in a City Context," 1–15. <https://doi.org/10.3390/su10124384>.

Mason, P. 2020. *Tourism Impacts, Planning and Management*. Fourth edition. | Abingdon, Oxon ; New York,: Routledge. <https://doi.org/10.4324/9780429273544>.

Nadin, V., Fernández Maldonado, A. M., Zonneveld, W., Stead, D., Dąbrowski, M., Piskorek, K., Sarkar, A., et al. 2018. *Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe* | ESPON. <https://www.espon.eu/planning-systems>.

Rauws, W. 2017. Embracing Uncertainty Without Abandoning Planning: Exploring an Adaptive Planning Approach for Guiding Urban Transformations. *Disp*, 53(1), 32–45.

<https://doi.org/10.1080/02513625.2017.1316539>

84925

## Planning, Social Change and Everyday Life

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Planning, like many other disciplines, has witnessed a decade of unsettling tendencies: World financial crisis 2008, global insurgent movements 2011, refugee 'crisis' (since 2015), new authoritarian state leadership (since 2016), climate crises protests (since 2018), pandemics (since 2019/20) and now on top also political and civic upheavals of undemocratic and democratic character in many cities and countries worldwide. While the city and the urban public realm have been considered key arenas to overcome these bifurcations, the potential of deep critique and (social, cultural, political) theorization of everyday life and of lived space to decipher the complexities, ambivalences and deep potentialities of social change has not yet been unlocked in planning theory and praxis. This paper addresses key concerns to realign planning theory and deeper conceptual insights on everyday life and lived space to start deciphering massive shifts in contemporary everyday life, particularly as regards social, cultural and political dimensions.

Keywords: urban studies, critique of everyday life, social change, economic disruption, political upheaval

### References

Bargetz, B (2016) *Ambivalenzen des Alltags. Neuorientierungen für eine Theorie des Politischen (Ambiguities of the Everyday. Reorientation for a Theory of the Political)*. Bielefeld: Transcript

Bayat, A (2013 (2010)) *Life as Politics. How Ordinary People Change the Middle East*. Stanford, California: Stanford Press

Huxley, M and Yiftachel, O (2000) *New Paradigm or Old Myopia? Unsettling the Communicative Turn in Planning Theory*. *Journal of Planning Education and Research*, 1, 19(4), pp. 333-42

Hou, J and Knierbein, S (2017) *City Unsilenced. Urban Resistance and Public Space in the Age of Shrinking Democracy*. London, New York: Routledge

Ploger, J (2018) *Conflict and Agonism*. In: Gunder, M, Madanipour, A, Watson, V (eds) *The Routledge Handbook of Planning Theory*. New York: Routledge, pp. 264-75

84901

## Cultural festivals in Oldambt: Creating a more positive image for a depopulating rural area.

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The role of cultural festivals as drivers for community building, regeneration and economic diversification is widely established. Whereas most of the previous research on this topic focuses on urban contexts, this paper has particular attention for the effects of cultural festivals in a rural area that deals with territorial imbalances. Oldambt, an area in the northeast of the Netherlands, has recently suffered from depopulation and a negative image. However, during the last decade, four high-quality cultural festivals have been developed in or moved towards the area. These may help to create better cultural amenities and a more positive image for Oldambt. In the long-term, this may help to attract more residents, businesses, and jobs. This paper investigates how these four festivals, Pura Vida, Waterbei, Festival Hongerige Wolf and Grasnepolsky, contribute to Oldambt. Based on 17 interviews with key stakeholders and a focus group with young people from the area, it analyses how rural cultural festivals help to strengthen the cultural amenities, to improve the image, and to regenerate the area by attracting more visitors, residents, businesses, and jobs. Furthermore, the paper critically assesses the role of governments in cultural planning. It finds that the festivals are often bottom-up initiatives that build on Oldambt's rich social and cultural heritage and help to enhance the quality of cultural life while improving the image of the area. As the Covid-19 pandemic and its effects put enormous pressure on the cultural sector and the future of these cultural festivals, the paper also emphasises the importance of local and regional government support.

Keywords: Cultural planning; Festivals; Rural development; Spatial Justice; Regeneration; The Netherlands

### References

Bell, D., & Jayne, M. (2010). The creative countryside: Policy and practice in the UK rural cultural economy. *Journal of Rural Studies*, 26(3), 209-218.

Christiaanse, S. (2020). Rural facility decline: A longitudinal accessibility analysis questioning the focus of Dutch depopulation-policy. *Applied Geography*, 121, 102251.

Duxbury, N., & Campbell, H. (2011). Developing and revitalizing rural communities through arts and culture. *Small Cities Imprint*, 3(1).

Hjalager, A. M., & Kwiatkowski, G. (2018). Entrepreneurial implications, prospects and dilemmas in rural festivals. *Journal of Rural Studies*, 63, 217-228.

Kloosterman, R. C. (2014). Cultural amenities: Large and small, mainstream and niche – A conceptual framework for cultural planning in an age of austerity. *European Planning Studies*,

22(12), 2510-2525.

Kwiatkowski, G., Oklevik, O., Hjalager, A. M., & Maristuen, H. (2020). The assemblers of rural festivals: organizers, visitors and locals. *European Planning Studies*, 28(2), 255-272.

84485

## Place-based tourism: an exploration of new interpretations of cultural tourism

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European urban tourism has long rested on the classic cultural offer materialised in museums and galleries. However, since 2010, multiple cities have started to heavily promote themselves as a lively, vivid urban destinations and tourists were invited to enjoy in the local life. Due to the more intensive cooperation of tourism and cultural sectors, in recent years we have witnessed an increase in the so-called place-based offers in the cities around Europe. Place-based tourism highlights the specific characteristics of a particular destination and promotes atmospheric, unique, authentic and local experiences in order to achieve destination distinctiveness (Truong et al., 2018). The growing demand for this type of tourism is also confirmed by recent studies (Smith, 2015; Boivin & Tanguay, 2019) and a survey about cultural offer in Ljubljana (Klepej et al., 2020), in which respondents have identified architecture, townscapes and local culture as the main motives of their arrival. Although, this new trend in the urban tourism has been corroborated, the theoretical background of the term is still ambiguous. Thus a Delphi survey was set up to explore various understandings of the term place-based tourism, both, in academic community, and in practice through official destination promoters of the selected urban destination case studies, namely Ljubljana, Barcelona, Nitra and Narva. A two-phased survey using the Delphi method with the participants (n=43) was performed in autumn 2021. In the first phase the participants reported their associations and opinions of the place-based tourism and based on the findings a common definition was created. In the second phase, participants provided examples of destinations and tourist/cultural offer following the mainstream. In addition, the official tourism development strategies were screened for presence of the concept and measures for its application. Taking these results into account, this contribution reflects on the current understanding of place-based tourism and what this means for current transformation of the cultural offer and experience in urban destinations.

Keywords: cultural tourism, urban destinations, place-based tourism, cultural offer, locality

### References

- Boivin, M., & Tanguay, G. A. (2019). Analysis of the determinants of urban tourism attractiveness: The case of Québec City and Bordeaux. *Journal of Destination Marketing & Management* 11: 67–79.
- Klepej D., Krošelj M., Stubičar N., Marot N. (2020). Project SPOT: Social and innovative platform on cultural tourism and its potential towards deepening Europeanisation. Deliverable 1.4a: Case study report: The City Municipality of Ljubljana, Slovenia, year 2020. Horizon 2020.
- Smith S (2015) A sense of place: place, culture and tourism. *Tourism Recreation Research* 40(2): 220–233.

- Truong, T. L. H., Lenglet, F. and Mothe, C. (2018). Destination distinctiveness: Concept, measurement, and impact on tourist satisfaction. *Journal of Destination Marketing & Management* 8: 214–231.

85240

## Preservation and exhibition of the bastion zone and the Old Town of Tallinn using a digital twin

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Tallinn's Old Town, with its surrounding bastion zone parks, has been a UNESCO World Heritage Site since 1997. In 2018, 2.71 million one-day and 1.93 million multi-day foreign visitors visited Tallinn, and 80% of them visited the Old Town. Due to the constant increase in the number of visitors, there is a problem with the movement in the Old Town, as well as with the resilience of the objects visited. The city has been working to solve this problem by offering alternative places to visit. The ca 150 ha large park and bastion zone surrounding the Old Town is an unused opportunity for extending this traffic.

To determine the preserved landscape values in the parks of the bastion zone surrounding the Old Town, a survey "Inventory of the green areas of the bastion zone of the Old Town of Tallinn" has been carried out. This inventory of existing species and their stands has also been developed into a dynamic digital layer in the project "Tallinn-Helsinki Dynamic Green Information Model". Together with Tallinn's 3D model of the Old Town, in which the buildings are modeled with great emphasis on details, and which allows you to look around the Old Town virtually, the green information layer is being developed into a digital twin of the area. The digital twin can be used to introduce the history of the parks, arouse the interest of visitors, analyze, and predict the future.

Knowledge of the available vegetation and the usage of algorithmic plant models, modeled in the GreenTwins project, makes it possible to build a realistic urban model with greenery for the bastion park zone. It allows to study the interaction of the built and natural environment while the plants grow and change over the seasons and years. It will reveal, for instance, which important views in the park, from the park, or to the buildings, will disappear due to vegetation growth, and whether maintenance cuts or felling will be needed to preserve the historical views.

Keywords: cultural heritage, landscape values, tourism, digital twin

### References

Emor AS 2019. Survey "Tallinn Foreign Visitors Survey"

Nurme, S. 2019. Understanding the Role of 18 th Century Estonian Manor Ensembles in Contemporary Planning and Conservation. Taltech Press, Tallinn

Lensment.M., Sõstra.K. Statistics Estonia 2019. Report "Impact of foreign tourism on the economy of Tallinn"

<https://gis.tallinn.ee/linnamudel/>

84401

## Lignite mining and energy production in Bełchatów industrial region: a threat or opportunity for tourism development?

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In-depth discussion on evolutionary changes of tourism (from social tourism in the mid of 1970s, through business tourism, then educational tourism during economic transition, towards leisure tourism in the future) is the main goal of this enquiry. Bełchatów industrial district in Poland is the case study area where the mentioned changes were evidenced. Moreover, all tourism changes have been and will be related to transformative moments like the development and then extinction of the core developmental functions in the region: lignite mining and energy production. In this research the method of case study analysis was applied to explore a co-evolution of tourism and industrial sectors. This paper addresses the eclectic concretized theory of regional economic change introduced by Hospers (2004). He combined achievements of Schumpeter, Fourastié and Perroux. It is emphasized that Schumpeter, as well as Perroux defined regional economy as a dynamic system and identified three driving forces of regional development: entrepreneurship, technological change and innovation. Schumpeter introduced the concept of structural change, while Fourastié and Perroux discussed respectively sectoral and spatial context of that change. Trigger events have political, top-down nature. These are namely launching radical industrialization, starting economic transition, and introducing European Green Deal. Mentioned trigger events, its impacts on core developmental functions (lignite mining and energy production) but also tourism development are discussed as the Schumpeterian context of radical changes of the region. The methods used to explore investigated problem base on triangulation of literature studies and analysis of documentary and secondary data sources. The following methodological steps proposed by Hospers (2004) in his theory will be applied: 1) geographical, historical, economic and social characteristic of the research area, 2) description of the contemporary issues of a region, including economic, institutional, cognitive and policy context, 3) identification of factors determining regional success and failure, and finally 4) formulation of theory-based position of region's future.

Keywords: Tourism; Regional development; Evolutionary approach; Concretized theory of regional economic change; Bełchatów industrial region; Poland

### References

- Brekke, T. (2015). Entrepreneurship and path dependency in regional development. *Entrepreneurship & Regional Development*, 27(3–4), 202–218. <https://doi.org/10.1080/08985626.2015.1030457>
- Breul, M., Hulke, C., & Kalvelage, L. (2021). Path Formation and Reformation: Studying the Variegated Consequences of Path Creation for Regional Development. *Economic Geography*, 97(3), 213–234. <https://doi.org/10.1080/00130095.2021.1922277>
- Darwent, D. F. (1969). Growth poles and growth centers in regional planning - a review. *Environment and Planning*, 1, 5–32.

- Frangenheim, A., Tripl, M., & Chlebna, C. (2020). Beyond the Single Path View: Interpath Dynamics in Regional Contexts. *Economic Geography*, 96(1), 31–51. <https://doi.org/10.1080/00130095.2019.1685378>
- Hospers, G. J. (2004). *Regional Economic Change in Europe: A Neo-Schumpeterian Vision*. LIT Verlag.
- Ioannides, D., & Brouder, P. (2017). Tourism and economic geography redux: evolutionary economic geography's role in scholarship bridge construction. In P. Brouder, S. Anton Clavé, A. Gill, & D. Ioannides (Eds.), *Tourism Destination Evolution* (pp. 183–193). Routledge.
- Kurikka, H., & Grillitsch, M. (2021). Resilience in the Periphery: What an Agency Perspective Can Bring to the Table. In R. Wink (Ed.), *Economic Resilience in Regions and Organisations* (pp. 147–171). Springer Fachmedien Wiesbaden GmbH. [https://doi.org/10.1007/978-3-658-33079-8\\_6](https://doi.org/10.1007/978-3-658-33079-8_6)
- Simmie, J., & Martin, R. (2010). The economic resilience of regions: Towards an evolutionary approach. *Cambridge Journal of Regions, Economy and Society*, 3(1), 27–43. <https://doi.org/10.1093/cjres/rsp029>

84050

## Clear understanding of tourists' spatial cognition for sustainable heritage tourism: A case study of Tunxi historic streets by space syntax based method.

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With high commercial and cultural value, historic streets can easily drive nearby regeneration and tourism development[1]. In china,it is common for urban designers to integrate historic streets with modern commerce spaces, forming a complex street structure characterized by diverse functions[2].However,all these changes may decrease the spatial experience of the original historic streets[3-4].Therefore it is urge to understand the tourists'spatial cognition of the whole historic district to support streets conservation and encourage sustainable heritage tourism[5].

This study takes Tunxi historic streets as an example.It is also a famous tourist destination in China, but the motorization of surrounding traffic and the construction of commercial districts have had an impact on the spatial structure of the original historic streets.The space syntax based method [6-7]was proposed to help urban designers to understand the tourists' spatial cognition , and thereby identify the spaces to be improved for better tour experience.

The results indicating that firstly, the surrounding motor traffic will reduce the vitality of the original pedestrian-based historic streets. Therefore, the subsequent planning needs to plan the traffic stations carefully to match the entrances and exits of the historic streets. Secondly, the connection area between historic streets and modern commercial streets should be the new focus for urban designers . It is recommended to adopt an "inverted trapezoid" open square design, which can effectively connect old and new plots, and imply the entry of historic streets for tourists; Finally, in addition to the mature main street, branch-level commercial streets helps enhancing the liveliness of the whole historic district.

Keywords: historic streets;spatial cognition;sustainable heritage tourism;space syntax;Tunxi streets

### References

- [1]Heath, Tim, Taner Oc, and Steve Tiesdell. Revitalising historic urban quarters. Routledge, 2013.
- [2]Zhai, Binqing, and Mee Kam Ng. "Urban regeneration and social capital in China: A case study of the Drum Tower Muslim District in Xi'an." *Cities* 35 (2013): 14-25.
- [3]Ye, Lin. "Urban regeneration in China: Policy, development, and issues." *Local Economy* 26, no. 5 (2011): 337-347.
- [4]Xie, Jing, and Tim Heath. "Conservation and revitalization of historic streets in China: Pingjiang Street, Suzhou." *Journal of urban Design* 22, no. 4 (2017): 455-476.
- [5]Zhu, He, Jiaming Liu, Huaxian Liu, Xibo Wang, and Yufei Ma. "Recreational business district boundary identifying and spatial structure influence in historic area development: A case study of Qianmen area, China." *Habitat International* 63 (2017): 11-20.

[6]Penn, Alan, and Alasdair Turner. "Space syntax based agent simulation." Springer-Verlag, 2002.

[7]Li, Yuan, Longzhu Xiao, Yu Ye, Wangtu Xu, and Andrew Law. "Understanding tourist space at a historic site through space syntax analysis: The case of Gulangyu, China." *Tourism Management* 52 (2016): 30-43.

84375

## A study of a customised investment model for historic buildings based on participatory multi-criteria analysis: the former British Consulate in Tianjin as an example

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As a valuable cultural resource in the city, heritage buildings with historical value have changed from traditional static conservation to new functional transformation and adaptive reuse, and nowadays they need not only to meet the needs of cultural activities but also to generate economic benefits to transfer the costs of heritage conservation. The article examines the model of partial renovation and reuse of the former British consular residence in Tianjin by preserving the original appearance of the building. The government-partnered landscaping company first carried out a participatory multi-criteria analysis based on the style, quality and ownership of the historic building, and then adapted it to the work needs of the corresponding Alibaba corporate office in terms of activity flow, open space and environmental quality. This is a one-to-one customized model for attracting investment in historic buildings, i.e. matching and adjusting the target of investment according to the multi-criteria analysis of historic buildings, and is an exploration of Tianjin's experience in attracting investment for high-quality needs in the context of adaptive reuse of unused historic heritage buildings. How to directly transform the city's cultural material resources into actual financial and economic benefits has certain implications for other cities with many historic buildings that are also in urgent need of financial and economic enhancement.

Keywords: historic buildings; adaptive reuse; participatory multi-criteria analysis; bespoke investment; Tianjin

### References

- [1]Nesticò, A., Morano, P., & Sica, F. (2018). A model to support the public administration decisions for the investments selection on historic buildings. *Journal of Cultural Heritage*.
- [2]Amato, A., Andreoli, M., & Rovai, M. (2021). Adaptive Reuse of a Historic Building by Introducing New Functions: A Scenario Evaluation Based on Participatory MCA Applied to a Former Carthusian Monastery in Tuscany, Italy. *Sustainability*, 13(4), 2335.
- [3]Cheung, E., & Chan, A. P. C. (2014). Revitalizing Historic Buildings through a Partnership Scheme: Innovative Form of Social Public–Private Partnership. *Journal of Urban Planning and Development*, 140(1), 04013005. doi:10.1061/(asce)up.1943-5444.0000161
- [4]Ryberg-Webster, S., & Kinahan, K. L. (2016). Historic preservation in declining city neighbourhoods: Analysing rehabilitation tax credit investments in six US cities. *Urban Studies*, 54(7), 1673–1691.
- [5]Paccoud, A., Niesserou, P., & Mace, A. (2020). The role of ethnic change in the closing of rent gaps through buy-to-let gentrification. *Urban Geography*, 1–16.

81790

## Qualitative and quantitative indicators in tangible and intangible cultural heritage as a decision-making tool for record, preservation and evaluation of a place.

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The paper is a final report of the doctoral thesis of the author and proposes an innovative multicriteria system of qualitative and quantitative indicators for the record and the evaluation of the cultural assets of a place. The study has the following steps: (a) the multicriteria decision-making system (b) a comprehensive toolkit and guidelines of the use of this multicriteria system in order to apply it in several places. The research study sheds new light on multicriteria decision-making systems, through the proposal of a new open access multicriteria evaluation based on a decision-making method. The aim of the literature review is to broaden the current knowledge of the definitions of the basic concepts and principals of tangible and intangible cultural heritage, as a new framework for the interpretation of the outcomes of culture and place. The literature review reveals a national and international research gap in cultural indicators in multicriteria system and emerge a holistic approach for the protection, recording and evaluation of cultural heritage. Multicriteria decision-making systems have become important in this field in terms of protection and conservation. This methodology calls into question the creation of a calibration through a ranking list -best to worse- of the most significant tangible and intangible cultural assets of a place. It proposes a step by step, user-friendly manual in order to provide an easy understanding and application. The paper proposes a new methodology, firstly as a new initiative to create a new multi criteria scientific tool and secondly through the in-depth, and detailed examination of this multicriteria method in the particular case of Ano Syros.

Keywords: intangible and tangible cultural assets, culture, indicators

### References

UNESCO. Text of the Convention for the Safeguarding of the Intangible Cultural Heritage; UNESCO: Paris, France, 2003.

Linaki, E. Intangible and Tangible Cultural Resources of Ano Syros. A Model Urban Study. Bachelor's Thesis, Aristotle University of Thessaloniki, Thessaloniki, Greece, 2016.

Stefanou, J. The Physiognomy of the Greek City; University Press, NTUA: Athens, Greece, 2000.

Turban, E. Decision Support and Expert Systems: Management Support System, 4th ed.; Prentice Hall (Higher Education Division, Pearson Education): Upper Saddle River, NJ, USA, 3 February 1995.

85261

## Green structure and presence of landscape image in towns

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Green structures surrounding small towns in cultural landscapes can inhabit important visual values like characteristic vegetation and land-form silhouettes with historic legibility. The Norwegian Planning and Building Act (2009) enables a municipality to decide legal zones for consideration of such landscape values even on private land. This has become common practice for some towns and cities in Norway.

The aim with this study is to emphasize the reason why the landscape silhouettes that surrounds smaller villages or towns in cultural landscape often are being exploited and changed with causes loss of place character. This can be observed as debates in local press, and examples are easily found both in places who strives with climate friendly compact urban planning, and on popular tourist sites where local inhabitants search to find an income by “marketing” the landscape and the view both to residential areas and tourist facilitation. To discuss the topic I will use a case-study.

- How are green structures and landscape values identified in overall plans, and how are the recognition of values for recreation and visual qualities in the municipalities administration? In what ways was changes in the landscape debated by inhabitants, in a local newspaper and in social media?

The case will be the hamlet or village of Straumen in Mid-Norway at the municipality of Inderøy, which means “the inner island”. There is a strong tide-water current at the site innermost in the fjord. The village was based on tenants and fishermen houses from late 19th century and is still picturesque and small scale despite the new roads and buildings nearby. The peninsula is agricultural dominated and in general known for its harmonious setting by the fjord. The site has had an expanding tourism connected to the old part of the village for the last 20 years. The landscape surrounding the village has pasture hillsides and horizons with spruce forest that frames the open cultivated land. This is the context of the village by the fjord. There is now an ongoing debate about landowners felling spruce and building in the horizon north of the village.

The hypothesis is that this silhouettes with spruce are more important in our everyday landscapes than we usually think of. Especially when we move in the paths or on the fields in the landscapes, and not on roads by car. Landscape images has a great meaning to the context around this village.

These unspoken values can be made visible to us in verbal expressions and analysis before it is lost.

Visible identity like this can be protected against further changes before it is too late. The elevating landscapes behind the viewpoint and to the north can be part of a landscape analysis and serve as a basis for consideration zones in the future overall plans.

The possibilities must be regarded by the administration in the municipality.

Keywords: Landscape architecture, cultural landscape, landscape planning, site analysis, visual aspects of landscape

#### References

Christian Nordberg Schultz, mellom jord og himmel, 1992

Torbjørn Tumyr Nilsen, Arkitektnytt 10/21, Psyk arkitektur 2021

Marius Fiskevold og Anne Cathrine Geelmuyden, Arcadia updated, raising landscape awareness trough analytical narratives, Routledge 2019

Inderøyningen (Lokal News Paper), desember 21 Edition, 2021

The Norwegian Environment Agency and the Direktorat for Cultural Heritage (Direktoratet for naturforvaltning og Riksantikvaren), Metode for landskapsanalyse i kommuneplan, 2011

84234

## “Force Majeure”: The Transformation of Cultural Strategy as a Result of Urban Shrinkage and Economic Crisis. The Case of Riga, Latvia

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Cultural strategies have been commonly used to address the consequences of urban shrinkage, particularly in a postindustrial context. Proliferated growth-oriented models, such as “creative city,” have threatened the sustainable development of shrinking cities. Alternative cultural models that prioritize social inclusion, local sensitivity, and affordability are thus urgently needed. Using Riga as a case study, this paper explores the process of transformation to an alternative cultural strategy in a post-socialist shrinking city and identifies planning and governance tools that stimulate its development. Employing qualitative interviews and document analysis, the relations between emergent and deliberate cultural strategies are investigated. The results show how the organization of the European Capital of Culture 2014 during the severe shrinkage and economic crisis led to five elements of an alternative cultural strategy: (1) a shift from investing in cultural “hardware” to “software,” (2) a locally sensitive approach, (3) cultural decentralization, (4) strengthened civic engagement, and (5) inclusiveness. These elements of an emergent strategy were recognized by local authorities and stimulated changes in the deliberate cultural strategy. This study supports the idea that urban shrinkage offers municipalities an opportunity to reimagine traditional planning practices and emphasizes the important role of civic actors’ participation in coproducing public services and governance strategies.

Keywords: shrinking cities, post-socialist city, cultural strategy, strategy transformation, European Capital of Culture

### References

- Beauregard, R. A. (2009). Urban population loss in historical perspective: United States, 1820-2000. *Environment and Planning A*, 41(3), 514–528. <https://doi.org/10.1068/a40139a>
- Berglund, L. (2020). Critiques of the shrinking cities literature from an urban political economy framework. *Journal of Planning Literature*, 35(4), 423–439. <https://doi.org/10.1177/0885412220928507>

- Bianchini, F., & Parkinson, M. (1993). *Cultural policy and urban regeneration. The West European experience*. Manchester University Press.
- Bierbaum, A. H. (2020). Managing shrinkage by “right-sizing” schools: The case of school closures in Philadelphia. *Journal of Urban Affairs*, 42(3), 450–473.  
<https://doi.org/10.1080/07352166.2020.1712150>
- Binns, L. (2005). Capitalising on culture: an evaluation of culture-led urban regeneration policy. *Futures Academy, Technological University Dublin*, 118–124. Retrieved from <http://arrow.dit.ie/futuresacart/5/>
- De Franz, M. (2013). Regeneration and discursive politics. In M. E. Leary & J. McCarthy (Eds.), *The Routledge Companion to Urban Regeneration*. Taylor & Francis.
- Joo, Y. M., & Hoon Park, S. (2017). Overcoming urban growth coalition: The case of cultureled urban revitalization in Busan, South Korea. *Urban Affairs Review*, 53(5), 843–867.  
<https://doi.org/10.1177/1078087416638449>

84527

## The role of civic engagement in preservation and enhancement of ancient transhumance routes (tratturi). The case of Apulia Region in Southern Italy

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Transhumance is an ancient, almost extinct practice that shaped the landscape and culture in diverse contexts around the world. In Italy, the transhumance heritage consists of an intricate network of routes, called tratturi, covering about 3000 km in the South of the country. In the Apulia Region (south-eastern tip of the country) this network is made up of 91 routes across 90 municipalities, many of which are located in inland areas, far from the large urban centres, the coast and the main economic, cultural and tourist activities.

The legacy of transhumance is a strong cultural identity resulting from the mutual influence of the populations involved in this practice over the centuries. However, in the last decades, the process of rapid modernisation that has affected the whole Southern Italy has led to a loss of the cultural and identity link between this heritage and the populations.

In order to promote the historical and cultural value of the transhumance routes, together with the enhancement of its ecological potential and use as a slow mobility network, the regional government, with the scientific support of a multidisciplinary research group, is developing a policy based on a new instrument called Document for the Enhancement of the Tratturi (DET), as a further step towards the creation of the Park of the Apulian Tracts.

In this framework, the involvement of active associations and key stakeholders of the civil society operating along the transhumance routes, is crucial for policy effectiveness. Our investigation revealed that while the municipal administrations have realized only recently how important these public infrastructures are as key assets for the sustainable development of their territories, associations and active citizens have been well aware of the potential of these routes for many years and have been working to preserve and promote these heritage routes. They often take care of the routes and their surroundings by carrying out maintenance operations, promoting cultural activities and mapping points of interest discovered during explorations.

Our paper explores how activism and civic engagement can play a key role at different levels in heritage enhancement strategies, from knowledge transmission and awareness raising to pilot projects implementation and co-management solutions.

**Keywords:** transhumance routes, landscape enhancement, civic engagement, cultural heritage, Apulian tratturi, marginal areas

### References

Barbanente A., Grassini L., Fostering transitions in landscape policies: A multi-level perspective, *Land Use Policy*, Volume 112, 2022, 105869, ISSN 0264-8377, <https://doi.org/10.1016/j.landusepol.2021.105869>

Brunckhorst D., Coop P., Reeve I., 'Eco-civic' optimisation: A nested framework for planning

and managing landscapes, *Landscape and Urban Planning*, Volume 75, Issues 3–4, 2006, Pages 265-281, ISSN 0169-2046, <https://doi.org/10.1016/j.landurbplan.2005.04.001>

Cervelli, E.; Scotto di Pert, E.; Pindozi, S. Identification of Marginal Landscapes as Support for Sustainable Development: GIS-Based Analysis and Landscape Metrics Assessment in Southern Italy Areas. *Sustainability* 2020, 12, 5400. <https://doi.org/10.3390/su12135400>

Healey, P., Civic engagement, Spatial Planning and Democracy as a Way of Life, *Planning Theory Practice* 2008, Vol. 9, No. 3, 379-414

López-Santiago, C. A., E. Oteros-Rozas, B. Martín-López, T. Plieninger, E. González Martín, and J. A. González. 2014. Using visual stimuli to explore the social perceptions of ecosystem services in cultural landscapes: the case of transhumance in Mediterranean Spain. *Ecology and Society* 19(2): 27. <http://dx.doi.org/10.5751/ES-06401-190227>

Mastronardi L.; Giannelli A.; Romagnoli L. Detecting the land use of ancient transhumance routes (Tratturi) and their potential for Italian inner areas' growth; *Land Use Policy*, Volume 109, 2021, 105695, ISSN 0264-8377, <https://doi.org/10.1016/j.landusepol.2021.105695>

Vendemmia B., Pucci P., Beria P., An institutional periphery in discussion. Rethinking the inner areas in Italy, *Applied Geography*, Volume 135, 2021, 102537, ISSN 0143-6228, <https://doi.org/10.1016/j.apgeog.2021.102537>

84186

## Cooperation and competition among large industrial sites in heritage tourism

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The Ida-Viru County in Northeast Estonia possesses a range of tangible and intangible heritage from the 19th and 20th centuries (Valk et al., 2020). Especially noteworthy are the textile and oil shale industries as they have used vast amounts of resources and space for their production in the past one hundred years. The new century has witnessed the textile industry being reduced to a minimum and in the wake of the European green transition, the oil shale industry is facing a significant reduction as well. For economic diversification purposes, Ida-Virumaa has begun to promote itself since 2017 as an adventure tourism region combining its sandy beaches and vast forests and mires with post-industrial entertainment.

Studies on a local and national scale have emphasised the potential of industrial heritage tourism in Ida-Viru County which can only be realised in collaboration and through proper mapping, assessment and promotion of industrial heritage by relevant specialists in consultation with local stakeholders (Metsaots et al. 2015a, Metsaots et al., 2015b, Michelson et al., 2020, Valk et al., 2020). At the same time, policy documents and strategies still rarely feature industrial heritage tourism. Rather, buildings and architecture have been referred to as cultural and historical heritage, and post-industrial landscapes have been considered as adventure tourism objects.

This paper examines the practical implications that the existing heritage-led initiatives are facing while working towards the reanimation of post-industrial spaces, with a special focus on large sites. Interviews conducted with the directors, CEOs and PR managers of such initiatives reveal that it is generally agreed that domestic tourism alone can not support industrial tourism in Estonia and it is necessary to increase both regional thematic collaboration and develop international networks and visibility. However, the potential of industrial tourism is still often latent or in development, hindered by differences in the agendas and funding of the initiatives, lack of trust and interest in industrial tourism from investors and the active industry, community scepticism and hope for re-industrialisation — issues which will be further exemplified and analysed in this paper.

Keywords: industrial heritage, post-industrial landscapes, green transition, tourism

### References

Metsaots, K., Printsman, A., Kaart, T. & Sepp, K. (2015a). What hinders and what facilitates good living in the oil shale mining region? *Oil Shale*, 32 (4), pp. 373–392. DOI: 10.3176/oil.2015.4.06

Metsaots, K., Printsman, A. & Sepp, K. (2015b). Public opinions on oil shale mining heritage and its tourism potential. *Scandinavian Journal of Hospitality and Tourism*, 15 (4), 380–399.

DOI: 10.1080/15022250.2015.1024817.

Michelson, A., Koppel, K., Melesk, K., Arrak, K., Laurimäe, M., Murasov, M., Gerli Paat-Ahi, G., Piwek, A. (2020). Ida-Virumaa majanduse ja tööturu kohandamine põlevkivitööstuse vähenemisega [Adaption of Ida-Virumaa County's Economy and Labor Market to the Reduction of Oil Shale Industry]. Tallinn: Poliitikauuringute Keskus Praxis.

Valk, H., Kriiska, A., Matsin, A., Oras, J., Ormisson-Lahe, A., Pae, T., Rahi-Tamm, A. & Rimmel, M-A. (2021). Päranditurism Eestis: potentsiaal ja arenguvõimalused [Heritage Tourism in Estonia: Potential and Development Possibilities]. Tartu: Tartu Ülikooli ajaloo ja arheoloogia instituut.

84631

## Night-time activities and changing urban pattern: Reading the nightscape of Ankara, Turkey

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Urban nightlife has been a significant issue for policy-makers in various aspects including night economy, security, law, health, and planning. Central districts providing entertainment and leisure hubs for both citizens and tourists are required to be planned to meet the necessities of 24-hour city. However, as the city grows and the taste and demand of users change, the spatial organization and character of night-time activities display a significant shift which also affects the urban pattern of central district, in turn. This study reads the development trends of central districts of Ankara with respect to the spatial distribution and user preferences of urban night-time activities. The aim of the paper is to provide an empirical evidence for understanding the decentralization process of the central business district shifting from the historical and main core to new development zones of the city by analysing the preferences of youth about their night-time use of the urban centres. In doing so, young adults studying at graduate level were selected to identify their use of the different central districts of Ankara, Turkey. Data were gathered via a questionnaire addressing the tendencies of 250 students on their spatial choice of leisure activities at evening and night-time across the city. Findings suggest that there is a significant tendency towards a particular concentration of entertainment facilities preferred by youth in suburban locations of the selected city with multiple and diverse centres of nightlife. The analysis constitutes a basis for a further discussion on spatial distribution of entertainment facilities and their night-time uses which is highly critical for understanding the night-time planning of the central districts to develop a revitalization policy for the descending perception on the historical and main central parts of the city.

Keywords: night-time; cityscape; central district; young adults; Ankara

### References

Chatterton, P., & Hollands, R. (2003). *Urban nightscapes: Youth cultures, pleasure spaces and corporate power*. Psychology Press.

Hollands, R. G. (1996). From shipyards to nightclubs: Restructuring young adults' employment, household, and consumption identities in the North-East of England. *Berkeley Journal of Sociology*, 41, 41-66.

Roberts, M., & Eldridge, A. (2009). *Planning the night-time city*. Abingdon: Routledge.

Rowe, D., Stevenson, D., Tomsen, S., Bavinton, N., & Brass, K. (2008). *The City After Dark Cultural Planning and Governance of the Night-time Economy in Parramatta*. Western Sydney: Centre for Cultural Research.

85109

## Heritage communities in the search for spatial justice. Reflections on ecomuseums

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In marginal contexts, some dominant discourses on the past may be a way to perpetrate territorial imbalances and spatial injustices in the making of the future. Low-income neighbourhoods, excluded communities, sacrifice zones, etc. may be subjugated under toxic narratives (Armiero et al., 2019) and oppressing identities.

In contrast, there exist various streams of literature – at the intersection amongst various disciplines –, and practices that try to revert such trends (ibid., Hayden, 1998, Duarte Cândido, 2020, Davis, 2020, among others), offering critical reflections on the nexus amongst stories, heritage, representations of the past, and possible transitions toward better socio-ecological conditions.

In this framework, a reinterpretation of the spatial value of culture and territorial heritage can be an opportunity for activating a path of Freirean emancipation for the most disadvantaged groups. Exploring the intersection between museologies, humanities, and spatial planning, the experiences of ecomuseums (de Varine, 2006, Borrelli and Davis, 2012, among others) emerge as interesting devices for organizing actors' engagement toward inclusive processes of care and regeneration of territorial heritage.

However, even in the most advanced ecomuseal experiences, several issues remain open, e.g., in terms of the relation between institutional and self-organized actors (conflicts, lack of reciprocal support, lack of trust, etc.), and long-term sustainability of such experiences.

This contribution aims to discuss a European taxonomy of ecomuseums that have generated significant effects in terms of ecological wisdom (Forester, 2018), and in terms of co-produced and inclusive spatial planning strategies (Albrechts et al., 2019), with the scope of contributing to the debate on community-based heritage planning and regeneration.

The proposed methodology intertwines the case-study method with lessons drawn from Action Research (AR) thanks to an in-depth focus on an AR process in a marginal area in Southern Italy (the Simeto Ecomuseum), highlighting its accomplishments and pitfalls.

Results are related to policy recommendations for supporting processes of stable institutionalization of ecomuseums as devices for coproduced spatial planning strategies aimed at generating a "more just" approach to heritage revitalization.

Keywords: cultural practices, public space, action-research; empowerment; trans-disciplinarity

### References

1. Albrechts L, Barbanente A, Monno V. From stage-managed planning towards a more imaginative and inclusive strategic spatial planning. *Environment and Planning C: Politics and Space*. 37(8), 1489-1506. doi:10.1177/2399654419825655
2. Armiero, M., Andritsos, T., Barca, S., Brás, R., Ruiz Caueyela, S., Dedeoğlu, Ç., ... &

- Velegrakis, G. (2019). Toxic Bios: Toxic autobiographies—a public environmental humanities project. *Environmental Justice*, 12(1), 7-11. doi.org/10.1089/env.2018.0019
3. Borrelli, N., & Davis, P. (2012). How Culture Shapes Nature: Reflections on Ecomuseum Practices, *Nature and Culture*, 7(1), 31-47. doi.org/10.3167/nc.2012.070103
  4. Davis, J. (2020). Museums and climate action: a special issue of *Museum Management and Curatorship*. *Museum Management and Curatorship*, 35(6), 584-586. doi.org/10.1080/09647775.2020.1842235
  5. De Varine, H. (2006). Ecomuseology and sustainable development. *Museums & Social Issues*, 1(2), 225-231. doi.org/10.1179/msi.2006.1.2.225
  6. Duarte Cândido, M. M. (2020). As museologias insurgentes: pesquisa e reflexões para transformar a Museologia na Bélgica. *Revista Museologia & Interdisciplinaridade*, 9(17), 95-110. doi.org/10.26512/museologia.v9i17.29790
  7. Forester, J. (2019). Ecological wisdom through deliberative improvisation: Theory and practice in challenging cases. *Journal of Urban Management*, 8(1), 12-19. doi.org/10.1016/j.jum.2018.04.003
  8. Hayden, D. (1998). Making Women's History Visible in the Urban Landscape. *City & Society*, 10(1), 9-20. doi.org/10.1525/city.1998.10.1.9

84970

## Culture spatial value in terms of spatial justice. The case of Lido Pola – Bene Comune, Urban commons in Naples (Italy)

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Sustainable urban development regions ideally describe a process generating environmental and socio-cultural responsibility and promoting viable and livable environments. To achieve this, it is essential to address how current environmental, economic, and social systems impact spatial configurations and to acknowledge concepts of urban landscapes as a cultural construct informed by a history of change. The UNESCO Historic Urban Landscape recommendations provide a promising tool and guidelines for significantly improving conservation practices. However, this method is largely unexplored in strategic assessments and spatial planning within historic urban environments. For this purpose, documenting the attributes and capacities of historic urban landscapes and its provisioning of cultural ecosystem services can present information beyond the traditional datasets to address issues of spatial complexities and highlight the need for sustainable solutions. This article will explore the question of how the use of the Ecosystem Matrix Model and mapping of pluralist datasets for cultural ecosystem services can enhance the spatial analysis of historic urban landscapes and aid in strategic assessment for sustainability. The case study of the ancient port town of Jaffa, Israel is studied, for contextually embedding the tool and testing its applicability. This case highlights socio-spatial heterogeneity within Tel Aviv-Yafo metropolis and the present-day gentrified historic area inflicted by neoliberal practices which have resulted in shifting demographics, spatial conflicts, and environmental impacts. Using quantitative and qualitative assessment data in combination with remote sensing and GIS, impacts on the landscape can be evaluated. The proposed approach thus delivers useful integrative information for environmental management and landscape planning, especially for marginalized historic urban environments, aiming at sustainable use of services provided by nature and culture. The multiplicity of information and datasets can be better managed with innovative frameworks of indicators, assessment matrices, with new emerging digital tools for visual representations such as data scaping. This methodological development applied to capacities of historic urban landscape providing cultural ecosystem services is presented in this paper to foster critical discussions.

Keywords: historic urban landscapes, cultural eco system services, datascaping, mapping, GIS, sustainability, matrix and indicators

### References

Bandarin, F., Van Oers, R. (Eds.), 2015. Reconnecting the City The Historic Urban Landscape Approach and the Future of Urban Heritage. John Wiley, United Kingdom. Bandarin, F., van Oers, R., 2012. The Historic Urban Landscape Managing heritage in an urban century. Wiley-Blackwell, UK. Burkhard, B., Kroll, F., F, Windhorst, W., 2009. Landscapes' Capacities to Provide Ecosystem Services - A Concept for Land-Cover Based Assessments. *Landsc. Online* 15, 1–22. <https://doi.org/0.3097/LO.200915> Burkhard, R.A., 2005. Towards a Framework and a

Model for Knowledge Visualization: Synergies Between Information and Knowledge Visualization, in: Tergan, S.-O., Keller, T.K. (Eds.), Knowledge and Information Visualization: Searching for Synergies. Springer, Germany. Evans, G., 2015. Cultural Mapping and Planning for Sustainable Communities, in: Cultural Mapping as Cultural Inquiry. Routledge.

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## Culture spatial value in terms of spatial justice. The case of Lido Pola – Bene Comune, Urban commons in Naples (Italy)

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Culture is making its way into the lexicon of European policies, going beyond its mere neoliberal and consumerist nature as an economic asset (cultural capitalism) and moving towards a horizontal and holistic meaning of large and complex set of domains whose main beneficiaries are citizens and communities. In order to reflect on the theme of the reinterpretation of the spatial value of culture in a perspective of spatial justice inspired by the normative principles of Fainstein's Just City, the interdisciplinary research group presents the process of political, collective and cultural experimentation taking place at Lido Pola - Bene Comune, located at the edge of the former industrial area of Italsider in Bagnoli-Coroglio (Naples, Italy).

Commons produce impacts on the city in social, cultural, economic and environmental terms, in fact, for a long time and in different parts of the world, they have established themselves as ecosystems for culture. They are open-air laboratories characterized by a transformative force of public space that reconstitutes the bonds of social solidarity through new and more intense relationships between the goods and the exercise of fundamental human rights. They are places where new public policies have been conceived starting from the practices of self-government and self-management as well as places where new institutions are experimented.

In Italy, the movement for the commons started in 2011, in addition to supporting protests for the defense of the territory and for public water, has made accessible to an increasingly large segment of the population areas of public space made marginal by the processes of uncontrolled urbanization or destined for sale and privatization. Exemplary is the experience of the city of Naples, which has included the category of common goods in its statute and has recognized the right of civic and collective use of goods that some informal communities of inhabitants had raised from degradation, abandonment or privatization process by strengthening a process already in place on a cultural, political and social basis.

The Action Research protocol applied to the Lido Pola - Bene Comune focuses on capability approach, specifically on the tenth point of Control (political and material) Over One's Environment (Nussbaum, 2003: 42), as well as on insurgent planning as social and cultural practice that inclusively innovate place-making processes. This process aims firstly at understanding to what extent local policy has stimulated models of governance able to support the production of equitable social and cultural spaces, and, secondly, at investigating how these new institutions can offer learning forms regarding welfare, democracy, cooperation and innovation.

Keywords: culture spatial value, spatial justice, urban commons, action research, capacity building

## References

- Borch, C., & Kornberger, M. (Eds.) (2015). *Urban commons: Rethinking the city*. Routledge.
- Borchi, A. (2018). "Culture as commons: theoretical challenges and empirical evidence from occupied cultural spaces in Italy". In *Cultural Trends*, 27(1), 33-45.
- Capone, N. (2017). "The concrete Utopia of the Commons. The right of Civic and collective use of public (and private) goods". In *Philosophy Kitchen*, n. 4.
- Cirillo, R., De Tullio, M. F. (2021). *Healing Culture, Reclaiming Commons, Fostering Care. A proposal for EU Cultural Policies*, IF Press.
- Fainstein, S. S. (2010). *The Just City*. Cornell University Press, Ithaca & London.
- Hess, C., & Ostrom, E. (Eds.) (2007). *Understanding knowledge as a commons: From theory to practice*. Cambridge, MA: MIT press.
- Nussbaum, M. (2003). "Capabilities as fundamental entitlements: Sen and social justice". In *Feminist economics*, 9(2-3), 33-59.
- Weck, S., Madanipour, A., & Schmitt, P. (2021). Place-based development and spatial justice. In *European Planning Studies*, 1-16.

85180

## Is Brussels a “Care City”? A gender perspective on the effects of Brussels public transportation system on care workers’ lives.

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Traditional migration studies have largely based their analysis of human interactions in the public space on concepts of ethnicity and class. However, in order to have a more complete understanding of these interactions, issues like gender have become increasingly relevant. Furthermore, it is important to change the narrative about migration, still perceived as a man-centred phenomenon, which relegates women into the categories of passive family members, enduring the process of migration. In Belgium, like elsewhere, migration remained mostly male dominated until the 1980s, while since the ‘90s data have shown a feminization of migration flows. (Catarino, Morokvasic 2005, 1-2)

The reason for this change is a significant transformation in the structure of the European labour market, with an increasing demand for workers in the “care” sector (as opposed to traditional industrial workforce), a sector which historically have been dependent on women’s domestic labour, and that is, in recent decades, attracting increasing numbers of female migrants, despite harsh working conditions.

The gender perspective underpinning the interpretative model of the ‘Care city’ represents an approach capable of breaking down the structural barriers (material and immaterial) that prevent all citizens (natives and migrants) from having equal access to housing, education, services, work and public spaces. The word 'care' does not only mean care, but also attention, protection and assistance; it refers on the one hand to the awareness of dependence, need and being in relationship as constitutive elements of the human being, and on the other hand to the concrete activities of care in a broad sense. It is about 'caring for the world' and not only through caring activities and social or domestic work, but also through a commitment to cultural transformation (Praetorius 2019, 79) .

In relation to the above this paper aims to extend the concept of 'care' to care for the urban environment, and determine whether Brussels may be considered a ‘Care city’, in relation to the social impact of the city’s mobility sector on the life of female care workers, and more in general of vulnerable population groups. This early stage research is based on an extended literature review and analyses of the theories related to the concept of 'care' and the methodologies already existing in several European cities, that have adopted a 'city of care' model. Through the analysis of a few key examples of good practices and a series of interviews with care workers from different communities (e.g., Filipinos, Latin American, etc.), this paper aims to understand the existing urban context of Brussels and its prospects of a more sustainable and inclusive future.

Keywords: Care City, gender, female mobility, care workers, cultural transition

## References

- Bruxelles Mobilité (Service Public Régional de Bruxelles). 2020. “Plan régional de mobilité 2020-2030 : Plan stratégique et opérationnel”. Accessed January 3, 2020. <https://mobilite-mobiliteit.brussels/fr/goodmove> .
- Catarino, Christine, Morokvasic, Mirjana. 2005. “Femmes, genre, migration et mobilités ”. *Revue européenne des migrations internationales*. 21 - n° 1, (2005) : 7-27. DOI : 10.4000/remi.2534. <https://journals.openedition.org/remi/2534>.
- Chatzidakis, Andreas, Hakim, Jamie, Litter, Jo, Rottenberg, Catherine and Lynne Segal. 2020. *The Care Manifesto*. London, New York: Verso.
- Council of Europe. 2018. *Migration from a Gender Perspective: Empowering Women as Key Actors for Integration*, Committee on Equality and Non-Discrimination, Strasbourg.
- Damyanic, Doris, Reinwald, Florian, Weikmann, Angela and others. 2013. *Manual for Gender Mainstreaming in Urban Planning and Urban Development*. Vienna: Municipal Department 18 (MA 18) – Urban Development and Planning. <https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008358.pdf> .
- Gabauer, Angelika, Knierbein, Sabine, Cohen, Nir, Lebuhn, Henrik, Trogal, Kim, Viderman, Tihomir and Tigran Haas. 2021. *Care and the City: Encounters with Urban Studies*. London: Routledge.
- Kern, Lesley. 2019. *Feminist City*. London, New York: Verso.
- Khosla, Prabha. 2018. “Reclaiming Urban Planning”. *Urbanet*, (August 8, 2018). <https://www.urbanet.info/women-land-rights-cities/>.

85071

## The economic, socio-cultural and spatial effects on tourism development in Antalya on the local community's well-being

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Tourism sector, which has been developing and expanding rapidly in the world economy since the 1950s, started to be developed as the main sector in Antalya, Turkey with the Southern Antalya Development Project initiated in 1976. The employment created by the sector offered occupation to the local community and additional labor force was met by internal migration. Following the developments, the population of Antalya increased by 257% between 1985-2015, and employment in tourism and related sectors increased by 524% (Işık & Zoğal, 2017). With the economic uplift, the socio-cultural life of the local community started to be affected by foreign tourists visiting the city, while the community's spatial experience has been reconfigured according to the sector needs as well.

In this study, instead of a development- and tourist-oriented approach to tourism development, the local community is put at the heart of urban life and their quality of life has been examined in the economic, socio-cultural and spatial context. To explore the existing relations between tourism activities and the well-being of the Antalya's local community, a semi-structured literature review is conducted including the studies with qualitative and quantitative data. The purpose of this study is to advise knowledge for further development of theoretical frameworks and conceptual models for tourism development by identifying the gaps and repetitive approaches that overlook the well-being dimension of local people in a tourism development area.

The participation of the tourism employees in the labor process is evaluated with the economic framework of this study while the competition and land prices are discussed accordingly. From the socio-cultural perspective, the effects of the social interaction between the local community and foreign tourists is examined with attributes to its reflection on changing patterns in their urban experience. Lastly, from a spatial point of view, environmental pollution in urban land, the inaccessibility of the open and public spaces and lack of access to services caused by the tourism activities has been discussed.

Results show that the focus of Antalya's tourism development is on urban rent and brand development. The local community's access to urban services and their participation in social life have not been sufficiently addressed in the literature. It is necessary to add that to focus on the local community's well-being in the city should be one of the parameters among the economic, social and environmental sustainability to be pursued for the urban quality of life.

Keywords: urban quality of life, well-being, local community, tourism development,

## References

Işık, Ş., Zoğal, V. (2017). Turizm Kentleşmesi Kavramı: Antalya örneği. Ege Coğrafya Dergisi, 26(2), pp. 71-94. Retrieved from <https://dergipark.org.tr/tr/pub/ecd/issue/33350/371228>

84430

## Culture, productive heritage and spatial development

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Culture is an important driver of innovation in heritage management and spatial development. In recent years, much attention has been given to the creative regeneration of marginalised heritage, such as productive heritage (Areces, 2005; Scaffidi, 2021). Many scholars have analysed this phenomenon to understand the effects on the territory (Dodd, 2020), the resource and the community (Clark & Wise, 2018; Tricarico et Al., 2020).

Innovative management models have been promoted to reactivate this heritage and create socio-cultural benefits and new economic development (Scaffidi, 2019). The research aims to discuss the importance of culture for cities and the reactivation of underused heritage. At the heart of the debate are innovative communities, where cultural initiatives, art exhibitions, alternative forms of education and cooperation keep heritage alive.

Considering this purpose, the research examines specific examples where socio-cultural actions have been the driving force behind sustainable development, creative regeneration of productive assets and spatial innovation. Through a qualitative research methodology, the research showcases examples of regeneration of productive heritage in Europe; among them the Kulturzentrum Schlachthof in Bremen (Germany), the Faust in Hannover (Germany), Real Fábrica de Cristales in La Granja (Spain) and WUK Werkstätten – Und Kulturhaus in Wien (Austria).

Through interviews and exploratory surveys, the research shows how culture can reactivate an abandoned and underused resource, creating new spatial values. The findings show that these cultural communities transform a marginalised heritage into an alive and vibrant ecosystem that promotes social and cultural services for the city. In conclusion, this research wants to contribute to the existing body of knowledge and create new insights for the European context.

Keywords: culture, marginalised heritage, productive heritage, regeneration, vibrant ecosystem, spatial development

### References

- Areces M.A.A. (2005) Patrimonio industrial y política cultural en el marketing de ciudades y territorios. *Abaco Revista de Cultura y Ciencias Sociales* 44/45: 45–62.
- Clark J. and Wise N. (eds) (2018) *Urban Community and Participation: Theory, Policy and Practice*. Berlin: Springer.
- Dodd M. (2020) *Spatial Practices. Modes of action and engagement with the City*, Routledge
- Scaffidi F. (2021) Economía circular, inclusión social y patrimonio industrial. In: Álvarez Areces M. (ed.) *Hacia una nueva época para el patrimonio industrial*, Editorial CICEES, Gijón, pp. 569-577.
- Scaffidi F. (2019) Soft power in recycling spaces: Exploring spatial impacts of regeneration and youth entrepreneurship in Southern Italy, *Local Economy*, vol. 34(7), pp. 632–656.
- Tricarico, L., Jones, Z. M., & Daldanise, G. (2020). *Platform Spaces: When culture and the arts*

intersect territorial development and social innovation, a view from the Italian context. *Journal of Urban Affairs*, 1-22.

82871

## 'River movie', nature, and culture projects on the banks of Lyon's rivers

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As a place of identity, the river constitutes an element of memory which it is a question today of revealing and making accessible for the greatest number. Lyon has settled and prospered on the banks of the Rhone and Saône. This metropolis was able to invent a new destiny and new uses, in order to bring its rivers in line with the aspirations of the time. The development of the riverbanks has made it possible to respond to the growing concern of city dwellers to see natural spaces maintained in their environment, but also to use the strong imaginary and identity potential of these places to renew the image of the metropolis.

This paper draws on research conducted on strategies and projects implemented in French metropolises and on a decade of teaching architects and urban planners at "Designing public spaces" workshops in Lyon.

Here we present more particularly the recent Rives de Saône project. This project has been designed, on the one hand, to fit in with the landscape and the ecosystem rather than transform them in a radical way; and on the other hand, by distinguishing itself from other metropolises with an innovative and creative development of the riverbanks.

This project sought to preserve the natural area of the Saône Valley and to stretch it to reach the centre of the conurbation, thereby reinforcing the relationship between the river and the districts and villages. And in the same time, the metropolis decided to integrate contemporary art as a non-negotiable element of the project. The metropolis decided to create places for recreation and contemplation by strengthening existing uses and developing a public art project that involved a team of artists prior to the design. The project named 'River movie' by its artistic director, was conceived as a journey along the river; a long walk in an open-air museum with the idea that art should not remain in museums. Choosing works of contemporary art is leaving room for the imagination of artists who have the capacity to express contemporary societal issues regarding ecological transitions. The originality of the project lies in the dual objective to create an innovative link between wild nature and sophisticated culture: An environmental project with a return to the wild character of the riverbanks with a restoration of the fauna and flora; and in the same time, an artistic project, with the use of contemporary art to enhance the river; and works of art selected to encourage awareness of the fragility of the biodiversity.

Thus, strategies and urban design are being reconceived to better address sustainable development and give more prominence to artistic interventions.

Keywords: culture, urban identity, contemporary art, public spaces, ecological transition, river

### References

SEIGNEURET, N., NOVARINA, G., Territorial energy transition strategies: new models for cooperation between actors and resource management? in *Local Resources, Territorial Development and Well-being*, DISSART, J.-C., SEIGNEURET, N. (codir.) Edward Elgar Publishing, pp. 121-142, 2020.

SEIGNEURET, N., Stratégies et projets urbains : Vers de nouveaux modèles de mobilisation des acteurs in *Coopération, gouvernance, territoires et transition énergétique*, ARTIS A. (dir.), Paris, L'Harmattan, pp. 61-70, 2017.

SEIGNEURET, N., NOVARINA, G., Construction de la métropole lyonnaise, stratégie d'ensemble et détails de projet, in *Métropoles en chantier*, LEBRAS D., SEIGNEURET, N., TALANDIER M. (codir.) Paris, Berger-Levrault, pp. 185-206, 2016.

SEIGNEURET, N., DUARTE, P. Projet urbain et planification territoriale en Europe : Négociation et itération in *Les enjeux de la planification territoriale en Europe*, ZEPF, M., ANDRESS, L. (codir.) Lausanne, PPUR, pp. 77-97, 2011.

85275

## TRADITIONAL COMMERCE, CHALLENGES AND OPPORTUNITIES FROM THE BUILT HERITAGE PERSPECTIVE: THE “LOJAS COM HISTÓRIA” PROGRAM

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Post-Industrial cities have been the stage for major changes at functional and economic level in the past decades, with a strong impact in urban regeneration policies. While peripheries were affected by deindustrialisation, inner parts of cities attracted the interest of tourists, investors, and new residents, with an unavoidable impact in historic boroughs, buildings, and businesses.

The present work proposes to debate the situation of commercial heritage and the success of its safeguard programs, in contexts of urban pressure, due to tourism and its impact in the processes of urban regeneration. To carry it, an analysis of Heritage International Charters was made, and eight concepts were established: Focus, Disciplinarily, Transformation, Function, Means, Participation, Culture, and Economic Value.

To better understand the creation of safeguard programs for commercial heritage, three programs were analysed and compared: one from Brazil – in Rio de Janeiro -, and two from Portugal - one from Porto and the other from Lisbon. These programs were analysed through the scope of the eight above-mentioned concepts. One of these programs was chosen, the pioneer in its country and for its prominence, to deepen and better understand its technical and bureaucratic part, this being the “Lojas com História” of the city of Lisbon.

A database including more than 170 Lisbon historic shops was created, with the information available through the program’s platforms and these were compared and verified through visits to participating establishments and an inquiry to their owners, after a meeting held with the coordination of “Lojas com História” program, and finally technical visits were made to some of these shops to assess the level of conservation and maintenance of their material heritage.

After organizing and treating this information, these were crossed with the concepts established at the early stage of the research, the reality of these places and their needs were discussed. To conclude, the presentation will highlight: (1) the challenges and opportunities in these safeguard programs; (2) the recommendations for future safeguard programs format; (3) reflexions about the impact of these programs at the urban regeneration policy level.

Keywords: traditional commerce, commercial heritage, heritage programs, material heritage, urban regeneration.

### References

- Carta para Salvaguarda das Cidades Históricas, de 1987. Available in: <http://www.patrimoniocultural.gov.pt/media/uploads/cc/CARTAINTERNACIONALPARASALVAGUARDASCIDADESHISTORICAS.pdf>. Retrieved in: 28th February 2021.
- Internacional de Turismo Cultural, de 1999. Available in: [https://www.icomos.org/charters/tourism\\_e.pdf](https://www.icomos.org/charters/tourism_e.pdf). Retrieved in: 28th February 2021.

- BARATA-SALGUEIRO, T., Mendes, L., & Guimarães, P. (2017). Tourism and urban changes: lessons from Lisbon. In M. Gravary-Barbas & S. Guinand (Eds.), *Tourism and Gentrification in Contemporary Metropolises: International Perspectives* (pp. 255-275). Londres: Routledge.
- Câmara Municipal de Lisboa, “Lojas com História”. Editora Tinta da China (2017).
- Câmara Municipal de Lisboa, “Lojas com História 2”. Editora Tinta da China (2020).
- Programa “Porto de Tradição”, Site da Câmara do Porto. Available in: <https://comercioturismo.cm-porto.pt/comercio/porto-de-tradicao>. Retrieved in: 28th October 2021

84371

## CINEMATIC OPEN SPACES OF FLANDERS : spatial planning and the imagination of Flemish open space in the fiction films *Bullhead* and *Kid*

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This paper explores the potential of film and cinematic perceptions as a tool to gain insight in the everyday culture of the Flemish urbanized landscape. Perceptions concerning this space are not only widely divergent – conventional approaches of urban planners as well as policy makers aspire to get grip on the dispersed spatial development while everyday practice of consuming space in Flanders unimpededly continues – these perceptions are also reflecting and influencing the evolution of this peculiar spatial condition. Based on a theoretical understanding of the duality between spatial theories or concepts and everyday culture, a cinematic approach is applied on the imagination of Flemish open space in the fiction films *Bullhead* (Michaël R. Roskam, 2011) and *Kid* (Fien Troch, 2013) as a case study. This cinematic approach combines a detailed cinematic analysis (using the video annotation software ELAN) of spatial, spatial-morphological and spatial-sociological, representations in the movies with interviews with the directors. The results reveal how the imagination and narratives in these films illustrate a symbolic value that goes beyond the commonplace of open space. By reflecting the intrinsic characteristics, the experience value and the typical dynamics of space, the cinematic representation reveals a more nuanced image, mediating between the planological opinion and everyday culture of this peculiar urbanized context. The conclusion illustrates how film and its cinematic analysis provide new perspectives on open space in Flanders. Furthermore, these understandings of open space, and Flemish space in general, in everyday culture will contribute to a more adapted spatial planning.

Keywords: film, culture, Flanders, urbanized landscape, open space, representation

### References

- AlSayyad, N. (2006b). *Cinematic urbanism: A history of the modern from reel to real*. New York.
- de Certeau, M. (1980). *L'invention du quotidien* (Vol. 1). Paris: UGE.
- Lefebvre, H. (1947). *Critique de la vie quotidienne*. Introduction [The Critique of Everyday Life]. In: London: Verso.
- Shiel, M. (2001). *Cinema and the City in History and Theory*. *Cinema and the city: Film and urban societies in a global context*, 1-18.

84891

## Spatial analysis as a tool for determining the scope and impact of tourism promotion onto the tourist flow in the cities, example of the City of Ljubljana, Slovenia

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Increase in tourist arrivals to the city also means increased density of the tourist flow in the city. Most commonly, tourists move around the city centre while visiting the tourist attractions promoted to them via several channels. While the urban tourist has undergone a transformation from classical cultural tourist to weekend break tourist, enjoying in the atmosphere of the city, also the digitalisation of tourism happened. Thus, tourists nowadays do not only rely on the printed guidebooks like in the past, but instead consult various online platforms, apps, follow blogs and gather information via social media. On these premises, the study has addressed the question “what is the relation between the promoted attractions in the tourism promotion and the spatial patterns of tourists’ movement around the city”. The question is answered on the example of the Ljubljana city by first mapping the promoted attractions and routes via tourist guide books, on-line platforms and blogs, and second, by carrying out the survey with tourists focused on spatial dimension. The later were asked about their knowledge of the most heavily promoted attractions, their visitations or intentions for visitations, their means of travelling around the city, decision making factors, sources of information and the travelled path. The types of urban tourists according to their spatial patterns are identified with the help of cluster analysis. Both methods confirmed heavy centralisation of both promotion and moving patterns around the city centre which corresponds to the over-touristification of the city centre. While confirming the limits of the spatial outreach of tourists in the city, the city management is given information via which channels information should be provided in order to disperse the tourist flow and what could motivate tourists to visit certain type of attractions. In the end, the authors reflect the results of the study via the lenses of spatial planning, and identify the role each, tourism managers and spatial planners should have and measures they should apply to more effectively managing the tourist flow in the cities.

Keywords: urban tourism, spatial analysis, tourism promotion, tourist flow

### References

- Stubičar, N., Klepej, D. and Marot, N., 2022. Prostorska analiza pojava mestnega turizma. Ljubljana. Biotechnical Faculty.
- Ministry of Economic Development and Technology, 2017. Strategy for the sustainable growth of Slovenian tourism for 2017-2021. Ljubljana, 2017.
- Sugimoto, K.; Ota, K.; Suzuki, S., 2019. Visitor Mobility and Spatial Structure in a Local Urban Tourism Destination: GPS Tracking and Network analysis. *Sustainability*, 11, 919. Available at: <https://doi.org/10.3390/su11030919>
- ROGERSON, C. M., & ROGERSON, J. M., 2016. Intra-urban spatial differentiation of tourism: Evidence from Johannesburg, South Africa. *Urbani Izziv*, 27(2), 125–137. Available at:

<http://www.jstor.org/stable/24921001>

Hu, I.-L., Chang, C.-C., & Lin, Y.-H., 2021. Using big data and social network analysis for cultural tourism planning in Hakka villages. *Tourism and Hospitality Research*, 21(1), 99–114.

Available at: <https://doi.org/10.1177/1467358420957061>

85272

## Public culture intervention in the sustainable spatial renewal of vernacular heritage, taking the villages surrounding the Erlitou Site in China as an example

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The villages surrounding protected areas of the Sites are a unique vernacular heritage due to their geographical location, long history, and the combination of nature and humanity. With the construction of more and more heritage sites in China, the villages around them are faced with the conflict between conservation and development. How to carry out sustainable micro-renewal while preserving the authenticity of the vernacular heritage is of great importance for the co-growth of the village residents and the site. This paper focuses on the process of revitalization of the villages nearby the Erlitou Site Park in China, aiming to study how sustainable village regeneration and conservation can be carried out through the activation of shared public culture. Firstly, through field research and literature review, this paper studies the vernacular morphology and architecture types of more than ten historical villages around the Erlitou site, and investigates the traditional vernacular culture and the daily public activities of the local villagers. Secondly, taking the nearest village to the site, Ranzhuang Village, as an example, the paper studies the role of public cultural activity interventions on the three different stages of vernacular heritage spatial renewal: master planning, architecture group, and acupuncture-style micro-renewal of residential buildings, aiming to summarise its impact on villagers' lives and vernacular heritage. This paper concludes that a living regeneration driven by a moderate shared public cultural activity intervention can promote the symbiosis between the heritage site and the life of the villagers, and increase the vitality of the village. This study aims to use the example of village regeneration in Henan, China, as a sustainable reference for the co-development of heritage sites and villages in other parts of the world.

Keywords: Erlitou Site, vernacular heritage, Public culture intervention, sustainable

### References

- [1] Mu Jun, Zhou Tigang, Liang Zengfei, Jiang Wei. The Museum of the Erlitou Summer Capital Site from the Perspective of Earthen Construction[J]. DOI:10.13717/j.cnki.ta.2021.02.012.
- [2] Li L. No city in the metropolis, a big elephant and invisible - Reflections on the creation of the Erlitou Summer Capital Site Museum[J]. Journal of Architecture,2021(01):76-79.DOI:10.19819/j.cnki.ISSN0529-1399.202101011.
- [3] Wang Xuerong,Xu Hong. "Proceedings of the International Symposium on the Erlitou Site and Erlitou Culture in China[J]. Archaeology, 2006(09):83-90.
- [4] Xu Hong. The characteristics of the early Chinese state from the Erlitou site[J]. Zhong Yuan Cultural Relics,2006(03):39-40+51.

85340

## A DIY toolkit to assess the value creation and multiple impacts of culture and tourism activities

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DINÂMIA'CET-ISCTE

In recent decades, culture has gained great centrality in the search for new development and planning strategies to revitalize and increase the competitiveness of the territories, largely due to the growing economic relevance of the symbolic and aesthetic value of goods and services [1] as well as the spaces where they are created, produced and consumed [2]. Besides, tourism had enormous growth, diversification and expansion, becoming an essential source of income and employment. Therefore, many territories seek to improve their image and attractiveness by exploiting local, tangible and intangible cultural resources and encouraging synergies between tourism and the cultural and creative and tourism industries.

New understandings and dynamics in culture and tourism, especially regarding sustainability and wellbeing demands, require new methodological approaches and operative tools to examine, communicate and aware cultural actors, policymakers and the public about the values associated with the specific and multifaceted nature of these activities and the impacts on local territories and communities. Traditional impact assessment methods tend to focus on short-term indicators based on more accessible and quantitative collection data, not considering the multiple effects on local territories and communities. Thus, not responding to the complexity of reality, to the multidimensionality and time interval necessary for impact assessment, and place sensitive [3]. In response to this challenge, a conceptual and analytical model was co-designed and tested in different projects to evaluate the impacts at the economic, social, environmental, cultural-artistic and participatory levels of the initiatives of the cultural and creative sector and tourism. This model led to the development of a digital application/platform – called CULTURE.IMPACTS DYI – to allow the systematization, self-assessment and self-awareness of value creation and the direct and indirect impacts generated by the action and activities of the different agents. In addition, it is a toolkit that incorporates an audience monitoring tool to help organizations estimate the effects of their end-user experiences and develop audiences. Moreover, the current pandemic crisis has had serious consequences for these activities. Therefore, it is even more imperative to create tools that go beyond conventional evaluations and provide evidence about their nature and multiple impacts.

Keywords: culture and creative activities; digital toolkit; impact assessment; sustainable development; value creation; wellbeing

### References

- [1] Lash, S. & Urry, J. (1994) *Economies of Signs and Space*. SAGE Publications
- [2] Amin, A., & Thrift, N.J. (Eds)(2004) *The Blackwell cultural economy reader*. Blackwell
- Pratt, A. C. (2004) *The Cultural Economy: A Call for Spatialized 'Production of Culture' Perspectives*. *International Journal of Cultural Studies*, 7(1), 117–128
- Scott, A. J. (2000) *The cultural economy of cities: Essays on the geography of image-producing*

industries. Sage Publications

[3] Tomaz, E., Costa, P., Gato, M. A., Cruz, A. R., & Perestrelo, M. (2020) Discussing impact assessment on creative tourism: A theoretical and analytical model. WP n.º 2020/05

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84497

## Heritage futures: Reinterpreting the spatial value of heritage in Praga district, Warsaw.

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Reviewing the spatial value of heritage, also means exploring how adaptive heritage reuse practices not only impacts the heritage itself, but also the impact on the direct surroundings, and its local and/or heritage communities. The purpose of this paper is therefore to explore and discuss the interrelatedness of re-use of material and immaterial aspects of heritage to the empowerment and inclusion of local and/or heritage communities and ongoing issues of spatial (re-)development. Based on qualitative semi-structured interviews in a case study of a living lab of ongoing heritage reuse practice in Praga district in the city of Warsaw, Poland, we identify the ongoing process of practices and interactions that shapes and reshapes the meaning of heritage. We note that although attempts are undertaken to link the re-use of material and immaterial aspects of heritage to the empowerment and inclusion of local and/or heritage communities and ongoing issues of spatial (re-)development it appears that heritage management is often only focusing on few of these aspects. Heritage re-use for instance becomes more and more interwoven with spatial developments often isolating of the heritage asset from its intangible aspects. To overcome this, we argue to focus more on flexible solutions which address myriad and changing values of heritage. Adopting heritage approaches that see heritage as a manifestation of continuous processes of valuation and re-valuation and as something that is always involved in the process of ‘making’, would be a good first step in this regard.

Keywords:

References

van Knippenberg, Karim, and Beitske Boonstra. “Co-Evolutionary Heritage Reuse: A European Multiple Case Study Perspective.” *European Planning Studies*, 2021, pp. 1–18, doi:10.1080/09654313.2021.2019684.

van Knippenberg, K., Boonstra, B., & Boelens, L. (2021). Communities, heritage and planning : towards a co-evolutionary heritage approach. *PLANNING THEORY & PRACTICE*, 1–17. <https://doi.org/10.1080/14649357.2021.1998584>

Janssen, J., Luiten, E., Renes, H., & Stegmeijer, E. (2017). Heritage as sector, factor and vector: conceptualizing the shifting relationship between heritage management and spatial planning. *European Planning Studies*, 25(9), 1654-1672. doi:10.1080/09654313.2017.1329410

Stegmeijer, E., & Veldpaus, L. (2021). *A Research Agenda for Heritage Planning: Perspectives from Europe*. Cheltenham, Northampton: Edward Elgar Publishing.

85255

## Digital tourism journey: How social media shapes a destination brand – case study of Suzhou, China

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Destination branding is a well-established concept in both tourism and place-making. One of the key tools for destination branding today is social media. Undoubtedly, social media empower individual users to retell their visiting experiences and, consequently, influence other online users' perceptions of a destination, motivation for travel, and behaviours during the visit. Conversely, social media offer destination management organisations (DMO) various avenues to understand their targeted audience's experiences, expectations and perceptions of a destination, crowdsource and weave their opinions into the brand narrative.

While existing studies have confirmed social media have transformed destination branding into a co-creation between individual users and DMO, the “digital journey” and its connection to destination branding remains relatively unexplored. The term “digital journey” is referred to the images and content shared on social media, which can be distinguished and analysed concerning three distinctive stages— before, during, and after a visit to the destination. Both online users and DMO use social media to yield their influence on destination branding, though employing different instruments or/and strategies at each stage.

This paper examines how Suzhou is branded on social media through the lens of both online users and DMO in the digital journey. It analyses Suzhou's online destination brand presented by DMO alongside user-generated content data from Twitter and interviews with key stakeholders who work on the front lines of brand marketing. With China's far-reaching Internet censorship, Suzhou and other non-tier-one cities in China have faced a glaring disparity between domestic and inbound tourism in both services provision and economic revenue. Domestic tourism has become an over-saturated marketplace popularised by censored social media platforms. In contrast, inbound tourism has been much monopolised by major cities such as Shanghai and Beijing, partly due to the limited visibility of non-tier-one cities to the global population. On this account, destination branding and marketing on international social media has become a strategic manoeuvre for Suzhou and the like to execute. The findings from our analysis point to a strong connection with Suzhou's deliberately created destination brand as a cultural cradle with 2500 years of history. The paper concludes with the potential of digital place-branding to create alternate digital journeys for Suzhou's brand.

Keywords: inbound tourism, destination branding, user-generated content, digital journey, data analysis

## References

- Aisyah Dwityas, Nindyta & Briandana, Rizki (2017) 'Social Media in Travel Decision Making Process', *International Journal of Humanities and Social Science* vol. 7 no. 7, pp. 193-201.
- Björner, Emma (2013) 'International Positioning through Online City Branding: The Case of Chengdu', *Journal of Place Management and Development*, vol. 6, no. 3, pp. 203-226.
- Fatanti, Megasari & Suyadnya, I. Wayan (2015) 'Beyond User Gaze: How Instagram Creates Tourism Destination Brand?', *Procedia - Social and Behavioral Sciences*, vol. 211, pp. 1089-1095.
- Kim, Joon Sik & Wang, Yi-Wen (2018) 'Tourism Identity in Social Media: The Case of Suzhou, a Chinese Historic City', *Transactions of the Association of European Schools of Planning*, vol. 2, no. 1, pp. 63-80.
- Li, Jingjing, Xu, Lizhi, Tang, Ling, Wang, Shouyang & Li, Ling (2018) 'Big Data in Tourism Research: A Literature Review', *Tourism Management*, vol. 68, pp. 301-323.
- Paül I Agustí, Daniel (2018) 'Characterizing the Location of Tourist Images in Cities. Differences in User-Generated Images (Instagram), Official Tourist Brochures and Travel Guides', *Annals of Tourism Research*, vol. 73, pp. 103-115.

85171

## Cultural roots of planning: nurturing diversity?

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Cultural diversity has become commonplace around the globe, especially in urban areas (Pollock et al., 2017). This has been capitalized upon, for example through tourism, and has strongly affected economic and political imaginaries. Planning, as a discipline that imagines desirable futures and takes concrete steps towards those imaginaries, plays an important role in shaping how cultural diversity can manifest (Bina et al., 2020). Planning strategies on diversity concern governance practices, mixed housing, tourism, the creation of cultural encounters in public space, among others (Koster, 2020; Mäntysalo et al., 2018; Tissot, 2014). They also impact whether cultural diversity is perceived as positive or negative by various populations. However, although cultural diversity and related subjects are common in planning, the cultural identity of planners themselves has been studied relatively little (but see Ferreira, 2020; Tewdwr-Jones, 2002; von Schönfeld et al., 2019 for insights on why and how it matters to consider the personal experiences of planners). The present article addresses this gap. It asks how planners (both those working in practice and those working in academia) perceive their own cultural identity, operationalised through their experiences related to various cultural sources, such as through their family's diversity, intensive or sporadic (tourist) travel, living in culturally diverse contexts, and through their choices in literature, film and arts. It then asks how these planners consider that their cultural identity affects their approach to cultural diversity in the areas in which they work - asking which policies they have supported and which imaginaries they propose as utopias for the future. An online survey and in-depth interviews with planners in Portugal serve to explore this topic. A review of local and national Portuguese policies concerning cultural diversity serves to substantiate the findings, and to explore relationships between the policies in place and the planners' self-perceptions. Portugal is chosen as a location for the research due to its high cultural diversity (through its past as colonizer, but also other sources) and its choice to have a significant portion of its economy based on tourism. A reflection on the implications of the results for socio-spatial justice concludes the article.

Keywords: cultural diversity, planners identity, spatial justice, imaginaries, tourism, public space

### References

- Bina, O., Inch, A., & Pereira, L. (2020). Beyond techno-utopia and its discontents: On the role of utopianism and speculative fiction in shaping alternatives to the smart city imaginary. *Futures*, 115. <https://doi.org/10.1016/j.futures.2019.102475>
- Ferreira, A. (2020). Dilemmas, Conflicts, and Worldview Diversity: Exploring the Relevance of Clare Grave's Legacy for Planning Practice and Education. *Journal of Planning Education and Research*, 0739456X2094079. <https://doi.org/10.1177/0739456X20940797>

Koster, M. (2020). An Ethnographic Perspective on Urban Planning in Brazil: Temporality, Diversity and Critical Urban Theory. *International Journal of Urban and Regional Research*, 44(2), 185–199. <https://doi.org/10.1111/1468-2427.12765>

Mäntysalo, R., Schmidt-Thomé, K., & Syrman, S. (2018). Learning and Governance Culture in Planning Practice: The Case of Otaniemi. In W. Salet (Ed.), *The Routledge Handbook of Institutions and Planning in Action* (pp. 165–182). Routledge.

Pollock, D. C., Van Reken, R. E., & Pollock, M. V. (2017). *Third culture kids: Growing up among worlds* (Third edition). Nicholas Brealey Publishing.

Tewdwr-Jones, M. (2002). Personal Dynamics, Distinctive Frames and Communicative Planning. In P. Allmendinger & M. Tewdwr-Jones (Eds.), *Planning Futures: New Directions for Planning Theory* (pp. 65–92). Routledge.

Tissot, S. (2014). Loving diversity/controlling diversity: Exploring the ambivalent mobilization of upper-middle-class gentrifiers, South End, Boston. *International Journal of Urban and Regional Research*, 38(4), 1181–1194. <https://doi.org/10.1111/1468-2427.12128>

von Schönfeld, K. C., Tan, W., Wiekens, C., & Janssen-Jansen, L. (2019). Unpacking social learning in planning: Who learns what from whom? *Urban Research & Practice*. <https://doi.org/10.1080/17535069.2019.1576216>

84404

## The spatio-temporal vibrancy characteristic of Historic urban area and its cultural influencing factor: A Case study of Qingdao, China

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Vibrancy is indispensable and beneficial for sustainable revitalization of historic urban area. The preservation of cultural heritage, especially the integral conservation of historic urban area, as appealed by ICOMOS, is a global career. Recently, the Chinese government issued "Opinions on Strengthening the Preservation and Inheritance of History and Culture in the Construction" to better preserve and revitalize the historic urban area.

To date, by incorporating Big Spatial Data (BSD) and its analysis into solutions, new opportunities are provided to quantitatively evaluate vibrancy and to support revitalization among the historic urban area. However, current research mostly focused on the public space vibrancy microscopically by analyzing the influence of Urban Built Environment (UBE) factors with ignorance of cultural factors and the temporal heterogeneity, which hardly be applied to the integral conservation of historic urban area. Therefore, by using multi-source BSD over 24-h periods in workday, weekend and holiday as a comprehensive proxy for vibrancy, this study measures neighborhood vibrancy in the historic urban area in Qingdao, China.

Furthermore, by using geographical and temporal weighted regression (GTWR) model, visualization analysis and cross analysis, the factors related to cultural and heritage, in addition to land use, traffic accessibility, urban morphology, are considered to reveal the formation of vibrancy and its enhancing strategies in historic urban area.

The results demonstrated that: (1)the vibrancy of historic urban area presents the heterogeneity spatially and temporally, and displays different characteristics between three types of days and generally negatively correlated with the degree of conservation and construction restrictions; (2) Mixed use and diversity, density, commercial facilities, public facilities contributed to the urban vibrancy of historic urban area; meanwhile, urban vitality was more susceptible to the cultural elements during nonworking times; (3)Nevertheless, the great variance presented between different elements of cultural factors, the vibrancy negatively related to the quantity and density of the cultural heritage, while positively related to the diversity and quantity of economic cultural facilities.

This study confirms that historic urban preservation without regeneration can accelerate the decline of urban vitality, and historic urban area urgently need reutilization which contributed to revitalization. It is proposed that cultural factors also have an impact on the vibrancy of historic urban area, where have special attributes, on the basis of verifying that the UBE factors also have influence on that area. With the deeper understanding of spatio-temporal characteristic of individuals reflected by vibrancy, the effectively and meticulously implications are propound for promoting historic urban area by optimizing UBE and heritage reutilization in specific districts.

Keywords: historic urban area; urban vibrancy; cultural influencing factor; heritage reutilization; historic urban revitalization; geographical and temporal weighted regression (GTWR) model

## References

- [1] Wu, C., et al., Check-in behaviour and spatio-temporal vibrancy: An exploratory analysis in Shenzhen, China. *Cities*, 2018. 77: p. 104-116.
- [2] Li, M., et al., Revitalizing historic districts: Identifying built environment predictors for street vibrancy based on urban sensor data. *Cities*, 2021. 117: p. 103305.
- [3] Ghadiri, M. and M. Sarrafi, Integrating support groups, an effective approach to regenerate historic neighborhoods of Iran Case study: Oudlajan Neighborhood, Tehran. *LAND USE POLICY*, 2022. 112.
- [4] Wang, F., et al., Vitality continuation or over-commercialization? Spatial structure characteristics of commercial services and population agglomeration in historic and cultural areas. *Tourism Economics*, 2019. 25(8): p. 1302-1326.
- [5] Kim, Y., Data-driven approach to characterize urban vitality: how spatiotemporal context dynamically defines Seoul's nighttime. *International Journal of Geographical Information Science*, 2020. 34(6): p. 1235-1256.
- [6] Wu, J., et al., Cultivating historical heritage area vitality using urban morphology approach based on big data and machine learning. *Computers, Environment and Urban Systems*, 2022. 91: p. 101716.

84414

## The historic Tehran's socio-spatial assemblage: The Grand Bazaar's arranged marriage with tourism

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Tehran's 1960s policy documents and newsletters show that experts were concerned about the city centre's residential future. Although the later planning policies entail promises of enhancing living standards in the area, the concerns of the 1960s remain relevant today: The Grand Bazaar and the residential areas cannot get along well in the historic city. Within the area's particular spatial-economic setting, the urban management system tends to be indulgent when negotiating space with the Grand Bazaar and its growing appetite for warehouse space. With the heritage turn in Tehran in the last decade, tourism seems to be a feasible function the Bazaar can tolerate in its surroundings. Based on archive research and fieldwork in Tehran in December 2019 and September-October 2021, I reflect on the relationships between the leading players in the historic city of Tehran. Although not officially acknowledged, it seems that regeneration policies have lost hope in balancing the commercial and residential functions of the historic city. Therefore, it can be said that culture-led regeneration, stylistic reconstruction, and beautification projects in the area mainly target the needs and tastes of local tourists rather than the current underprivileged or prospective wealthy residents. Historically decorated buildings and arcades are being built for tourists who enjoy visiting nostalgic streets, cafes, and monuments and do not mind or notice the warehouses and chemically polluted shoemaking and goldsmithing workshops behind them. The current socio-spatial assemblage in the area indicates that in the future, more residents are to leave to provide space for the Grand Bazaar and the tourism industry to live together in the historic city happily ever after.

Keywords: Tehran; Bazaar; Tourism; assemblage; culture-led regeneration

### References

Ashworth, G., 2011. Preservation, conservation and heritage: Approaches to the past in the present through the built environment. *Asian anthropology*, 10(1), pp.1-18.

De Cesari, C. and Herzfeld, M., 2015. Urban heritage and social movements. *Blackwell readers in anthropology*, 12.

Gravari-Barbas, M. and Guinand, S. eds., 2017. *Tourism and gentrification in contemporary metropolises: International perspectives*. Taylor & Francis.

Keshavarzian, A., 2007. *Bazaar and State in Iran: The politics of the Tehran Marketplace* (Vol. 26). Cambridge University Press.

McFarlane, C., 2011. The city as assemblage: dwelling and urban space. *Environment and Planning D: Society and Space*, 29(4), pp.649-671.

## TRACK 3: LAW

82082

### Roundtable: Regulating Coastal Zones: International Perspective

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This roundtable is proposed following the publication of *Regulating Coastal Zones*, edited by Rachelle Alterman and Cygal Pellach, published recently by Routledge.

The book is not a regular edited book. Instead, it is team work of authors from 15 countries who have followed a rigorous framework prepared by the editors. The book is the first to address issues of coastal zones and their land and planning regulation through a systematic comparative prism.

The goals of preserving coastal zones seem to be shared universally, especially in the era of sea-level rise, deterioration of environmental assets, and the growing pressures of tourism and second homes. Yet, the book reveals striking differences across countries. Some of these differences can be attributed to different degrees of governance quality, public awareness, and citizen compliance with development controls. However, many other differences are embedded in the sets of laws and regulations that apply to coastal zones in each country. These differ in surprising ways from country to country. The legal differences are the “elephant in the room” - hardly recognized to date.

The book encompasses 15 advanced-economy countries. These were selected to represent three groups of legal contexts: Several of the countries are Mediterranean ones, thus ostensibly bound by the Barcelona Protocol on Integrated Coastal Zone Management -an international treaty they all signed. A few more countries are non-Mediterranean members of the EU, where there are presumed shared policies. And two countries are located in different global zones. The findings demonstrate that, contrary to what one may assume, there are major differences in the instruments for coastal zone management and their degrees of effectiveness, regardless of the supra-national regulations that may apply to them. The book enables exposure of some of the unanticipated underlying commonalities and differences that may help to understand and improve coastal zone management for the future.

The roundtable will be composed of several of the contributors to the book, from several countries, and will be chaired by the two Editors.

Keywords: coastal zones; land regulation; climate change; regulatory instruments; comparative analysis

#### References

Alterman, Rachelle and Cygal Pellach (2021), *Regulating Coastal Zones: International Perspectives on Land Management Instruments*, Routledge.

Ahlhorn, F. (2017). *Integrated Coastal Zone Management: Status, Challenges and Prospects*. Springer Vieweg.

Billé, R., & Rochette, J. (2015). The Mediterranean ICZM Protocol: Paper treaty or wind of change? *Ocean & Coastal Management* 105, 84–91.

Boelaert-Suominen, S., & Cullinan, C. (1994). *Legal and Institutional Aspects of Integrated Coastal Area Management in National Legislation*. Food and Agriculture Organization of the United Nations, Rome (Italy). Legal Office.

Cullinan, C. (2006). *Integrated Coastal Management Law: Establishing and Strengthening National Legal Frameworks for Integrated Coastal Management (FAO Legislative Study 93)*. Food and Agriculture Organization of the United Nations.

Portman, M. E. (2016). *Environmental Planning for Oceans and Coasts*. Springer.

Ramkumar, M., James, R.A., Menier, D., & Kumaraswami, K. (Eds.). (2019). *Coastal Zone Management: Global Perspectives, Regional Processes, Local Issues*. Elsevier.

Sanò, M., Jiménez, J. A., Medina, R., Stanica, A., Sanchez-Arcilla, A., & Trumbic, I. (2011). The role of coastal setbacks in the context of coastal erosion and climate change. *Ocean & Coastal Management*, 54(12), 943–950.

85349

## Can legislation mitigate the negatives in condominium towers?

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In recent year, we witness a steep increase in tower condominiums (strata tenure) in many countries across the globe (happily, less so in Europe, propelled by two contending rationales: On the one hand, to supply the demand by a growing segment of the global super-rich who accelerate the financialization of housing; On the other hand, to promote the “compact city” and, ostensibly, provide more dense and ostensibly environmentally friendly housing. Neither rationale can help cities overcome the “vertical shock” they will experience. The residential towers phenomenon is a new human experiment within an unknown knowledge terrain. What are their long-range impacts – environmental, social, economic, and epidemiological?

On the socio-legal front, condominium tenure entails challenges associated with “the commons” and their susceptibility to the free rider syndrome. Is Hardin’s Tragedy unavoidable? Or can Ostrom’s Governing by the Commons win? These challenges are exacerbated by the intersection of condominium legal structure with the sheer structural physical size. Residential towers are highly complex machines to construct and maintain. They entail a growing range of services and technologies, including demands posed by adaptation to climate change and epidemics.

Contrary to intuition about agglomeration economy, even non-luxury towers are very expensive to build and maintain for the long run. Their hidden costs for owners and negative are legally difficult to expose and internalize. High legislative demands to ensure long range financing will become exclusionary. Less stringent legislation will create gradual gaps in capacity to finance maintenance, and higher-pace deterioration. Any legislation will fall short of ensuring capacity to retrofit for climate change or new technologies likely to emerge in the future.

With Hardin and Ostrom in mind, the paper analyses two contrasting categories of condominium legislation and its degree of fit to the challenges of sustainable towers. One category was tailored to upscale tower condominiums, and is represented by Florida, where the Surfside tower collapse occurred. The second category, prevalent in many countries where lower and middle-income groups reside in condominiums, is represented by Israel, which is increasingly becoming a country of towers. The legislation, however, was gestated for walk-ups. The study analyses the legislation comparatively, supplemented by case study research in each country. It concludes with a projection of future challenges.

Keywords: condominium housing, towers, legislation, free-riders, climate change

### References

Alterman, Rachelle, 2010. "The Maintenance of Residential Towers in Condominium Tenure: A Comparative Analysis of Two Extremes – Israel and Florida ". Chapter 5 pp. 73-90 in.. *Multi-Owned Housing: Law, Power and Practice*. Edited by Sarah Blandy, Jennifer Dixon and Ann Dupuis. Aldershot, UK: Ashgate Publishing

Garfunkel, Dorit. 2017, High-Rise Residential Condominiums and the Transformation of Private Property Governance, *UBC Law Review*, 50: 4; 891

Pomponi, Francesco, Ruth Saint, Jay H. Arehart, Niaz Gharavi and Bernardino D'Amico. 2021. Decoupling Density from Tallness in Analysing the Greenhouse Gas Emissions of Cities. *Nature PI Urban Sustainability* (2021, 1: 33.

Ter Kah Leng, A Man's Home is [Not] His Castle - En Bloc Collective Sales in Singapore *Singapore Academy of Law Journal*, 20 SAclJ 49 (2008)

Van Der Merwe Cornelius, *European Condominium Law The Common Core of European Private Law*. (2015).

84715

## Spatial governance and planning systems in the global South: ex-post regularisation and informal institutions.

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Spatial governance and planning systems (SGPSs) empower the public authority to exert a certain control over spatial development and should be oriented to implement the right to the city at domestic level. Whereas most comparative studies on how the organisation and management of activities in space –in a way that answers societal needs– focus on the European continent, contributions comparing SGPSs in the global South are scarcer. The paper approaches SGPSs comparative analysis in the global South by exploring the characteristics and outcomes of the SGPSs active in three Latin American countries –namely Bolivia, Ecuador and Peru– characterised by incremental urbanisation. The research is based on the combination of semi-structured interviews with key stakeholders and desk research related to documentary and secondary sources' analysis. In the selected countries, spatial planning activities are mostly limited to the ex-post regularisation of occurred developments, with the allocation of land use rights (and the acknowledgement of property rights) that happens as the final stage of the process, when they are already taken on the ground. The focus of the analysis is on the interaction between the state, the market and the civil society in addressing (or not) the implementation of the right to the city. In the selected countries, the civil society –activated by the logic of necessity– satisfies –either autonomously or by taking advantage of a so-called necessity-market– the societal needs that formal institutions are not able to address. In so doing, a variable set of informal institutions stands out as the main feature of SGPSs. The research findings allow to frame a new category called ex-post regularisation spatial governance and planning systems, indicating that most territorial developments occur ex-post and independently from the action of the state. The new typological category identified opens a promising way for SGPSs' analysis in the global South and towards their global comparability, as advocated from various international organisations. Furthermore, by considering the informal institutions alongside the formal ones could allow to better tailor the spatial planning tools and regulations towards the right to the city implementation in the global South and beyond.

Keywords: spatial governance and planning systems; incremental urbanisation; right to the city; Latin America; global South.

### References

Abramo, P. (2012). La ciudad com-fusa: Mercado y producción de la estructura urbana en las grandes metrópolis latinoamericanas. *Revista EURE - Revista de Estudios Urbano Regionales* 38(114), pp. 35-69. <http://dx.doi.org/10.4067/S0250-71612012000200002>

Berisha, E., Cotella, G., Janin Rivolin, U., & Solly, A. (2021). Spatial governance and planning systems in the public control of spatial development: a European typology. *European planning*

studies, 29(1), 181-200. <https://doi.org/10.1080/09654313.2020.1726295>

Blanc, F., Cabrera, J.E., Cotella, G., García, A., & Sandoval, J.C. (2022). Does planning keep its promises? Latin American spatial governance and planning as an ex-post regularisation activity. Manuscript submitted for publication.

Bolívar, T., & Erazo, J. (Eds.). (2013). Dimensiones del hábitat popular latinoamericano. Quito: FLACSO. ISBN: 978-9978-67-328-7

Calderón, J. (2017). La insoportable levedad de la planificación urbana y lo legal informal en el Perú. In: Desco. El arte del desgobierno. Serie: Perú Hoy N° 31.

Janin Rivolin, U. (2012). Planning Systems as Institutional Technologies: a Proposed Conceptualization and the Implications for Comparison. *Planning Practice and Research*, 27(1), pp. 63-85. <https://doi.org/10.1080/02697459.2012.661181>

Karaman, O., Sawyer, L., Schmid, C., & Wong, K. (2020). Plot by Plot: Plotting Urbanism as an Ordinary Process of Urbanisation. *Antipode*, 52(4), pp. 1122-1151. <https://doi.org/10.1111/anti.12626>

Massiris Cabeza, A. (2002) Ordenación Del Territorio En América Latina. *Scripta Nova: Revista electrónica de Geografía y Ciencias Sociales*, 6, pp. 105-132

84476

## Negotiating densification: Implications of flexible regulations on the Swiss planning system

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Emerging objectives to combat urban sprawl and the increasing popularity of urban areas have put densification on the political agenda. However, many municipalities struggle to implement densification objectives due to the complex ownership structures in already built-up areas. Simultaneously, a prevalent policy trend of adopting a managerial approach to public problems with efficiency concerns, namely New Public Management, can be observed. This shift has led to a more significant role for private initiatives, a focus on the project level, and flexible decision-making at the local level of planning in many countries. As a result, negotiations between planning authorities, landowners, and other stakeholders increasingly determine densification policy formulation and implementation in a project-based manner. This study uses a neo-institutional framework to understand how these negotiations affect the planning objectives and outcomes in densification. The case study in Thun, Switzerland, shows that municipal authorities use more flexible regulations, which allow for case-by-case decision-making through the negotiation with landowners. This flexibilization leads to a higher legal complexity by including additional criteria in planning regulations. While this may provide municipalities with a greater grip on planning outcomes, such as the provision of affordable housing or green spaces, this study questions the implications on the wider planning system in terms of legal certainty and democratic legitimacy.

Keywords: densification; property rights; New Public Management; flexibility; legitimacy; legal certainty

### References

- Gerber, J. D. (2016) 'The managerial turn and municipal land-use planning in Switzerland – evidence from practice', *Planning Theory and Practice*, 17(2), pp. 192–209. doi: 10.1080/14649357.2016.1161063.
- Gerber, J. D., Nahrath, S. and Hartmann, T. (2017) 'The strategic use of time-limited property rights in land-use planning: Evidence from Switzerland', *Environment and Planning A*, 49(7), pp. 1684–1703. doi: 10.1177/0308518X17701916.
- Hartmann, T. and Spit, T. (2015) 'Dilemmas of involvement in land management - Comparing an active (Dutch) and a passive (German) approach', *Land Use Policy*. Elsevier Ltd, 42, pp. 729–737. doi: 10.1016/j.landusepol.2014.10.004.
- Knoepfel, P. et al. (2011) *Public policy Analysis*. Bristol: The Policy Press. doi: 10.1017/CBO9781107415324.004.

Moroni, S. et al. (2020) 'Simple Planning Rules for Complex Urban Problems: Toward Legal Certainty for Spatial Flexibility', *Journal of Planning Education and Research*. SAGE Publications Inc., 40(3), pp. 320–331. doi: 10.1177/0739456X18774122.

Savini, F. (2016) 'Don't blame public law: The legal articulation of certainty in Amsterdam land-use planning', *Town Planning Review*, 87(4), pp. 459–479. doi: 10.3828/tpr.2016.29.

85231

## Urban renewal projects as coalition magnets: between the laws and governance in the local context

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The urban renewal projects in Brazil reflect an ambiguous form of urban redevelopment. These projects demand the “right to the city” but increasingly promotes income concentration and social segregation. Moreover, it’s frequent that these urban projects are designed by internationally renowned architects in order to legitimize State interventions in the local context. Taking as a starting point the discussion about urban fragmented projects and strategic planning, in this paper we develop the argument that urban renewal projects could work as coalition magnets. In urban redevelopment processes these magnets are mobilized as instruments of public action to make flexible the local rules of land-use. Through the case study of urban renewal projects in the city of Maringá, state of Paraná, Brazil, this paper aims to presents the partial results of an ongoing PhD research that analyzes: the governance, the coalitions and urban design in two projects along the history of this city. Data is collected in the City Hall and local key actors are interviewed. Maringá was built in 1947 according to a modern urban plan based on ideas from the garden city. Throughout its history, the city has had two urban renewal projects that were not built, but they transformed the intervention sites. The first proposal was designed in the 1980s by the architect Oscar Niemeyer for the reoccupation of an old railway maneuvering yard. The second was designed in 2012 by French architects of ARCHI 5 for the redevelopment of an old airport of the city. Although projects by renowned architects and urban entrepreneurialism ideas have been mobilized in the history of Maringá, the hypothesis developed in this paper is that those who govern in the renewal projects are the local political and real estate agents. The urban renewal projects were used only as coalition magnets for urban transformation. Once the coalition was formed, the projects did not need to be built to make the local land use laws more flexible, benefiting the local real estate market.

Keywords: urban renewal projects; coalition magnets; instruments of public action; local governance;

### References

Ascher F. *Os novos princípios do urbanismo*. 4th ed. São Paulo: Romano Guerra; 2010.

Béland D, Cox RH. Ideas as coalition magnets: coalition building, policy entrepreneurs, and power relations. *Journal of European Public Policy* [Internet]. 2016 Mar 15 [cited 2022 Feb 1];23(3):428–45. Available from: <https://doi.org/10.1080/13501763.2015.1115533>.

Castells M, Borja J. As cidades como atores políticos. *Novos Estudos* [Internet]. 1996 [cited 2022 Feb 1];(45):152–66. Available from: <http://novosestudos.com.br/produto/edicao-45/#591561c8102ad>.

Lascoumes P, Le Galès P. Introduction: Understanding Public Policy through Its Instruments—From the Nature of Instruments to the Sociology of Public Policy Instrumentation. *Governance* [Internet]. 2007 [cited 2022 Dec 1];20(1):1–21. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-0491.2007.00342.x>.

Silvestre G, Jajamovich G. The role of mobile policies in coalition building: The Barcelona model as coalition magnet in Buenos Aires and Rio de Janeiro (1989–1996). *Urban Studies* [Internet]. 2020 Jul 29 [cited 2021 Dec 3];0042098020939808. Available from: <https://doi.org/10.1177/0042098020939808>

Pinson G. Chapitre 5 : Le projet urbain comme instrument d'action publique. In: *Gouverner par les instruments* [Internet]. Paris: Presses de Sciences Po; 2005. p. 199–233. (Académique). Available from: <https://www.cairn.info/gouverner-par-les-instruments--9782724609492-p-199.htm>

Portas N. *Perspectivas Urbanas / Urban perspectives. El surgimiento del proyecto urbano* [Internet]. 2003 [cited 2022 Feb 1];1–11. Available from: <https://upcommons.upc.edu/handle/2099/555>.

84540

## Where does urban beauty come from? The formation and evolution of Dortmund's most appreciated neighbourhood.

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Cities are, by definition, artificial products; they are built out of actions, works, aspirations, dreams, plans, and designs of an uncountable number of people and different generations. On the face of it, creating beautiful built environments is in our hands but it appears to be an elusive task. Moreover, how a beautiful urban area emerges over-time is rarely investigated. The problem is that the neglect of this vital issue is not necessarily at the benefit of cities or planning. Whether the beauty of cities is taken for granted or considered marginal in planning discourse, it occupies a key role in the everyday life of citizens and therefore needs to be deepened.

This article tries to reduce such a gap by investigating the case of the Kreuzviertel (Dortmund, Germany). It first examines the most appreciated aspects of the neighbourhood through the analysis of online sources and direct interviews. Second, it presents the current morphological, economic and social characteristics of the area. Third, it reconstructs its genesis and historical evolution with a particular focus on the morpho-generative principles, that is:

- the old rules governing its evolution,
- the streets-grid framing the incremental construction of buildings,
- the distribution and configuration of private and public property.

After these analyses, the paper distinguishes and discusses the effective contribution of planning/design interventions and spontaneous (i.e. emergent, not centrally coordinated) dynamics in the generation of urban beauty. The article demonstrates that a key role in the process has been played by two often overlooked institutional conditions: 1) relatively simple and mainly negative planning rules and the presence of multiple, diverse and relatively small private owners (i.e., a several property situation).

Keywords: Urban beauty; Incremental development; Property; Planning rules; Spontaneity; Urban design

### References

Cozzolino, S. (2021). On the spontaneous beauty of cities: neither design nor chaos. *URBAN DESIGN International*, 1-10.

Cozzolino, S., & Moroni, S. (2021). Multiple agents and self-organisation in complex cities: The crucial role of several property. *Land Use Policy*, 103, 105297.

Cozzolino, S. (2020). The (anti) adaptive neighbourhoods. Embracing complexity and distribution of design control in the ordinary built environment. *Environment and Planning B: Urban Analytics and City Science*, 47(2), 203-219.

Moroni, S., Buitelaar, E., Sorel, N., & Cozzolino, S. (2020). Simple planning rules for complex

urban problems: Toward legal certainty for spatial flexibility. *Journal of Planning Education and Research*, 40(3), 320-331.

85264

## Regulating residential heritage: from national institutional settings to regional legislation. A comparison of two Russian regions.

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It is commonly considered that Russia has a solid vertical and hierarchical power structure (Fondahl et al., 2019). However, due to the country's size, geographic, economic, and demographic diversity, there is some flexibility and decentralization at the regional level, even if of a low degree (Studin, 2018). Regions can decide the setting of the authority structure, administrative division and interpret federal legislation based on the regional aims. The studies dealing with the issue of this decentralization are underrepresented in both "Western" and national literature (Braverman et al., 2014), especially in the field of built heritage use and preservation. Our paper explores how the national legislation is adopted and applied in two Russian regions: the Rostovskaya oblast in southern Russia and the Sverdlovskaya oblast in the Ural geographic area. We focus on the legislation in areas relevant to the residential heritage, such as urban planning, housing, and monuments protection. To collect data, we used a mixed-method research approach that includes the institutional and legislative setting of control, management, and transformation of the existing built environment through the comparative study of the national and regional legislative documents, national and regional governments' structure and responsibilities, analysis of media-sources, actors mapping and exploration of the cases of law application "on the ground." Our findings demonstrate that despite the different applications of the national regulations regionally, the regions cannot overcome the existing gaps and contradictions that cause complicated residential heritage use and preservation issues. This paper contributes to further research on institutional practices with a specific focus on housing stock as a legacy of the past and broadening the scope of research on the role of central-regional government relations in spatial transformation.

Keywords: Russia, regional policy, residential heritage, institutions, built environment

### References

- Braverman, I., Blomley, N., Delaney, D. & Kedar, A. (Eds.). (2014). *The Expanding Spaces of Law. A Timely Legal Geography*. Stanford University Press
- Fondahl, G., Filippova, V., Savvinova, A., Ivanova, A., Stammler, F. & Hoogensen G. (2019) Niches of agency: managing state-region relations through law in Russia, *Space and Polity*, 23:1, 49-66, DOI: 10.1080/13562576.2019.1594752
- Studin, I. (Ed.) (2018). *Russia: Strategy, Policy and Administration*. Palgrave Macmillian

84010

## How much room for rivers can we actually make? The future of the Dutch Active Land Policy under the light of blue and green infrastructure implementation

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This article investigates the potential of Active Land Policy in the Netherlands as an instrument to make more room for water. As the discourse regarding integrated water management in the Netherlands is gaining more momentum, it is still unclear how shifts in the narrative of Flood Risk Management towards making more room for water have affected other areas of public policy, particularly land policy and property management. In this paper, land and water policy arrangements in the Netherlands, regarding private property in the realm of Flood Risk Management, are analyzed making use of Policy Arrangement Approach (PAA). This study seeks to contribute to a better understanding of the potential of Active Land Policy in facilitating the provision of large scale blue and green infrastructure in urban areas in the Netherlands. Through PAA, four main dimensions of water and land policies are scrutinized, namely the Discourses, Rules, Actors and Resource allocation. PAA analytical framework is applied to a case study in the city of Nijmegen, in the juxtaposition between Making room for river Waal project and two neighboring urban transformation projects developed through Active Land Policy principle, namely Waalsprong and Waalfront. Content analysis of policy and legal documents, qualitative data collected through interviews with key stakeholders in Nijmegen, as well as a Delphi study with international experts, have informed the findings of this study. Findings reflect on the types of blue and green infrastructure that have been facilitated through active land policy in Waalsprong and Waalfront and the policy arrangements that have supported the delivery of these types of infrastructure. Concurrently, findings address factors that limit the potential of active land policy to deliver larger blue and green infrastructure, such as Room for the river Waal project. The paper concludes with recommendations to expedite rethinking of active land policy in the Netherlands in the realm of blue and green infrastructure.

Keywords: Active Land Policy, Blue and Green Infrastructure, Making Room for Water, Flood Risk Mitigation

### References

- Kaufmann, M. (2018) 'Limits to change – institutional dynamics of Dutch flood risk governance', *Journal of Flood Risk Management*, 11(3), pp. 250–260. doi: 10.1111/jfr3.12307.
- Needham, B. (2016) *Dutch land use planning. The principles and practice*. New York: Routledge
- Wiering, M. and Immink, I. (2006) 'When water management meets spatial planning: A policy-arrangements perspective', *Environment and Planning C: Government and Policy*, 24(3), pp. 423–438. doi: 10.1068/c0417j.

Wiering, M., Liefferink, D. and Crabbé, A. (2018) 'Stability and change in flood risk governance: on path dependencies and change agents', *Journal of Flood Risk Management*, 11(3), pp. 230–238. doi: 10.1111/jfr3.12295.

84182

## Beyond privacy concerns: Towards a comprehensive legal critique of smart cities

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Is often accepted that the implementation of smart city initiatives necessarily promotes efficiency, transparency, and equality. However, a rising number of voices alert that such initiatives can trigger a variety of legal conundrums that, if poorly managed by urban planners namely due to lack of legal awareness, are most likely to seriously jeopardize the public interest. The negative consequences of these initiatives for the public interest largely transcend personal data extraction and privacy loss issues, which nevertheless typically dominate contemporary debates about planning law for smart cities. In fact, a focus on privacy issues creates an excessively simplified perspective on the matter unlikely to prepare urban planners for the full complexity of what is at stake.

Through a literature review supplemented by face-to-face interviews and a web-survey with technologists, planners, and other public officials, this research aimed at exposing some of the threats induced by smart cities that professional planners should be knowledgeable about. This presentation will expose threats associated with the following issues: i) the procurement of digital services and technologies, ii) the relationships between emerging digital technologies and legal developments, iii) the regulation of cloud-based interoperable and standardized digital solutions, iv) the emergence of the so-called ‘Innovation Principle’, and v) the legal consequences of a transition from regulatory planning to real-time urban management.

It is crucial that urban planners develop awareness about these matters for at least two reasons. The first, already mentioned, concerns the protection of the public interest. The second concerns the protection of their own jobs. If the smart city paradigm continues to gain traction, planners might soon find themselves studying employment law and work rights to safeguard their own livelihoods instead of planning law and property rights to safeguard the public interest.

Keywords: smart cities, legal concerns, empirical study

### References

1. Ferreira, A, Oliveira, P, and von Schönfeld, K. (forthcoming) Planning cities beyond digital colonization? Insights from the periphery. *Land Use Policy*
2. von Schönfeld, K., and Ferreira, A. (2021) Urban Planning and European Innovation Policy: Achieving Sustainability, Social Inclusion, and Economic Growth? *Sustainability*, 13(3), 1137.
3. Vanolo, A. (2014). Smartmentality: The Smart City as Disciplinary Strategy. *Urban Studies*,51(5), 883-898.

4. Aurigi, A., & Odendaal, N. (2020). From “Smart in the Box” to “Smart in the City”:  
Rethinking the Socially Sustainable Smart City in Context. *Journal of Urban Technology*.  
doi:10.1080/10630732.2019.1704203

83760

## Making land available - Comparing the German Building Land Mobilisation Act and the partial revision of the Swiss Spatial Planning Act

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Planning practice is confronted with seemingly contradictory challenges, such as the qualitative and quantitative provision of housing while at the same time reducing land consumption. To address the apparent dilemma, legislators are increasingly relying on densification. However, a fundamental prerequisite (and often a significant challenge) for this is the actual availability of the required land. Recent reforms of planning law in both Germany and Switzerland aim to promote precisely this availability of building land by increasing the effectiveness and speed in order to make the land needed available for inward development, thus meeting the seemingly conflicting planning policy goals. This paper compares recent legislative efforts in Germany and Switzerland by using the method of comparative law (popularized by Konrad Zweigert and Hein Kötz). The German Building Land Mobilization Act includes amendments to the Building Code (Baugesetzbuch) and the Building Use Ordinance (Baunutzungsverordnung), which are intended to enable faster activation of building land and the creation of more affordable housing. To this end, the amendment expands existing instruments for the activation of building land and introduces simplifications of the planning law. In Switzerland, the Spatial Planning Act (SPA) has been partially revised to achieve inward settlement development through precise regulations on the expansion of the building zone and instruments to ensure the actual implementation of zoning plans.

Keywords:

### References

De Cruz, Peter. *Comparative Law in a Changing World*. 3rd ed. New York, NY: Routledge-Cavendish, 2007.

Zweigert, Konrad, and Hein Kötz. *Introduction to Comparative Law*. 3rd rev. ed. Oxford : New York: Clarendon Press ; Oxford University Press, 1998.

Gerber, Jean-David, Thomas Hartmann, and Andreas Hengstermann, eds. *Instruments of Land Policy: Dealing with Scarcity of Land*. Urban Planning and Environment. London ; New York: Routledge, Taylor & Francis Group, 2018.

Aemisegger, Heinz, Pierre Moor, Alexander Ruch, and Pierre Tschannen, eds. *Praxiskommentar RPG*. 1. Band: Nutzungsplanung. Zürich Basel Genf: Schulthess, 2016.

Gerber, Jean-David, Stéphane Nahrath, and Thomas Hartmann. 'The Strategic Use of Time-Limited Property Rights in Land-Use Planning: Evidence from Switzerland'. *Environment and Planning A: Economy and Space* 49, no. 7 (July 2017): 1684–1703.

<https://doi.org/10.1177/0308518X17701916>.

Knoepfel, Peter, Patrick Csikos, Jean-David Gerber, and Stéphane Nahrath. 'Transformation der

Rolle des Staates und der Grundeigentümer in städtischen Raumentwicklungsprozessen im Lichte der nachhaltigen Entwicklung'. PVS Politische Vierteljahresschrift 53, no. 3 (2012): 414–43. <https://doi.org/10.5771/0032-3470-2012-3-414>.

84422

## Revising law, revising cities: Feminist Methodology and the Collective Moral Damage in the Public Civil Action of Pinheirinho in Brazil

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Even though the relation between law and urban planning researches has been growing in the last decades, it still not an obvious one. Most of the time, the traditional focus of law in property makes it more an obstacle than an asset to fight spatial inequality, as when a judicial order evicts a longstanding settlement to re-establish ownership, in the name of property law, but ignoring housing as a public policy. Our proposal is to revise a sentence that extinguished a public civil action proposed to condemn the Municipality of São José dos Campos, a medium city of the State of São Paulo, Brazil, for collective moral damage due to violent acts perpetrated by the State during the eviction of a community called “Pinheirinho”. Using the rewrite of the sentence as a method, we try to underline how the focus on collectivity with a gender perspective could mean a very different result (based on the same case and the same law). With this aim, the authors concentrated their efforts on the analysis of the collective moral damage (the request of indemnity that was denied in the original sentence) to apply a feminist methodology. Gender as a category of social analysis helps to understand the most submerged plots of the relations that structure law, power and state. For this reason, the analytical use of this category reveals serious consequences that reflect on institutional strategies to protect rights against discrimination and inequality. The sentence revised shows how law and urban planning studies can have a different relationship when it focuses on the collectivity.

Keywords: Feminist Methodology; Social Reproduction; Right to Housing; Urban Policy; Collective Rights.

### References

- ALVAREZ, Sona E. *Engendering Democracy in Brazil: women's movement in transition politics*. New Jersey: Princeton University Press, 1990.
- BARTLETT, Katherine T. “Métodos Jurídicos Feministas”. In: FERNÁNDEZ, Marisol; MORALES, Félix (Orgs.). *Métodos Feministas en el Derecho*. Lima: Palestra, 2011. p. 19- 116.
- BAKKER, Isabella. “Neo-liberal governance and the Reprivatization of Social Reproduction: Social Provisioning and Shifting Gender Orders”. In: *Power, Production and Social Reproduction* (Ed. Isabella Bakker and Stephen Gill). New York: Palgrave Macmillan, 2003..
- Charter for Women's Right to The City, presented at the World Urban Forum in Barcelona in September 2004, p. 4. Disponível em <https://www.hlrn.org/img/documents/WFW-%20%20Charter%20for%20Womens%20Right%20to%20the%20City%20-%202004.pdf>.
- CRENSHAW, K. *Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics*. University of Chicago, Legal Forum, Vol 14, 1989 pp. 538–554.

EUROCULTURES - Belgium; FOPA Dortmund - Germany; GROUPE CADRE DE VIE - France; PRAXIS - Greece; SEIROV-NIROV - The Netherlands. European Charter of Women in the City. Action-Oriented Research supported by the Commission of the European Union Equal Opportunities Unit, 1995.

FERNANDES, Edésio. “Política Urbana na Constituição Federal de 1988 e Além: Implementando a Agenda da Reforma Urbana no Brasil”. Vol IV- Constituição de 1988: o Brasil 20 anos depois. Estado e Economia em Vinte Anos de Mudanças. Disponível em <https://www12.senado.leg.br/publicacoes/estudos-legislativos/tipos-de-estudos/outras-publicacoes/volume-iv-constituicao-de-1988-o-brasil-20-anos-depois.-estado-e-economia-em-vinte-anos-de-mudancas/politica-urbana-agricola-e-fundiaria-politica-urbana-na-constituicao-federal-de-1988-e-alem-implementando-a-agenda-da-reforma-urbana-no-brasil>

IPEA. Retratos das Desigualdades de Gênero e Raça, 4ª edição. Brasília: IPEA, 2011. Disponível em <https://www.ipea.gov.br/retrato/pdf/revista.pdf>

84900

## Redeveloping empty farm stables for commercial purposes: two cases from the Netherlands.

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Throughout the European Union, farm enlargement, and the reduction of farms are causing empty farm stables in areas that planning regulations designate for farming uses. This issue is debated at the crossroads of rural development, spatial planning, and property rights. Solutions tend to focus on either demolition or re-use of former stables for residential purposes, and, in this way, neglect opportunities for commercial re-use, which may be beneficial to keep jobs in rural areas. This paper investigates the prospects and effects of commercial re-use of stables by analysing two Dutch cases: 1) The Green East in Raalte (Province of Overijssel), and 2) Mouthoeve in Boekel (Province of Noord-Brabant). The first is a centre for start-ups in the agri-food industry and the second is a shopping centre with authentic craft shops on the edge of the village. The analysis shows that the local municipalities stretched planning rules to enable this commercial re-use, which would not be possible in many other Dutch municipalities.

Furthermore, more commercial re-use of empty farm stables may further increase the struggle over rural spaces, that is, a process of commercial gentrification of farm buildings. However, both examples have been able to attract new entrepreneurs, jobs, and excitement to their respective areas. Although the cases are only a part to the large issue of empty farm stables, they show that under the conditions that there are a good plan and a local government with a flexible approach, the redevelopment of empty farm stables for commercial purposes could help to revitalise and regenerate a rural area. This raises the question whether the current Dutch planning system can deal with upcoming processes of rural transformation, and the creative solutions which may be put forward in these processes.

Keywords: Governance of spatial planning; Land policy; Agricultural change; Re-use; Farm buildings; The Netherlands.

### References

Daalhuizen, F., Van Dam, F., & Goetgeluk, R. (2003). New firms in former farms: a process with two faces. *Tijdschrift voor economische en sociale geografie*, 94(5), 606-615.

Fuentes, J. M., Gallego, E., García, A. I., & Avuga, F. (2010). New uses for old traditional farm buildings: The case of underground wine cellars in Spain. *Land Use Policy*, 27(3), 738-748.

Gies, T. J. A., Nieuwenhuizen, W., Naeff, H. S. D., Vleemigh, I., Paulissen, M., Ros, P., & Dijkstra, K. (2016). Landelijk gebied en Leegstand: Aard, omvang en oplossingsrichtingen van huidige en toekomstige leegstand agrarisch vastgoed in Nederland (No. 2755). Wageningen: Wageningen Environmental Research.

Mackay, M., Nelson, T., & Perkins, H. C. (2019). Agritourism and the adaptive re-use of farm

buildings in New Zealand. *Open Agriculture*, 4(1), 465-474.

Needham, B. (2014). *Dutch land-use planning: The principles and the practice*. Farnham: Ashgate Publishing, Ltd.

Van der Sluis, T., Pedrolì, B., Frederiksen, P., Kristensen, S. B., Buschk, A. G., Pavlis, V., & Cosor, G. L. (2019). The impact of European landscape transitions on the provision of landscape services: an explorative study using six cases of rural land change. *Landscape Ecology*, 34(2), 307-323.

Van der Vaart, J. H. (2005). Towards a new rural landscape: consequences of non-agricultural re-use of redundant farm buildings in Friesland. *Landscape and urban planning*, 70(1-2), 143-152.

Verhoeve, A., De Roo, N., & Rogge, E. (2012). How to visualise the invisible: Revealing re-use of rural buildings by non-agricultural entrepreneurs in the region of Roeselare-Tielt (Belgium). *Land Use Policy*, 29(2), 407-416.

84409

## Compensating Downzoning. A comparison of European compensation schemes for implementing no net land take policies.

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Well-operating spatial planning requires effective procedures of rezoning. Although upzoning and downzoning are each other's mirror images, little comparative research has been carried out on the process of downward planning and the rollback of development rights. Traditionally more conditioned by facilitating urban growth, the planning practice needs to implement new sustainable and environmental goals such as the UN land degradation neutrality (LDN) and the European no net land take target (NNLT). By consequence, downzoning has become more topical because of these new land policies. However, an obstacle in downzoning can be the legal system of compensation or the lack of it. Our research aims to explore the instrument of compensation and in what circumstances of downzoning it is appropriate. We present a theoretical classification of compensation schemes and three distinctive characteristics by which a specific national scheme can be positioned. Five European countries were selected that have very different compensation schemes, ranging from non-compensation to full compensation of revised development rights. Based on the characteristics of rationale, conditions and calculation, the compensation schemes of the Netherlands, Belgium-Flanders, France, Germany and Switzerland were analyzed, compared and positioned in the classification framework. We found that a compensation system strongly reflects a particular political-normative construction of property rights and the degree to which these rights are prioritized. In the light of these findings, it is striking that the European Court grants considerable discretionary margin to the member states when it comes to downzoning. By consequence, the same governmental decision of downzoning can result in a very different outcome for the landowner, depending in which European member state the planning revision occurs. In order to implement a policy of land thrift or land neutrality, we argue that a feasible compensation system is especially needed in countries that are faced with a planning oversupply and binding rights attached to outdated zoning.

Keywords: land use planning, no net land take, regulatory taking, downzoning, compensation, property rights.

### References

Alterman, R. et al, 2010. Takings International. A Comparative Perspective on Land Use Regulations and Compensation Rights.

European Commission, 2011. Roadmap to a Resource Efficient Europe, (COM/ 2011/0571).

Available from:

[http://ec.europa.eu/environment/resource\\_efficiency/about/roadmap/index\\_en.htm](http://ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm) [Accessed 9

December 2021].

Gerber, J-D; Hartmann, T.; Hengstermann, A., 2018. Instruments of Land Policy. Dealing with Scarcity of Land. Routledge.

Hagman, D.G. & Mischynski, D.J., 1978. Windfalls for wipeouts: Land value recapture and compensation.

Renard, V., 2009. Property Rights Protection and Spatial Planning in European Countries. In: Property rights and land policies, edited by Gregory K. Ingram and Yu-Hung Hong.

Richardson, J., 2003. Downzoning, fairness and farmland protection, 19(1) J. Land Use & Envtl. L. 59.

Serkin, C., 2005. The meaning of value: assessing just compensation for regulatory takings, Northwestern University Law Review, Vol. 99, 677-742.

84552

## Governance structure and hierarchical coordination in spatial planning systems: a cross-country comparison

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Spatial planning is a process of multi-level spatial governance. Distributions of competences among levels of government established in spatial planning systems reflect the governance structures between the upper and lower levels of governments (Geoff Vigar,2009). Although developed countries have formed relatively stable planning systems and constitutions during the evolutions of spatial planning over a long period of time, the practices and systems are still undergoing dynamic adjustment and adapting to institutional and political changes and challenges. Especially in European countries, some prevalent new trends in planning revolutions have been observed, including the changing role of central government and local government, both the centralisation and decentralization (ESPON COMPASS,2018; Reimer M, 2014) . Current researches have focused mostly on spatial planning systems while the hierarchical coordination, often neglected, is expected to play a crucial role in spatial governance (Schmitt Peter,2020). In this respect, this paper aims to conduct a comparative study of governance structures in statutory spatial planning systems by reviewing the on-going experiences in representative western and eastern countries. First, a general analysis of latest trends and concepts in the practice of international spatial planning is given. Second, based on case study, five main tools of hierarchical coordination among different levels of spatial planning are sorted out as policies, indicators, spatial boundaries, land use and facility allocations. Third, comparative governance structures and hierarchical relationships are concluded. Preliminary result shows a diverse combination of both rigid and soft forms of horizontal cooperation have been applied. The research contributes to the research field of spatial planning by outlining typical governance structures and summarizing methods of hierarchical coordination in spatial planning systems for further research.

Keywords: governance structure, spatial planning system, hierarchical coordination, comparative study

### References

- Vigar G.(2009). Towards an Integrated Spatial Planning? *European Planning Studies*,17,1571-1590.
- ESPON COMPASS. (2018a). COMPASS – Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe. Final Report (Luxembourg).
- Reimer M., Getimis P., Blotevogel H. (Eds.).(2014). *Spatial Planning Systems and Practices in Europe: A Comparative Perspective on Continuity and Changes*. London: Routledge.
- Schmitt P., Smas L.(2020). Dissolution Rather than Consolidation - Questioning the Existence of the Comprehensive-Integrative Planning Model. *Planning Practice & Research*.

84605

## Olympic Regeneration vs. Social (In)Justice: Value Capture as a Referee

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The Olympic Games are powerful tools to catalyse urban and economic development, being used by host cities to boost their global profiles and, consequently, attract capital investment. This aimed city-branding is often sought by “starchitecture” or “Olympic urbanism” strategies meant to create emblematic facilities and regenerate degraded urban areas in prime city zones, targeted at niche segments. However, these strategies come attached with negative social effects, often involving processes of displacement and ulterior gentrification. Most recent host cities have been pressured to mitigate such effects, but the strict Olympic Games financial model severely constrains the opportunities of hosts to find cost-effective solutions. Moreover, resorting to the private sector to find funding for Olympic projects has proven to be a difficult task, except in what concerns the construction of accommodation facilities. For being associated with the Games, property market values of such facilities tend to be extremely speculated and prone to attract private investment. In this context, the implementation of value capture mechanisms can prove valuable to mitigate the negative social impacts of the Games. Thus, hosts have been using them to deliver affordable housing in Olympic villages. However, this solution also reduces the Games’ economic value, and, on top of that, most recent editions have struggled to implement such models, even if previously proven successful elsewhere. The application of value capture mechanisms in Olympic contexts seems to be a gap in the literature and, thus, this research aims at introducing such concept to Olympic studies. Solely resorting to a literature review, the main argument is built around three lines of thought that evidence the paradoxes of combining social responsibility with the mega-event strategy. Based on the fact that Olympic projects present unique characteristics that differentiate them from other “common” urban projects, conclusions draw a pathway for alternative applications of value capture mechanisms that can potentially prove more efficient in mitigating social injustices derived from the Games.

Keywords: mega-event planning; urban development; Olympic Games; affordable housing; property market value; value capture

### References

- Bernstock, P. (2020). Evaluating the contribution of planning gain to an inclusive housing legacy: a case study of London 2012. *Planning Perspectives*, 35(6), 927-953.
- Blunden, H. (2012). The Olympic Games and Housing. In H.J. Lenskyj, & S. Wagg (Eds.), *The Palgrave Handbook of Olympic Studies*. Palgrave Macmillan: Hampshire, United Kingdom.
- Kavetsos, G. (2012). The Impact of the London Olympics Announcement on Property Prices. *Urban Studies*, 49(7), 1453-1470.
- Müller, M. (2015). The Mega-Event Syndrome: Why So Much Goes Wrong in Mega-Event Planning and What to Do About It. *Journal of the American Planning Association*, 81(1), 6-17.
- Muñoz Gielen, D., & Lenferink, S. (2018). The role of negotiated developer obligations in

financing large public infrastructure after the economic crisis in the Netherlands. *European Planning Studies*, 26(4), 768-791.

Preuss, H. (2019). Event legacy framework and measurement. *International Journal of Sport Policy and Politics*, 11(1), 103-118.

Smith, A. (2014). Leveraging Sport Mega-Events: New Model or Convenient Justification? *Journal of Policy Research in Tourism, Leisure and Events*, 6(1), 15-30.

Wang, M., & Bao, H.X.H. (2018). Mega-event effects on the housing market: Evidence from the Beijing 2008 Olympic Games. *Cities*, 72, 207-216.

85142

## Soft spaces, soft planning, and soft law: Assessing the changing model of city-regional planning in Finland

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This paper discusses “soft spaces” and “soft planning” in city-regional planning, complementing the discussion with the concept of soft law. The point of departure is that the city-regional scale of planning often falls in between existing formal jurisdictions, and city-regional planning takes place in soft spaces representing “fluid” scales, scales “other than those of the statutory planning system” (Allmendinger & Haughton 2009, 617). This has been the case also in Finland, which is the contextual locus of this paper.

Planning taking place in these new informal spaces has been called “soft planning”. While soft planning has been promoted because of its assumed agility in responding to multi-scalar and transforming planning problems, it has also been argued to suffer from legitimacy deficits (Allmendinger and Haughton 2009; 2010). The effectiveness of soft planning has also been questioned because it does not produce legally binding outcomes, and it typically has not replaced statutory planning (Mäntysalo et al. 2015).

This paper introduces the concept of soft law (see e.g. Maher 2021) to the discourse on soft spaces and soft planning, arguing that the concept of soft law is useful in assessing both the legitimacy and effectiveness of the soft and hard features in planning. The paper also uses the concepts of soft spaces, soft planning, and soft law for scrutinizing the ongoing renewal of the Finnish planning system, where some, but not all aspects of currently largely informal city-regional planning are purported to be formalised or hardened.

Keywords: soft space, soft planning, soft law, city-regional planning, Finland

### References

Allmendinger, P. & Haughton, G. (2009) Soft spaces, fuzzy boundaries, and metagovernance: the new spatial planning in the Thames Gateway. *Environment and Planning A*, 41(3): 617-633.

Allmendinger, P., & Haughton, G. (2010) Spatial planning, devolution, and new planning spaces. *Environment and Planning C: Government and Policy*, 28(5): 803-818.

Maher, I. (2021) Revisiting Soft Law. *Governance, Regulation and Networks*. In Eliantonio, M., Korkea-aho, E., Ștefan, O (eds.) *EU Soft Law in the Member States: Theoretical Findings and Empirical Evidence*. Oxford: Hart Publishing.

Mäntysalo, R., Kangasoja, J. K. & Kanninen, V. (2015) The paradox of strategic spatial

planning: a  
theoretical outline with a view on Finland. *Planning Theory & Practice*, 16(2): 169-183.

84420

## Land policy and the power of private property - Exploring volitional vacant properties

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Land policy and private property have increasingly points of contact like on the housing market. The different situations on housing markets are influenced by many different behaviors of the landowners. Especially in tense housing market situations in high-demand city centers or in touristic hot spots different housing market actors pursue different goals and causes more than one kind of supply and demand for living space. One observable phenomenon of volitional vacant properties is a kind of emptiness on the streets. Different cities and countries have various names for this kind of emptiness - »ghost cities« (China), »buy-to-leave«-properties (London), »ghost-villages« (Switzerland) or »Rolladensiedlung« (Germany). Increasingly, luxury residences remain vacant, i.e., are neither occupied nor used by their owners and also not sublet. At the same time the demand for affordable living space is continuously growing which results in an imbalance between the supply and demand for living space. The superficial assignment of responsibilities in the case of volitional vacancy is closely related to a definitional problem. This phenomenon is not yet well understood. The academic debate is mainly focusing on different types of structural or functional vacancies. This contribution aims to a better understanding of the phenomenon and how land policy can intervene in volitional vacancies. The analytical framework which is based on the Public Policy Analysis by Knoepfel aims to modelling involved actors as well as analyzing the legal structure and property theory approaches. The Public Policy Analysis is applied in general after analyzing the phenomenon of volitional vacant properties and will be illustrated by the example of Berlin. This contribution explore the different definitional horizons of the phenomenon to understand how living space has become one of the most in-demand commodities and capital assets of the modern time. Further explanations investigate the legal structures to find out if planning law protect volitional vacant properties and if property theory approaches thematize volitional vacancy and the un-use of private property. The conclusion shows that volitional vacant properties are an interesting example for further scientific debates to analyze the field of tension between land policy and private property.

Keywords: volitional vacancy, land policy, property law, private investment, property theory, land use planning instruments

### References

- Benjamin Davy (1999): Boden und Planung - Zwischen Privateigentum und Staatsintervention, IN: Dortmunder Beiträge zur Raumplanung 89
- Human Rights Council, United Nations (2017): Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context
- Jarass, In: Jarass/Piero (2020): GG, Verlag C.H. Beck, Art. 14, Rn. 16
- Stefano Moroni, Anita de Franco & Beatrice Maria Bellè (2020): Unused private an public

buildings: Re-discussing merely empty and truly abandoned situations, with particular reference to the case of Italy and the city of Milan, *Journal of Urban Affairs*  
von Justi, Johann Heinrich Gottlob (1760/1965): *Die Grundfeste zu der Macht und Glückseeligkeit der Staaten*  
Knoepfel, Peter; Larrue, Corinne, Varone, Frédéric; Veit, Sylvia (2011): *Politikanalyse*

84349

## Farming activities and diffuse urbanization in cross-border regions : a case study on the French-Belgian border areas

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A large part of building development for housing and other activities is concentrated today in discontinuous spaces located on the outskirts of urban centralities. This dynamic of diffuse urbanization is part of an international trend and one of the features of the « post-suburban » world (Phelps & Wu, 2011). In cross-border regions, regulation of diffuse urbanization faces specific challenges due to diverging planning systems and cross-border mobilities (Buitelaar & Leinfelder, 2020 ; ESPON & Luxemburg University, 2010).

The aim of our study is to highlight the place of farming activities in the regulation of diffuse urbanization in the context of a cross-border region characterized by important urban sprawl and challenges for farmland preservation : the French-Belgian border. We propose to take into account the variety of developments induced by farming activities : housing needs for farmers, building projects linked to conventional agriculture but also innovative diversification activities (on-farm processing and marketing, agritourism) (Perrin et al., 2020). We follow a sociological approach, focused on the implementation of planning regulations at the local level not only by planning authorities, but also by the various stakeholders of the land tenure system (Dongmo Zangue et al., 2022 ; Idt & Pellegrino, 2021 ; Le Bivic & Melot, 2020 ; Holtslag-Broekhof et al., 2014).

This inquiry is implemented within the frame of the research project « Gertrud » on « Cross-border Management and Regulation of Diffuse Urbanization », funded by the French national research agency. Under this project, several case studies are currently conducted in cross-border regions with France, Belgium, Luxemburg, Germany and Spain. The objectives of the research project are to understand the difficulties encountered by public and private actors in planning the production of diffuse urbanization and to identify barriers as well as innovative practices, when facing with different planning systems and competing land uses in a context of cross-border areas.

The presented research focuses on a case-study in French-Belgian border areas, especially in the peri-urban surroundings of the Lille conurbation. The inquiry is based on semi-structured interviews conducted in France and Belgium with local stakeholders involved in the management of farmland and land-use : local planning authorities, farmland management agencies, farmer unions and NGOs, local bodies in charge of cross-border cooperation.

Our first results show that differences in the regulation of farming activities in urban planning between both countries, but also competitions for access to farmland (due the lower price levels in France) may explain some dynamics of diffuse urbanization in the outskirts of conurbations. This research could contribute to new insights on cross-border urbanization by underlining the necessity to integrate farming activities in the planning of suburban areas.

Keywords: Diffuse urbanization, farmland, cross-border regions, urban planning, urban sprawl, law.

## References

- Buitelaar, E. & Leinfelder, H. (2020). Public Design of Urban Sprawl: Governments and the Extension of the Urban Fabric in Flanders and the Netherlands, *Urban Planning*, Volume 5, Issue 1, Pages 46–57, <https://doi.org/10.17645/up.v5i1.2669>
- Dongmo Zangue, Y., Melot, R. & Martin, P. (2022). Diversity of farmland management practices and their nexus to environment: A review, *Journal of Environmental Management*, Volume 302, Part B, 114059, <https://doi.org/10.1016/j.jenvman.2021.114059>
- ESPON & University of Luxembourg (eds.) (2010), Cross-border polycentric metropolitan regions, Final report, [http://www.espon.eu/main/Menu\\_Projects/Menu\\_TargetedAnalyses/metroborder.html](http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/metroborder.html)
- Holtslag-Broekhof S.M., Beunen R., van Marwijk R. & Wiskerke J.S.C. (2014). Let's try to get the best out of it" understanding land transactions during land use change, *Land Use Policy*, 41, 561–570, <https://doi.org/10.1016/j.landusepol.2014.04.016>
- Idt, J. & Pellegrino, M. (2021). From the ostensible objectives of public policies to the reality of changes: Local orders of densification in the urban regions of Paris and Rome, *Land Use Policy*, Volume 107, 105470, <https://doi.org/10.1016/j.landusepol.2021.105470>
- Le Bivic, C. & Melot, R. (2020). Scheduling urbanization in rural municipalities: Local practices in land-use planning on the fringes of the Paris region, *Land Use Policy*, Volume 99, 105040, <https://doi.org/10.1016/j.landusepol.2020.105040>
- Perrin, C., Clément, C., Melot, R., & Nougaredes, B.. 2020. "Preserving Farmland on the Urban Fringe: A Literature Review on Land Policies in Developed Countries." *Land* 9 (7): 223. <https://doi.org/10.3390/land9070223>
- Phelps, N.-A. & Wu F. (2011). *International Perspectives on Suburbanization. A Post-Suburban World?*, New York, Palgrave Macmillan.

85242

## ‘Central-Local’ Planning and the Right to Adequate Housing in Ghana

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In recent decades, there is a growing importance of decentralised planning in relation to the right to adequate housing (Satpute and Feruglio, 2016). Despite this development, the literature usually refers to right to housing as an outcome of ‘central-local’ government collaboration in policy planning and implementation (UN, 2014; UN-Habitat, 2015; Government of Ghana, 2015). But are these two levels of planning expressly connected and delivering housing on the basis of the right to adequate housing? This paper addresses this question by exploring the relationship between the central and local governments in Ghana in the context of the right to adequate housing. It draws on the UN-Habitat’s ‘Housing at the Centre’ approach to examine the extent to which this approach played out in two Municipalities in Ghana. This is done through a desk study of the new national housing policy of Ghana in 2015 and the 2018 – 2021 medium term development plans of Wa Municipal Assembly and West Gonja Municipal Assembly. It notes that right to housing has not been adequately integrated into municipal and national planning and as well failed to promote ‘Housing at the Centre’ approach. The paper concludes that ‘central-local’ housing planning interventions should focus more on collective commitment towards right based approach to housing and/or ‘Housing at the Centre’ approach. Also, decentralised Municipal housing supply responsibilities should commensurate with the required resources, capacity and accountability for right to adequate housing.

Keywords: Decentralisation, Planning, Right to Housing, Housing Policy, Central-Local, Ghana

### References

1. Government of Ghana (2015). National housing policy. Accra: Ministry of Water resources, Works and Housing.
2. Satpute, J. and Feruglio, F. (2016). Implementing the right to adequate housing: A guide for local governments and civil society. [online]. Available [www.ohchr.org](http://www.ohchr.org). Date accessed: 7th January, 2022.
3. UN (2014). Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development. Geneva, United Nations.
4. UN-Habitat (2015). Housing at the centre of the new urban agenda. Nairobi: United Nations Human Settlements Programme.

85023

## Territorial Value - the role of nature-based components

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Are we incorporating all relevant value components in the assessment of territorial value? Traditionally, territorial value creation is deeply related to urban central locations where the concentration of some production factors (labour, capital and entrepreneurship) and access to urban utilities, such as infrastructures, facilities and cultural amenities is higher.

However, land values often reflect environmental driven components, such as outstanding natural and cultural landscapes or the proximity to territories that excel natural beauty and tranquility. For more than 20 years ecological, economic, biodiversity, landscape ecology and other scholars have recognized the contribution of Ecosystem Services (ESS) to create territorial value, and increase territorial resilience, even if the ESS role is often invisible or not perceived by stakeholders, including territorial agents (Gómez-Baggethun and Barton, 2013; McPhearson et al, 2015; Gren and Andersson, 2018).

Our research team of Planning, Urbanism and Environment, at IST - University of Lisbon, and CiTUA research centre, have been exploring the idea of territorial value as the value created in the territory by the services, or the benefits, provided by the ecosystem to the society, both to community and to individuals - the TevESS project. This is aligned with the Territorial Agenda 2030 and the recognition of the relevance of ESS in creating healthy environments in territories and the risk imposed by land take, land consumption and loss of biodiversity. In addition, just societies demand equitable and shared distribution of values across different societal groups. Learnings from sustainability transitions reveal that to face up to societal grand challenges, innovative approaches are needed.

Under the TevESS project, we aim to develop processes and mechanisms to capture the value created by ESS in the territory, recognized by the actors in place, to be incorporated in territorial policies and in the planning process. To achieve this goal, we assume that the territorial value should encompass social, fiscal, legal, financial, planning, ecological and other dimensions. Innovative mechanisms based on forms of transfer development rights are being explored, as well as concepts and methodological tools to evaluate and to enable an equitable sharing of the territorial value, recognizing multi-scaling approaches and multi-level territorial decision-making (Rode, et al 2016). Outcomes expect to contribute to improved territorial equity and justice.

This proposed presentation to the AESOP international community aims to share our research reflections and outcomes and debate ideas and experiences to develop new learnings.

Keywords: value-capture; land value; transfer development rights; ecosystem services; spatial planning governance; territorial justice; territorial resilience

#### References

Gómez-Baggethun, E. and Barton, D. (2013). Classifying and valuing ecosystem services for urban planning. *Ecological Economics*; 68: 235-245. DOI: 10.1016/j.ecolecon.2012.08.019.

Gren, Å., Andersson, E. (2018). Being efficient and green by rethinking the urban-rural divide —Combining urban expansion and food production by integrating an ecosystem service perspective into urban planning. *Sustainable Cities and Society*; 40: 75–82. DOI: 10.1016/j.scs.2018.02.031.

McPhearson, T., Andersson, E., Elmqvist, T., Frantzeskaki, N. (2015). Resilience of and through urban ecosystem services. *Ecosystem Services*; 12: 152-156.

Rode, J., Wittmer, H., Emerton, L., Schröter-Schlaack, C. (2016). Ecosystem service opportunities: A practice-oriented framework for identifying economic instruments to enhance biodiversity and human livelihoods. *Journal for Nature Conservation*; 33: 35-47. DOI: 10.1016/j.jnc.2016.07.001.

84546

## Mobility Rights – a precondition for the Mobility Transformation Process?

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Mobility rights, within the framework of the liberal conception of fundamental rights, have so far been primarily understood as rights of individuals to move freely without restrictions by the state. Thus, legal discussions focused on individual mobility, as the ongoing debate on a right to drive a car until the late 90s showed. Nowadays, the focus has shifted on other aspects. Mobility rights are seen as part of the right to participate in society. Even without owning a car, citizens should be able to move freely and make use of the public space. Therefore, mobility rights can be understood as social rights that ensure access to public transportation. It is discussed whether there should be an obligation of the state to provide an adequate supply of public transportation and guarantee certain standards to enable these rights of participation.

This issue has become more essential within the process of transformation towards sustainable mobility. From a legal perspective, the question arises on whether within our existing legal system and the traditional conception of fundamental rights it would be possible to implement such social mobility rights. European fundamental rights catalogues and constitutions within the EU hardly contain any legally enforceable social rights. Fundamental rights however guarantee not only freedoms of citizens, but also their equality before the law. The idea that mobility rights should include the provision of services of public transportation by the state can thus be considered as an obligation of the state to provide a legal framework, which ensures equal opportunities to move. While the question concerning a human right on mobility seems to be more of a theoretical nature than it can improve the living conditions of citizens in practice, it is of importance to implement standards and ensure equal and easy access to public transportation. Especially as governments take measures restricting individual traffic, aiming to enforce sustainable mobility, compensatory measures are necessary to strengthen and improve public transportation systems. At the same time, law should not set up legal barriers for the various stakeholders in the transportation sector to actively take part in the ongoing mobility transformation processes.

Keywords: mobility, mobility rights, public transportation, fundamental rights, sustainable mobility

### References

- de Búrca/de Witte (eds), *Social Rights in Europe* (Oxford Univ. Press, 2005)
- Zhu, *Service of General Economic Interest in Transport* - in: *Zhu, Services of General Economic Interest in EU Competition Law* (T.M.C. Asser Press 2020, 217)
- Murphy/Feigon, *Shared Mobility and the Transformation of Public Transit* (Transportation Research Board, 2016)
- Röthel, *Grundrechte in der mobilen Gesellschaft* (Duncker & Humboldt, 1997)
- Damjanovic, *Marktregulierung und soziale Grundrechte* (Journal für Rechtspolitik 2012, 262)



84783

## Singapore, glass half full or empty? How Planning Law and land regime has shaped socio-economic outcomes since Independence

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### Introduction

Anne Haila described Singapore as a laboratory for a social scientist, given the multiple ways land is used, managed or treated as a source of public revenue (Haila, 2016:2). Sock-Yong Phang explains how housing has given the bottom 50% of households in Singapore, wealth equating to the level advocated in Piketty's 'ideal society' (Phang, 2018:145). Yet inequality is high and persistent despite efforts by the government to reduce it; how and why was this unique land regime created?

### Aims & method

The aim of this paper, by means of a narrative case study, is to explain how theoretically inconsistent policies and their ad hoc, pragmatic application has created a number of rent leakages to a minority of the population, which will expose systemic societal weaknesses as fixed term leases expire over the next forty years.

It will focus on the history and impact of a series of Planning Laws implemented after Independence, culminating in the Land Acquisition Act (1966), together with the establishment of Statutory Bodies; these were granted the authority to acquire land for housing, industrial and commercial development, and subsequently allowed to sell the land on a leasehold basis. This embedded a system of value capture that continues to feed significant revenue into the annual operating budget.

### Result

The result has been to establish Singapore as a prosperous global city, with a unique blend of public and private ownership of land, public utilities and corporations, as well as a substantial National Endowment Fund. The limiting factors and peculiar treatment of land rents as 'past reserves' rather than current income, will highlight the opportunity to build a more inclusive and open society over time, to dispel some of the negative impressions of Singapore prevalent in international public discourse, (Oswin, 2019), (George, 2017),(Chua, 2017).

### Conclusion

The paper will offer some alternative strategies for Singapore, to preserve the benefits of a coherent land regime better adapted to the insight of land rent theory. It will indicate how the Singapore experiment offers a model that might be adopted in other jurisdictions, as well as avenues for further research.

Keywords: Planning law, land rent, value capture, inequality, Singapore

## References

- Chua, B.H., 2017. Liberalism disavowed: communitarianism and state capitalism in Singapore. NUS Press, Singapore.
- George, C., 2017. Singapore, incomplete: reflections on a first world nation's arrested political development. Woodsville News, Singapore.
- Haila, A., 2016. Urban land rent: Singapore as a property state. Wiley Blackwell, Southern Gate, Chichester, West Sussex, UK.
- Oswin, N., 2019. Global city futures: desire and development in Singapore, Geographies of justice and social transformation. The University of Georgia Press, Athens [Georgia].
- Phang, S., 2018. Policy innovations for affordable housing in Singapore: from colony to global city, 1st edition 2018. ed, Palgrave advances in regional and urban economics. Palgrave Macmillan, Cham, Switzerland.

85083

## Balancing regulation and instruments of climate policy

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In the beginning of 2022, the new cabinet in The Netherlands proclaimed unprecedented ambitions with regard to energy transition and climate policies. The government aspires to move the Dutch rear guard position in the ranking of European climate policies into a frontrunners position. It aims to establish for the next ten years a 35 billion fund for energy transition and another 25 billion to deal with the problem of nitrogen. The government proposes a wide program of future objectives and policy tasks.

Thinking about legitimate and effective intervention, however, requires a well-balanced interaction between evolving sets of public norms and purposive policy instruments of governmental administration (Salet, 2018 and 2021). The setting of public norms and the promulgation of aspirational policy tasks are different dimensions of public regulation. The cultivation and active interaction of both dimensions is needed to underpin legitimate and effective public intervention. Such like in many other administrations, today, Dutch policies are predominated by tendencies of managerial policy-making, leaning on purposive policies, the negotiation with interested stake-holders, the programming of policy tasks, and benevolent subsidies to organize the processes of transition. Rather than socialising public norms, the government relies on the pushing of its own purposive and financial incentives.

Willem Salet will discuss the meaning of socialising substantive norms and position rules (rules of the game) and the impact of this on the unilateral use of purposive instruments.

Keywords: public norms, policy instruments, subsidies

### References

Salet, W. (2018) *Public Norms and Aspirations*. Routledge, New York.

Salet, W. (2021) Public Norms in Practices of Transitional Planning—The Case of Energy Transition in The Netherlands. *Sustainability* 2021, 13(8), 4454;

<https://doi.org/10.3390/su13084454>

84447

## Informal, illegal or invisible? Local compliance officers' perspectives on unauthorised housing in Australia

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This paper explores the notion of informal housing through the perspectives of local officers responsible for enforcing compliance with building regulations in Australia. Originally associated with the global south, the term 'informal housing' has been used in various ways to describe 'slum' and 'squatter' settlements; illegal or unauthorised constructions; as well as a variety of practices which either fail to comply with, or afford protection under, regulations for residential development and tenure (Harris, 2017). In the so-called global north, where visible, non-compliances with land use planning laws face enforcement action, and residential design and density is carefully regulated; secondary dwellings in rear yards or basements; subdivided houses and apartments; or the conversion of non-residential buildings have all become recognised in the research literature as forms of informal housing (see among others Durst and Wegmann, 2017; Alterman and Calor, 2020; Shrestha, Gurran and Maalsen, 2021). However, many different types of informality are conflated across these typologies – for instance, whether their construction is illegal; whether the number of occupants breach occupancy rules; or whether they comply with planning and building codes but represent unorthodox, potentially lower cost, forms of accommodation.

In this paper we draw on in-depth interviews with local officers responsible for enforcing residential building rules, health and safety regulations to understand notions of informal housing as perceived by those at the front line. With reference to the views of 23 compliance officers working in the two most populous Australian states - New South Wales and Victoria, we find divergent views about informal housing at the local level. These range from regarding informality as (i) non-existent within the local area; to (ii) recognising that informal practices may occur but are largely invisible; or (iii) identifying significant concerns about illegal constructions or occupancy requiring policy intervention to address. The findings of this study contribute to wider debates about the nature of informal housing and how to better support low income and vulnerable residents through policy or regulatory intervention.

Keywords: informal housing, planning, land and housing regulations, illegal development, compliance

### References

Alterman, R., & Calor, I. (2020). Between informal and illegal in the Global North: Planning law, enforcement, and justifiable noncompliance. In U. Grashoff (Ed.), *Comparative Approaches*

to Informal Housing Around the Globe (p. 286). UCL Press.

Durst, N. J., & Wegmann, J. (2017). Informal housing in the United States. *International Journal of Urban and Regional Research*, 41(2), 282-297. doi: 10.1111/1468-2427.12444.

Harris, R. (2017). Modes of Informal Urban Development: A Global Phenomenon. *Journal of Planning Literature*, 33(3), 267-286. doi: 10.1177/0885412217737340.

Shrestha, P., Gurran, N., & Maalsen, S. (2021). Informal housing practices. *International Journal of Housing Policy*, 21(2), 157-168. doi: 10.1080/19491247.2021.1893982.

84276

## The problem of transaction costs: Sustainable management of natural resources and landscapes

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This article contributes to the debate on the relevance of the Coasean solution for allocation of property rights over natural resources and landscapes (Lai). Most environmentalists believe that the solution proposed by Coase (1960) leads to cost-effective but environmentally unsustainable results because it prescribes establishment of property rights by private entities whose main interest is to maximize profits in the short run (Vatn et al., 2010). The contribution of this article is that it explores this problem in the light of the concept of complex property rights, according to which complex property rights prevail in the economy and social life (Slaev, 2020). These are group/shared entitlements owned by collective companies, cooperatives, corporations, local communities and associations, which are private-common – common to the individual members of the group, and private to the group entity. These property rights differ in their degree of privateness/collectiveness. The problem then is not whether private or common property rights should be established over natural resources, but what the optimal degree of privateness/collectiveness is. The thesis of the paper is that in each specific case the optimal degree of privateness/collectiveness depends on the nature of the specific economic and social activities that set specific requirements for the scale of resource use (Lai, 2020, Cozzolino and Moroni, 2021, Slaev, 2022). Thus the key problem hampering the sustainable management of natural resources and landscapes is that often the creation of an entity with an optimal degree of privateness/collectiveness is associated with prohibitively high transaction costs (Lai and Lorne, 2014),

Keyword: sustainable land use management, complex property rights, degree of privateness, private ownership, collective ownership, preservation of nature and natural resources

### References

Coase RH (1960) The problem of social cost. *Journal of Law and Economics* 3: 1-44. Cozzolino S, Moroni S (2021) Multiple agents and self-organisation in complex cities: The crucial role of several property. *Land Use Policy* 103: 1-7. Lai LWC (2020) Sustainable development of heritage conservation and tourism: A Hong Kong case study on colonial heritage. *Sustainable Development* 28:1181–1188. Lai LWC, Lorne FT (2014) Transaction Cost Reduction and Innovations for Spontaneous Cities: Promoting a “Meeting” between Coase and Schumpeter. *Planning Theory* 13(2): 170-188. Slaev, A.D. (2020) Complex private-common property rights in institutional and planning theories. *Planning Theory* 19(2) 193–213, Slaev, A.D. (2022) Matching the degree of privateness/collectiveness to the scale of resource use. *Land Use Policy* 112, 105809. Vatn A, Barton DN, Lindhjem H et al (2011) Can markets protect biodiversity? An evaluation of different financial mechanism, UMB Noragric Report 60. Aas.

84740

## Do the Dutch to recreate their land again?

Jan Spijkerboer

Kadaster

There is an old saying that says: "God created the world, but the Dutch made the Netherlands", referencing to the many clever methods that the Dutch people used to reclaim land from the sea. Nowadays we have to recreated again. Because of the big impact of Nitrogen on Natura 2000 areas( Habitat directive) , the climate change ( CO2 emission, see-level rising) , declining of land in peat meadowland because of dewatering, we have to rebuild the land again.

After the Second World War the adage was “Never hunger again” . So, with a National plan for Mandatory Landconsolidation ( 1955-1990) the agricultural plots, landscape of the Netherlands was reshaped again.

Do we have to do it again for a sustainable agricultural use of the land with a good balance on ecology and economy, Are the common land management instruments for this National Plan adequate or do we need to update it. What is the role of the National Government versus the Provincial Government?

The aim of the presentation is to give an update of the current situation of the use of spatial planning in the Netherlands( National level, Provincial level, municipality level, water-authority level). The different landinstruments which are available like land acquisition, voluntary landconsolidation, mandatory landconsolidation and expropriation. Which instruments are used around several Nitrogen-sensitive N2000 areas. By analyzing al the deeds from the public records of the Kadaster, an overview is given which instrument is used (voluntary landaquisition, voluntary landconsolidation, expropriation) and what was the time-line.

Not only several nitrogen-sensitive N2000 areas will be analyzed but also the peat meadow areas in the province of Friesland ( North part of the Netherlands) where in a participatory process the landowners and landusers make a voluntary landconsolidation plan for a sustainable way of landuse with natural handicaps because of a higher water-level.

Was self-realization possible, what kind of legal measures were used to determine the qualitative obligations for self-realization. What are the lessons learned so far to use for the next decade.

Keywords: spatial planning, landconsolidation, expropriation for nature areas, reducing Nitrogen emission

### References

Prof. dr.ing. J.W. Erisman, inaugural lecture Leiden 14-01-2022 “ In freedom but not non committal”

ing. Jan Spijkerboer, Agricultural Law, June 2014, Expropriation for nature- and outdoor

recreation areas a mythe or soon a reality.  
Prof. mr. Jeroen Rheinfeld, University of Groningen  
Prof. dr. W.K. Korthals Altes Tech University Delft

85155

## ASSESSING DIFFERENT MODES OF LAND MANAGEMENT AND LAND GOVERNANCE. THE CASE OF ABANDONED BUILDINGS IN THE ATHENIAN CITY-CENTRE

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Urban decay is a sign of the crisis by which many contemporary urban areas are plagued. Although urban centers, compared with other spatial types, are better resisted to the increased socioeconomic challenges, their resilience is significantly affected by the institutional, economic and social developments. The governance and management policies can play an important role in securing the urban vitality. Many countries are dealing with the recession of their city-centres and, through good practices, managed to regenerate the urban cores. Meanwhile, other countries either failed to bring positive results or take action at all. Greece is an indicative example. Mainly due to the severe financial crisis that affected its economic and social structure in 2008 and revealed its chronic weaknesses owing to well-established statuses, Greek city-centres had been degraded to such a degree that they had almost lost their attractiveness. The problem of the abandoned buildings, with its urban, economic, social and environmental impacts, was revealing of the situation. Regarding the city of Athens, since the post-war period, certain districts were led to urban decay. Over the past two decades, the 20% dropout of Athens' permanent population intensified further the abandonment of the residential and commercial buildings, which begun in the early 1990s. This implicitly highlighted the particular property management challenge and land governance inadequacies.

This paper examines how the different modes of land management and land governance could deal with the problem of abandoned buildings in the Athenian city-center. Specifically, two types of land management and land governance are assessed in combination; that is the active and passive land management as well as the state-led and market-led land governance. Through this evaluation, significant conclusions are drawn regarding the existing local governance and land management practices as well as the necessity of introducing new strategies and tools implemented from sub-local to regional to national scale.

Keywords: Abandoned buildings, land management, governance, Athens

### References

Hartmann, T. and Spit, T., 2015. Dilemmas of involvement in land management – Comparing an active (Dutch) and a passive (German) approach. *Land Use Policy*, 42, pp.729-737.

Mallach, A., 2011. *Bringing buildings back*. Piscataway, N.J.: Rutgers University Press.

Ozturk, S. and Sozdemir, A., 2015. Effects of Global Financial Crisis on Greece Economy. *Procedia Economics and Finance*, 23, pp.568-575.

Smith, M.S.,2014. No Property Left Behind: An Exploration of Abandoned Property Policies (Theses). Historic Preservation, 554.

Tira, M., van der Krabben, E. and Zanon, B. (2011). Land management for urban dynamics: innovative methods and practices in a changing Europe. Transport and Urban Development COST Action TU0602..

Triantafyllopoulos, N., 2018. The Problem of Vacant and Abandoned Buildings in the Center of Athens [online] Dianeosis. Available at: <<https://www.dianeosis.org/2018/02/abandoned-buildings-athens/>> [Accessed January 2022]. (In Greek)

84913

## RESOURCE PROTECTION IN THE AMERICAN STATE OF OREGON

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Oregon is the ninth largest American state, with an area of approximately 250,000 square kilometers and a geography that includes a 583-kilometer coast, two significant mountain ranges, a desert, and many other natural and man-made resources. It has a population of approximately 4.2 million, three quarters of which live in the Willamette Valley, which has an area of approximately 14,000 square kilometers. As with almost any place in America, there are political and legal conflicts over the use of natural and man-made resources on private and public lands. There is a vigorous property rights movement throughout the United States, which comes into conflict with the rights of indigenous peoples, minimum instream flow requirements, and other public rights. It is useful to have a legal regime that minimizes those types of conflicts and provides a level of consensus over the use of those resources.

Over the past half-century, such a regime has been crafted in Oregon. That regime brings together various interests to support the planning and regulation of fifteen categories of natural and man-made resources. In addition to the broad constituency for wilderness areas and fish and wildlife habitat, those interests include users of recreation trails and scenic waterways, supporters of historic and cultural preservation, purveyors of energy and mineral resources, and the more conservation-oriented Portland metropolitan area. The result is a system that holds its own against private property rights absolutists.

This paper addresses protections for natural and man-made resources in the context of Oregon's statewide land use planning program. It discusses the history, evolution, and mechanics of such protections, which generally take the form of comprehensive plan policies and land use regulations. It also analyzes and evaluates the current system and its prospects for improvement.

Keywords: planning law, natural resources, historic and cultural resources, land use regulation

### References

Sullivan, "The Quiet Revolution Goes West: The Oregon Planning Program 1961-2011," 45

John Marshall Law Review 357, (2012)

Sullivan and Huegel, "The Natural Resource Protection Conundrum" Willamette University Law Review, (Forthcoming Spring 2022)

Oregon Revised Statutes, Chapter 197

Oregon Statewide Planning Goals, Goal Five: Natural Resources, Scenic and Historic Areas, and Open Spaces

84374

## Is the new Environmental and Planning Act in the Netherlands eroding Democracy?

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The Netherlands has a long tradition of representative democracy. Concerns about the representation of citizens have driven politicians and policymakers in recent decades to strengthen democracy, in particular by increasing citizen participation. Many academics and practitioners believe that citizen participation positively affects the quality of democracy. It is no surprise then that the Dutch government strongly promotes citizen participation within its representative tradition. Generally, democracy in the Netherlands is characterised as highly robust and resilient: it continues without considerable declines in quality. However, we argue that democracy and its quality must not be taken for granted. This paper explores how change of rules in environmental and planning law can decline the quality of democracy, albeit slightly and slowly. We present a case study of the new Environmental and Planning Act in the Netherlands. This act, that enters into force in July 2022, regulates the physical environment. Based on a qualitative legal analysis, the findings show that the elected representatives are becoming less powerful, while the executive branch's powers are further expanding. Furthermore, the findings show that citizen participation is inscribed into the law and strongly promoted, but simultaneously brings challenges to the quality of representative democracy. We conclude with the statement that if Dutch democracy must continue to be robust and resilient, drawing attention to rules of democracy in environmental and planning law is of utmost importance.

Keywords: democracy, planning law, environmental law, citizen participation, representation

### References

Boese, V., A. Edgell, S. Hellmeier, S. Maerz & S. Lindberg (2021) How democracies prevail: democratic resilience as a two-stage process, *Democratization*, 28:5, p. 885-907.

Geurtz, C. & T. van de Wijdeven (2010) Making Citizen Participation Work: The Challenging Search for New Forms of Local Democracy in The Netherlands, *Local Government Studies*, 36:4, p.531-549.

Groothuijse, F., K. Landman & R. Nehmelman (2018) Constitutionele aardverschuivingen in het omgevingsrecht?, *NJB*, 637, p. 848-855.

Michels, A. (2006) Citizen participation and democracy in the Netherlands, *Democratization*, 13:2, p. 323-339.

85221

# Resolving conflicts between public and private interests in land

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This paper focuses on the role of local authorities in disputes between different stakeholders in the same parcel of land.

This paper explores the use of the power used in England and Wales (currently contained in Section 203 of the Housing and Planning Act 2016) to override easements and covenants which could otherwise impede development ('the Overriding Power'). The power enables local authorities to complete development projects that may otherwise have been blocked by servitude owners obtaining injunctions prohibiting an infringement of their rights. However, it is also being used in a way that was not originally envisaged. It is possible for developers to approach local authorities requesting that the authority acquire the land subject to the burden of the covenants or easements (which activates the Overriding Power) and then transfer the land back to the developer. Recent examples of the power being used in this way are 22 Bishopsgate (City of London) and the redevelopment of Chelsea Football Club's stadium (Hammersmith and Fulham).

Although the effect of the Overriding Power is similar to compulsory purchase powers, the process and checks on its exercise are far less robust. One of the criticisms of decisions relating to the Overriding Power is that there is sometimes a lack of public scrutiny and deliberative democracy. In a number of reported cases (for example; 'Derwent Holdings Ltd (R on the application of) v Trafford Borough Council' (2009) as the land transaction was not publicised, by the time the interested parties became aware of the acquisition and re-conveyance the time limit for bringing a claim for judicial review and challenge the validity of that decision had passed.

The intervention of local authorities in these disputes raises significant questions about the stewardship of land and how conflict over finite resources should be managed.

Keywords: Public Interest, Well-being, Servitudes, Justice, Scrutiny

## References

Derwent Holdings Ltd (R on the application of) v Trafford Borough Council [2011] EWCA Civ 832. Available at:

<https://uk.westlaw.com/Document/I930B10E0B32611E09C06FB0D2B13893D/View/FullText.html?navigationPath=Search%2Fv1%2Fresults%2Fnavigation%2Fi0ad604ab0000017eb4d3fc9c115a013f%3Fppcid%3D28a30d93148442e3a923f5445fa4df8a%26Nav%3D Duk-CASES%26fragmentIdentifier%3DI930B10E0B32611E09C06FB0D2B13893D%26parentRank%3D0%26startIndex%3D1%26contextData%3D%2528sc.Search%2529%26transitionType%3D SearchItem&listSource=Search&listPageSource=d4932b684665a6044d54beedc6de4546&list=UK-CASES&rank=2&sessionScopeId=e25a37f0ae987a03032c5220a5e13b6a2c341075f4e8f02635a2d22228a49c19&ppcid=28a30d93148442e3a923f5445fa4df8a&originationContext=Search%20>

Result&transitionType=SearchItem&contextData=(sc.Search)&comp=wluk&navId=74DC96DD3E959057A6FC1A4B4613D369

Hampson, A. and Cluett, D. (2016) Redevelopment of 22 Bishopsgate – Potential Acquisition of Land for Planning Purposes. City of London Corporation Report. Available at: <http://democracy.cityoflondon.gov.uk/documents/s62868/22%20Bishopsgate%20rights%20of%20light%20report%2022%20March%202016%20final%20NC%202.pdf>

Law Commission (2011) Making Land Work: Easements, Covenants and Profits a Prendre. (Law Com No 327). Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/229064/1067.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229064/1067.pdf)

London Borough of Hammersmith and Fulham (2018) ‘Decision Notice – Acquisition of an Interest in Land for Planning Purposes (Stamford Bridge Grounds, SW6), In Order to Engage Section 203 of the Housing and Planning Act 2016’. [Online] Available at: <http://democracy.lbhf.gov.uk/ieDecisionDetails.aspx?AId=54418>

Section 203 Housing and Planning Act 2016. Available at: [https://uk.westlaw.com/Document/I2FEBC120222611E6872D9505B57C9DD6/View/FullText.html?navigationPath=Search%2Fv1%2Fresults%2Fnavigation%2Fi0ad604ab0000017eb4d768c6115a01f9%3Fppcid%3D8c1582df8fec41f2bdef4cca7b592538%26Nav%3DLEGISLATION\\_PRIMARY\\_SECONDARY\\_WLUK%26fragmentIdentifier%3DI2FEBC120222611E6872D9505B57C9DD6%26parentRank%3D0%26startIndex%3D1%26contextData%3D%2528sc.Search%2529%26transitionType%3DSearchItem&listSource=Search&listPageSource=77e2124b7fc2714cdefbf9290808e204&list=LEGISLATION\\_PRIMARY\\_SECONDARY\\_WLUK&rank=1&sessionScopeId=e25a37f0ae987a03032c5220a5e13b6a2c341075f4e8f02635a2d22228a49c19&ppcid=8c1582df8fec41f2bdef4cca7b592538&originationContext=Search%20Result&transitionType=SearchItem&contextData=\(sc.Search\)&comp=wluk&navId=D21C4D5EA58B0597AEE6F4D3D50C26EB#co\\_anchor\\_ukReferences\\_journalArticles](https://uk.westlaw.com/Document/I2FEBC120222611E6872D9505B57C9DD6/View/FullText.html?navigationPath=Search%2Fv1%2Fresults%2Fnavigation%2Fi0ad604ab0000017eb4d768c6115a01f9%3Fppcid%3D8c1582df8fec41f2bdef4cca7b592538%26Nav%3DLEGISLATION_PRIMARY_SECONDARY_WLUK%26fragmentIdentifier%3DI2FEBC120222611E6872D9505B57C9DD6%26parentRank%3D0%26startIndex%3D1%26contextData%3D%2528sc.Search%2529%26transitionType%3DSearchItem&listSource=Search&listPageSource=77e2124b7fc2714cdefbf9290808e204&list=LEGISLATION_PRIMARY_SECONDARY_WLUK&rank=1&sessionScopeId=e25a37f0ae987a03032c5220a5e13b6a2c341075f4e8f02635a2d22228a49c19&ppcid=8c1582df8fec41f2bdef4cca7b592538&originationContext=Search%20Result&transitionType=SearchItem&contextData=(sc.Search)&comp=wluk&navId=D21C4D5EA58B0597AEE6F4D3D50C26EB#co_anchor_ukReferences_journalArticles)

Singer, J. W. (2000). Entitlement. New Haven: Yale University Press

84411

## Research on the legalization path of China's historic city conservation from the perspective of Central-Local interaction: A case study of Guangzhou

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In order to improve the characteristic protection system of cultural heritage, China has put forward the legal concept of historic city in 1982, in order to protect those cities that are especially rich in cultural relics and have great historical value or revolutionary commemorative significance. Since then, the protection of historic cities has gradually moved towards the legalization stage. However, many of China's historic cities are plagued by government failures and lawlessness, which has resulted in the destruction of cultural heritage values. Therefore, it's urgent to improve the rule of law in historical and cultural cities.

In order to protect the regional characteristics of historic cities, China has adopted a legislative system that combines central legislation with local legislation. But at the same time, there are many problems in the process of legalization, such as the ambiguity of legal procedure and the dislocation of system transmission. Therefore, this study will focus on what kind of interactive relationship has been formed between the central and local governments in the current legal system. How to optimize the interaction between them to improve the legal system? As one of the first cities to be listed as a historic city, Guangzhou takes the lead in the construction of the rule of law, which is very typical as a case city.

Firstly, this study collects relevant legal texts, policy documents and news reports through multiple platforms, and on this basis sorts out the legalization features of Guangzhou historical and cultural city. Then, content analysis method is used to deconstruct the above texts, and the interactive structure in the legal system is obtained from the vertical and horizontal dimensions. Then, the dynamic mechanism of the legal system construction is studied through semi-structured interview.

The preliminary conclusions are as follows: Guangzhou has formed a mature interactive network between local horizontal governments, showing distinct regional characteristics. But the complementary relationship between central and local legislation has not been formed yet.

Keywords: Historic city, Central-Local interaction, Legalization, Guangzhou

### References

- [1]. Laffin, M., Central-Local Relations in an Era of Governance: Towards a New Research Agenda. *LOCAL GOVERNMENT STUDIES*, 2009. 35(1): p. 21-37.
- [2]. Zhu, X., Dynamics of central-local relations in China's social welfare system. *JOURNAL OF CHINESE GOVERNANCE*, 2016. 1(2): p. 251-268.
- [3]. Boullenois, C., Assessing the Balance of Power in Central-Local Relations in China. *CHINA PERSPECTIVES*, 2017(2): p. 76-U84.
- [4]. Qi, Y. and L. Zhang, Local Environmental Enforcement Constrained by Central-Local Relations in China. *ENVIRONMENTAL POLICY AND GOVERNANCE*, 2014. 24(3).

- [5]. Zhang, Y., J. Orbie and S. Delputte, China's climate change policy: Central-local governmental interaction. ENVIRONMENTAL POLICY AND GOVERNANCE, 2020. 30(3): p. 128-140.
- [6]. Lee, J., Central-local Relation in China: Historical Heritage, Dynamics, Trends and Prospects. China Knowledge Network, 2020. 15(15): p. 141-174.

85362

## Judicial Constraints of Land Use Actions: Situating China in Global Context

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The strong presence of law and judicial decisions in land use planning in the U.S. derives from the strong attachment to property and its protection prescribed by the Constitution. The consequential regulatory system at the local level allows for a high degree of certainty and visible role of courts in adjudicating land disputes. An alternative mode – as practiced in the U.K. for instance – offers local planners a substantially higher degree of discretion and flexibility, with a much subdued degree of judicial constraints. This contrast inevitably is reflected elsewhere around the world as emerging countries begin to wrestle with the question about the role of law, ranging from business contracts to development control.

China's adoption of a leasehold system for urban land instead of wholesale privatization has distinguished itself from other former socialist countries. This also has strengthened the status of the municipality as the most powerful manager of urban land. On the other hand, the public is becoming increasingly aware of rights issues that are similar to those in a freehold property right regime. Though a small percentage of all court cases, land disputes have found their way to administrative divisions of local courts. Such litigation generally carries a low cost, as well as low risk of delays given that court staffing tends to be abundant. On the other hand, plaintiff win rates are rather low.

These court cases and judicial decisions provide a window into which we can understand the emerging role of courts in resolving disputes around 'land lease' (tudi chengbao), 'land rental' (tudi zulin), 'land expropriation' (tudi zhengyong), and 'relocation' (banqian). Motivating this paper are two research questions:

- What legal issues are at the heart of land use disputes adjudicated by local courts?
- What are the common forms of reasoning by courts in these cases?

Land-related administrative cases used in this research are downloaded from the China Judgement Online ([wenshu.court.gov.cn](http://wenshu.court.gov.cn)), an official court documents online database launched in the mid-2010s as a result of the mass digitization initiative to disclose Chinese judicial decisions. For our analysis, only cases judged against government actions are included – dispositions categorized as vacate, change, or confirm invalidity of agency actions, or ordering agencies to conduct specific remedial actions or provide compensation to the plaintiff. The choice is predicated upon the fact that the role of law is a nascent concept and practice in China as the degree of judicial independence remains limited. But with the cases selected for this study, I expect to demonstrate a rising role of judicial constraints in urban land development. I also hope to integrate a comparative perspective, using practices in the U.S. as a reference framework in which judicial case laws have been instrumental in (re)directing local land use regulations.

Keywords: judicial constraints, land disputes, urban governance, China

#### References

Cui, Wei & Zhiyuan Wang. 2017. "The Selection of Litigation against Government Agencies: Evidence from China." Working paper.

Liebman, Benjamin L., Margaret E. Roberts, Rachel E. Stern and Alice Z. Wang. 2019. " Mass Digitization of Chinese Court Decisions: How to Use Text as Data in the Field of Chinese Law." Working paper.

Mao, Wenzheng and Shitong Qiao. 2021. "Legal Doctrine and Judicial Review of Eminent Domain in China." Law & Social Inquiry, prepublished.

Meligrana, John, Zhijian Li and Zhiyao Zhang. 2011. "Resolving Land Use Disputes in China: An Analysis of a Method of Dealing with Citizen Complaints." Environment and Urbanization ASIA 2 (2): 251–264.

## TRACK 4: HOUSING

84509

‘NEW URBAN TRANSFORMATION’: THE ROLES AND THE STRATEGIES OF THE DIFFERENT ACTORS DURING THE PARCEL-BASED URBAN TRANSFORMATION PROCESS IN THE CASE OF ISTANBUL KOZYATAGI NEIGHBORHOOD

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In Turkey urban transformation was initiated as the displacement process of informal settlements in the 2000s (Yalçınan et al. 2014), but over the years it has spread especially to all middle-class or even upper-class neighborhoods (Berkmen and Turgut 2019) following the new law in 2012 (Aksümer 2021; Hayat Zengin Çelik 2017). Thus, the new urban transformation, implemented on a parcel basis, has become a tool working in a fragmented manner, depending on the agreements between contractors and residents.

This research mainly aims to show how this new urban transformation process works, with a focus on the role and strategies of different actors in process. Methodological approach of this study is ‘triangulation’ (Arksey ve Knight 1999) using the qualitative and quantitative methods together. A comprehensive survey of more than 100 residents inhabiting in the different parts of the neighborhood was conducted to determine the dwellers’ perception of the neighborhood and urban transformation. In addition, since the researchers live in this neighborhood, they have the chance to effectuate a participant observation approach. Thirdly, in-depth interviews were carried out with residents, tradesmen, and contractors in the research process.

While the process begins with an agreement between the residents and the contractor, every interest group involved differ in their roles and strategies. The contractors try to determine the process by choosing key actors from the residents of the building to affect the decision process. Residents seem to have the opportunity to choose the contractor but they are separated with different demands and expectations, affecting neighboring practices. Tradesmen are the other interest group observed. It seems that to be able to hold on to the transforming neighborhood, it is vital for them to transform themselves and develop coping strategies, otherwise they are pushed towards the periphery of the neighborhood.

Keywords: Urban Transformation, Contractors, Neighborhood Transformation, Actors in Urban Transformation

### References

Aksümer, Gizem. 2021. “Urban Transformation as a Desiring Machine : The Role of Information Flows during Urban Transformation in Turkey ’ s Informal Settlements.” *Athens Journal of Architecture* 7(3):377–402.

Arksey, Hillary, and Peter Knight. 1999. *Interviewing for Social Scientists: An Introductory Resource with Examples*. Sage Pub.

Berkmen, Naime Hülya, and Sırma Turgut. 2019. “‘Bağdat Street’ in The Grip Of Urban

Transformation.” MEGARON / Yıldız Technical University, Faculty of Architecture E-Journal 14:155–66. doi: 10.14744/megaron.2019.35467.

Hayat Zengin Çelik, Tolga Çilingir. 2017. “Parsel Bazındaki Dönüşüm Uygulamalarının Kentsel Maliyetleri, Karşıyaka-Bostanlı Mahallesi Örneği.” Planlama Dergisi 27(3):329–46. doi: 10.14744/planlama.2017.73745.

Yalçınan, Murat Cemal, Çare Olgun Çalışkan, Kumru Çılgın, and Uğur Dünder. 2014. “İstanbul Dönüşüm Coğrafyası [Transformation Geography of Istanbul].” in Yeni İstanbul Çalışmaları: Sınırlar, Mücadeleler, Açılımlar [New Istanbul Studies: Borders, Struggles, Declinations], edited by A. Candan Bartu and C. Özbay. İstanbul: Metis Yayınları.

85322

## The hidden stock of affordable housing

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The global housing affordability crisis inspires a continuous discourse on the ways to expand the supply of affordable housing. In some countries or cities, Accessory Dwelling Units have emerged as an appealing solution (McKinsey Global Institute, 2017). ADUs imply additional rental units within existing structures, created through internal subdivision, or densification of already-developed plots of land through construction of extra units. We classify such housing as affordable because reliance on existing infrastructure constitutes a de facto subsidy. However, in the legal context of many countries, ADUs face restrictive regulations that make them illegal and deter the establishment of more ADUs (Antoninetti 2008; Chapple et al. 2012; Infranca 2019). Given their clandestine attributes, national or local authorities rarely have data on ADUs currently in use, or on their potential extent, costs and benefits.

This paper is embedded in the current state of knowledge (mostly emerging from the USA or Canada) and focuses on the case of Israel. Although in Israel too, there is no official data, our estimate is that ADUs constitute a major, unaccounted part of the rental housing stock. The case of Israel is interesting because of the extreme circumstances of the local housing market, which cannot keep up with the country's extremely high population growth rates. A 2017 legislation ostensibly attempted to promote the legalization of ADUs. However, only a several dozen have been approved over three years.

The regulation's failure highlights the lack of information about attributes of this housing sector. Our study is the first to attempt to gauge its extent and socio-spatial distribution. We mined data from private rental listings on commercial websites over the past decade and examined the share of ADU rental offers out of total rentals offered. Our findings indicate a significant rise annually of this share, and almost country-wide distribution. In addition, we sought to confront restrictive rules in the new legislation to see to what extent units in the marketplace would have been eligible for regularization, had the owners chosen to submit a permit request. We found major mismatch, implying that homeowners would have had to demolish units or invest more money. Both are disincentives to approach the authorities for a permit.

Keywords: Accessory dwelling units, Affordable housing

### References

Antoninetti M (2008) The difficult history of ancillary units: The obstacles and potential opportunities to increase the heterogeneity of neighborhoods and the flexibility of households in the United States. *Journal of Housing for the Elderly* 22:348–375. doi: 10.1080/02763890802458320

Chapple K, Wegmann J, Nemirow A, Dentel-Post C (2012) Yes in My Backyard: Mobilizing the Market for Secondary Units. The Center for Community Innovation (CCI) at the Institute for

Urban & Regional Development (IURD), UC-Berkeley.

Infranca J (2019) The New State Zoning: Land Use Preemption Amid a Housing Crisis. Boston College Law Review 60(3) :823.

McKinsey Global Institute (2017) Housing affordability: A supply-side tool kit for cities.  
<https://www.mckinsey.com/featured-insights/future-of-cities/housing-affordability-a-supply-side-tool-kit-for-cities>

84860

## Planning for Gender Justice in the “New Suburbia”: Reconciliation of paid work, care work and suburban living

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After a period of re-densification and re-urbanisation, many cities in Europe have started to expand at the margins again, in some cases planning complete new districts with thousands of housing units in order to fight the increasing housing shortage. Suburban residential quarters have been criticised by (feminist) planning practitioners and theorists as manifestations of unequal reproductive relations, pointing out that women living in suburbia were marginalised spatially and socially and campaigning for a better recognition of reproductive tasks in the design of the built environment. Suburban space was seen as an inhibitor of emancipation, forcing women to give up paid work due to lack of close-by employment, childcare, and inflexible public transport. Nowadays, gender roles are re-garded as socially ascribed and gender-sensitive planning has become more common in many European cities, taking into account diverse life realities and aiming to support people with reproductive tasks regardless of their biological sex. It is striking, however, that the majority of reproductive tasks is still carried out by women and that especially (heterosexual) parents experience a severe “traditionalisation effect” after the birth of a child. As a response to gender-sensitive planning efforts it has been argued that a recognition of reproductive tasks by planning would merely ease the double burden for women but not bring about real change in gender relations.

Nowadays, quarters at the margins are planned to differ significantly from “classic” sub-urban residential spaces. Masterplans provide for higher density, mixed use, less car-dependency and high-quality social and cultural infrastructure – all of which have been identified as supportive for the reconciliation of paid work and reproductive work. In my contribution at AESOP, I will discuss planning strategies in new suburban neighbourhoods and ask whether they have the potential to strategically and progressively transform reproductive relations. By means of a qualitative text analysis and using Hamburg-Oberbillwerder as a case study, I am going to analyse whether gender justice is an objective for planners at all and which aspects of the gender-related criticism are being integrated into the planning and design of contemporary suburban neighbourhoods. I will show that on the one hand, many of the planning principles aim to support the reconciliation of paid work and care work. On the other hand, there is no underlying vision of gender justice so that an actual transformation of gender relations is not expected.

Keywords: suburbia, gender-sensitive planning, gender justice, care work, reconciliation of work and family

### References

Bertram, Henriette (2020): Feministisches Suburbia oder: Wie misst man Geschlechtergerechtigkeit im Stadtteil? Von Widersprüchen, Ungereimtheiten und Unschärfen bei der gender-

sensitiven Planung. In: *Feministische GeoRundmail* (83), S. 85–89.

Boterman, W. R. & Karsten, L. (2014). On the Spatial Dimension of the Gender Division of Paid Work in Two-Parent Families: The Case of Amsterdam, the Netherlands. *Tijdschrift voor economische en sociale geografie*, 105 (1), 107–116.

Frank, Susanne (2009): Architekturen: Mehr als ein "Spiegel der Gesellschaft". In: *Aus Politik und Zeitgeschichte* (25), S. 16–21.

Massey, D. (1984). *Spatial divisions of labour*. London: Macmillan. Tummers, Lidewij; Denèfle,

Sylvette; Wankiewicz, Heidrun (2019): Gender mainstreaming and spatial development:

contradictions and challenges. In: Barbara Zibell, Doris Damyanovic und Ulrike Sturm (Hg.):

*Gendered approaches to spatial development in Europe perspectives, similarities, differences*.

London: Routledge (Routledge studies in gender and environments), S. 78–98.

85350

## Housing and the just city. Actors, strategies, and outcomes of a large scale urban development in Nantes

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According with the perspective of this track that consider the housing market as a driving force in societal inequalities, the paper proposes to consider the case study of the Île de Nantes urban project to better understand the relationship between housing policy and socio-spatial inequalities in the case of French urban project. The case-study is a multi-layered large-scale redevelopment intervention on a post-industrial fringe in which social cohesion and social mix aims played a big role in the public rhetoric of the urban laboratory (“fabriquer la ville autrement”). Moreover, the Île de Nantes urban project was promoted by combining housing affordability, social housing, green sustainability, and participatory processes, to reach, at the same time, social cohesion and economic growth through creative and cultural economy. Besides all the ambitious promises in terms of social impacts, the multileveled relationships among a large variety of actors, the incremental transformation based on consensus building, the pervasive design of public space, and the integrated approach used to enhance the area, the main goals of the project, and of the strategies behind, was to improve city attractiveness and competitiveness after the long-lasting shrinkage due to 80’s deindustrialisation. Therefore, different forms of inequalities have increased in time, as more people moved to a thriving Nantes and affected the housing market. Thus, in this framework, this French urban project, and housing policies related, are analysed in order to consider possible different scenarios in which social cohesion could be effectively pursued through the right social mix by taking care to the housing affordability and social housing as a means and not as an outcome. Nonetheless, good and bad outcomes of Île de Nantes urban project require to be considered also at the citywide level, according to the larger effects on sprawl, segregation and expulsions that increase (and not decrease) urban inequalities in the urban space.

Keywords: urban project, social cohesion, housing policies, spatial inequalities, urban development, social housing

### References

1. Ariani, C. (2017a), “Collaborazione Pubblico Privato e qualità delle trasformazioni urbane: condizioni, riferimenti, possibilità” [Unpublished doctoral dissertation]. La Sapienza Università di Roma
2. Ariani C. (2017b), “Co-produrre la città”. Riflessioni sull’interazione tra attori e sulla definizione di interesse pubblico e interesse privato in alcuni progetti italiani e francesi”, In: Atti XIX Conferenza Nazionale SIU “Cambiamenti Responsabilità e strumenti per l’urbanistica al servizio del Paese, Planum Publisher, pp. 1765-1771, ISSN: 1723-0993
3. Ariani, C. Donvito, G. (2019),”Opportunities, innovations and legitimacy in Public-Private Collaborations. Lessons from French Practices” , in AA. VV. (2019), Planning for Transition

AESOP 2019 Annual Conference - Book of Papers Venezia 9-13 Luglio 2019, pp. 327-350

4. Harvey, D. (1989). From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism. *Geografiska Annaler. Series B, Human Geography*, 71(1), 3-17

5. Le Galès, P. (2016). Neoliberalism and urban change: Stretching a good idea too far?. *Territory, Politics, Governance*, 4/2016, 154-172

6. Ostrom, E. (1990). *Governing the commons: the evolution of institutions for collective action*. Cambridge University Press. Cambridge, UK

7. Pinson, G. (2009). *Gouverner la ville par projet: urbanisme et gouvernance des villes européennes*. Presses de Sciences Po, Paris.

84272

## The reconfiguration of disadvantaged housing locations in the wake of reurbanisation: Evidence from German city regions

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Disadvantaged housing locations are currently receiving new attention in German city regions. Displacement forces of reurbanisation that popular cities have been exposed to over the last twenty years lead to housing shortages and increasing costs. Reinforced by diverging income opportunities on a transforming urban labour market, low-income households experience pressures of social exclusion. Remaining affordable housing options are frequently government-funded but diminishing. Below average market prices are frequently located in deprived neighbourhoods or disadvantaged areas, potentially further outdistancing affected people in terms of life chances and community participation.

On this background, research methods in socio-spatial analysis are frequently confronted with limited availability of required socio-economic and demographic data. This shortcoming is amplified by the scientific need to also observe locational disadvantages that displaced low-income households are exposed to. According to the ‘capability approach’ initially postulated by Amartya Sen, knowledge about (environmental) pressures, (accessibility to) resources, and community cohesion are crucial aspects to inform social and urban planners about necessary actions for socially inclusive and sustainable policy development.

This contribution presents a new two-step methodological approach to analyse, visualize and assess disadvantaged housing locations. The methodology is based on a geostatistical analysis of purchasing power of households in a country-wide 1x1 km grid. The analysis yields ‘cold spots’ where the average purchasing power deviates significantly from adjacent neighbourhoods and the city-regional average (‘macro-analysis’). Associated qualitative researchers in human geography and experts from planning practice helped to identify case studies from these cold spots for a second analysis step (‘micro-analysis’). Here, address and street level data on housing and sociodemography from official and private data vendors are fused with open source and administrative information on infrastructure quality as well as environmental pressures and resources. The resulting index provides a local assessment that will be further substantiated with qualitative research on expert knowledge and community views.

The results contribute to the advancement of monitoring methods for disadvantaged housing locations. This is of special importance if the governance of societal transformation pressures (globalisation, digital transformation, pandemic crisis, climate adaptation) aims to avoid, remedy and mitigate potential impacts of growing disparities, both in a social and a territorial sense.

Keywords: socio-spatial analysis, low-income households, poverty concentrations, capability approach

#### References

- Comim, F., Qizilbash, M., & Alkire, S. (2008). *The capability approach: Concepts, measures and applications*. Cambridge University Press.
- Hochstenbach, C.; Musterd, S. (2016): Gentrification and the suburbanization of poverty. Changing urban geographies through boom and bust periods. In: *Urban Geography* 39 (1), S. 26–53. DOI: 10.1080/02723638.2016.1276718.
- Najib, K. (2020). Socio-spatial inequalities and dynamics of rich and poor enclaves in three French cities: A policy of social mixing under test. *Population, space and place*, 26(1), e2280.
- Roth, H. (2018). Increasing poverty or statistical illusion? Patterns, dynamics and spatial disparities of relative poverty in Germany. *Europa Regional* 25 (3-4), pp 5-16.

85254

## Informality, Governance and Housing Production in a Global North city: the case of London

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In recent years there has been increasing interest and attention paid to informal processes involved in the production and provision of important urban functions including housing, across more developed cities of the so-called Global North (McFarlane, 2012; Le Gales & Vitale, 2013). Processes of informality identified range from high level ‘offline’ dialogues and instances of clientelism between state actors and private organisations (Ward, 2021), through to forms of illegal housing including ‘beds in sheds’ (Lombard, 2019); forms of the ‘shadow city’ that are more commonly associated with cities of the Global South. The aims of this paper are, firstly, to show how informality occurs in a major Global North city and in full view of citizens, and, secondly, to better account for the processes that shape urban developments, with special reference to residential schemes. This paper begins by using the relevant literature to create an organisational framework to chart identified processes and manifestations of Global North informality. The framework is then deployed to showcase instances of informality in London as captured through a mix of documentary material and evidence from a wide range of semi-structured interviews. Finally, the paper finishes by presenting a granular level case study of informality in London’s King’s Cross development, showing how informal processes are present at different stages of the development pipeline.

Keywords: Informality, Governance, Housing, Global North

### References

- Chiodelli, F. (2019) ‘The dark side of urban informality in the global north: Housing illegality and organised crime in northern Italy, *International Journal of Urban and Regional Research*, 43, pp. 497-516
- Le Galès, P., & Vitale, T. (2013). *Governing the large metropolis. A research agenda. Cities are Back in Town*. MIT Press: Cambridge MA
- Lombard, M. (2019). Informality as structure or agency? Exploring shed housing in the UK as informal practice. *International Journal of Urban and Regional Research*, 43(3), 569-575.
- McFarlane, C. (2012). Rethinking informality: Politics, crisis, and the city. *Planning Theory & Practice*, 13(1), 89-108.
- Roy, A. (2005). Urban informality: toward an epistemology of planning. *Journal of the American planning association*, 71(2), 147-158.
- Ward, C. (2021). Land financialisation, planning informalisation and gentrification as statecraft in Antwerp. *Urban Studies*, 00420980211028235.

84600

## Urban Diversity and Epidemic Resilience: The case of the COVID-19

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The spread of the coronavirus pandemic offers a unique opportunity to improve our understanding of the role of urban planning strategies in the resilience of urban communities confronting a pandemic. This study examines the relationship between urban diversity and epidemiological resilience by empirically assessing the relation between the level of neighborhood homogeneity and the probability of being infected by the coronavirus. We focus on the ultra-Orthodox Jewish community in Israel, a relatively closed community that was disproportionately and severely affected by the pandemic. The findings indicate a monotonic but nonlinear relationship between the level of ultra-Orthodox prevalence in a neighborhood and a resident's probability of contracting COVID-19. As the fraction of ultra-Orthodox individuals in the neighborhood decreases, the fraction of infected population decreases significantly and more strongly than can be explained without recourse to urban diversity considerations. This relationship is found to be significant and strong, even when other variables are accounted for that had hitherto been perceived as central to coronavirus distribution, such as housing density, socioeconomic level of the neighborhood, and number of people per household. The findings are important and relevant to many societies around the globe in which a variety of populations have a separatist lifestyle.

Keywords: coronavirus, COVID-19, urban diversity, resilience, neighborhood homogeneity, ultra-Orthodox

### References

- Fainstein, S. S. (2005a). Cities and diversity: should we want it? Can we plan for it?. *Urban Affairs Review*, 41(1), 3-19.
- Fainstein, S. (2015). Resilience and justice. *International Journal of Urban and Regional Research*, 39(1), 157–167.
- Hananel, R. (2017). From central to marginal: The trajectory of Israel's public-housing policy. *Urban Studies*, 54(11), 2432-2447.
- Malovicki-Yaffe, N. (2020). Capabilities and Universalism—An Empirical Examination: The Case of the Ultra-Orthodox Community. *Journal of Human Development and Capabilities*, 21(1), 84-98.
- Talen, E. (2012). Zoning and diversity in historical perspective. *Journal of Planning History*, 11(4), 330-347.
- Shamai, M., & Hananel, R. (2021). One + One + One = A Lot: The Cumulative Effect of Israel's Flagship Urban Renewal Policy on Neighborhood Diversity. *Land Use Policy*, 100.
- Sokol, D. (2020). Will the Coronavirus Make the Suburbs Popular Again?, *AD PRO, Cities*, April.21.2020, <https://www.architecturaldigest.com/story/will-the-coronavirus-make-the-suburbs-popular-again> (Retrieved July.16.2020).



84073

## TOWARD A SPECTRUM OF NEIGHBORHOOD CHANGE: IDENTIFYING DISINVESTMENT FACTORS THAT LEAD TO NEIGHBORHOOD DISPLACEMENT

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This paper seeks to expand the scholarly conversation on neighborhood change and displacement to include how the process of disinvestment and decline could also potentially lead to neighborhood displacement. The goal of this project is to add necessary nuance to the neighborhood change discussion, by further conceptualizing "disinvestment-induced-displacement" (DID) and determining the specific aspects of disinvestment that lead to DID. The Panel Study of Income Dynamics (PSID) dataset will be used to construct the dependent variable in the multivariate analysis. Neighborhood displacement will be measured by a household's decision to leave the neighborhood (census tract) during the housing market recovery period (2013 – 2017). A multi-level regression model will be used in this essay in hopes of understanding whether things like school quality, violent crime, prior population loss, contribute to the likelihood or rate of a household exiting a neighborhood. When neighborhood displacement is viewed through a spectrum as opposed to a gentrification binary, the groundwork is laid for a discussion around intentional, community-driven redevelopment.

Keywords: neighborhood displacement; urban disinvestment; urban decline; urban regeneration

### References

- Freeman, L. (2005). Displacement or succession? Residential mobility in gentrifying neighborhoods. *Urban Affairs Review*, 40(4), 463–491.
- Haase, A., Rink, D., Grossmann, K., Bernt, M., & Mykhnenko, V. (2014). Conceptualizing urban shrinkage. *Environment and Planning A*, 46(7), 1519–1534.
- Marcuse, P. (1985). Gentrification, abandonment, and displacement: Connections, causes, and policy responses in New York City. *Wash. UJ Urb. & Contemp. L.*, 28, 195.
- Sims, J. R. (2016). More than gentrification: Geographies of capitalist displacement in Los Angeles 1994–1999. *Urban Geography*, 37(1), 26–56.
- Tighe, J. R., & Ganning, J. P. (2015). The divergent city: Unequal and uneven development in St. Louis. *Urban Geography*, 36(5), 654–673.

85329

## Barrier-free and wheelchair-accessible Housing in Context of Common Goods oriented Housing market. A Case Study of Berlin (Germany)

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The housing research and policy address the topic of housing affordability in large German cities intensively. However, the state of research and political interventions regarding barrier-free and wheelchair-accessible housing are limited. Today, there is no evidence-based data on the stock and demands for these residential types in Berlin (Senate Department for Urban Development and Housing 2019: 95f.). Responsible stakeholders assume a considerable shortage (Berlin's representative for persons with disabilities 2019: 3f.). Firstly, the government of Berlin disregards Article 19 of the Convention of the United Nations on the rights of persons with disabilities, according to which every person has the right to freely choose where to live. Secondly, urban research and politics insufficiently consider the supply of these housing types in order to public welfare oriented urban planning. The planned PhD project is intended to close the existing data gap partly. A city-wide analysis of stock and demands of these housing types will be conducted. The following questions, for example, will be investigated: How many barrier-free and wheelchair-accessible housing units do exist? Where are they located in the city? Can the housing supply respond to changing life situations and related relocation plans of the target groups? The principle of the common good (social compatibility, solidarity, justice of distribution etc. (Gailing/ Moss 2016: 773; von Arnim 1977: 22ff.)) will theoretically underpin why barrier-free and wheelchair-accessible housing must be considered in Berlin's housing market development consequently. The research design consists of an analysis of planning documents and topic-specific inquiries from politicians as well as of two questionnaire-based surveys. In the first step, the housing stock is determined by surveying housing providers and housing and tenant associations. In the second step, demands will be determined by surveying tenants with limited mobility, associations of disabled persons and state and district representatives. At the AESOP congress, the planned PhD project will be presented. Furthermore, an overview of national laws and state funding programs for barrier-free and wheelchair-accessible housing construction will be given. Important stakeholders will be shown and the problems of defining terms such as "barrier-free" and "accessible for disabled" will be discussed.

Keywords: housing, accessibility, common goods, spatial justice, spatial planning and research

### References

Convention of the United Nations on the rights of persons with disabilities on 3 May 2008.  
Landesbeauftragte für Menschen mit Behinderungen Berlin (2019): Bericht über Verstöße gegen die Regelungen zur Gleichstellung behinderter Menschen durch Behörden oder sonstige öffentliche Stellen und deren dazu abgegebene Stellungnahmen oder ergriffene Maßnahmen 11. Verstößebericht für den Zeitraum 01. März 2013 – 29. Februar 2016. Berlin.  
Gailing, L.; Moss, T. (2016): Gemeinwohl. In: Akademie für Raumforschung und

Landesplanung - ARL (editors) (2018): Handwörterbuch der Stadt- und Raumentwicklung. Hanover, pp. 773-778.

Senate Department for Urban Development and Housing (2019): Wohnraumbedarfsbericht 2019. Berlin

von Arnim, H. H. (1977): Gemeinwohl und Gruppeninteressen: Die Durchsetzungsschwäche allgemeiner Interessen in der pluralistischen Demokratie. Ein Beitrag zu verfassungsrechtlichen Grundfragen der Wirtschaftsordnung. Frankfurt am Main.

84351

## Age Structure, Residential Density, and Housing Quality: Using Citizen Hotline Data to Understand Community Conflicts in Shanghai

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Community conflicts add chaos to everyday life, while also play an important role in shaping community life and, sometime, creating community bonds. The purpose of this research is to explore how community characters affect the intensity and types of neighborhood conflicts.

The official promotion of 12345 citizen hotlines in Chinese cities has provided new data and methods for such research. Based on the data of neighborhood complaint calls from 12345 Hotline data in Shanghai in 2019, this paper uses a negative binomial regression model to evaluate how the age structure, residential density, and housing quality of a community affect neighborhood conflicts, as well as the similarities and differences in the effects on the three main types of conflict: group renting, noise nuisance, and illegal constructions.

The analysis shows that in Shanghai, the neighborhood-conflict intensity is lower in communities with a higher proportion of young and middle-aged people (30-59), a higher residential density and a higher property fee (i.e. the quality of housing). It seems in Shanghai, residents between the age 30 to 59 serve as the pacifier of the community conflicts, who can significantly lower the frequency of complaints, or they might be too busy to be bothered. More interestingly, the discovery that the higher the residential density, the lower the probability of arousing conflicts complaints, is very different to the existing studies in Australia or the other countries, and deserve further research.

For the complaints on “group renting”, the outcome is corresponding to the common sense: it relates to higher proportion of youth aged 20-29 in the community, higher residential density, and lower property fee/quality. When the communities comprise of smaller portion of core families (people aged 30-59), they become more sensitive to noise nuisance. In terms of the intolerance of illegal construction, the communities with lower residential density, higher property fee, and earlier built, are much more significant than others.

In conclusion, based on the 12345 data, a larger proportion of young and middle-aged people, a proper dense living situation, and effective environmental maintenance all help to reduce the occurrence of neighborhood conflicts and shape a harmonious community in Shanghai. What does that talk to community workers or planners?

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Keywords: Community planning, community conflicts, age structure, residential density, housing quality, 12345 Citizen Hotline

#### References

- [1]Matthew A. Crenson. Neighborhood Politics[M]. Harvard University Press, 1983
- [2]Cheshire, L. and R. Fitzgerald, From Private Nuisance to Criminal Behaviour: Neighbour Problems and Neighbourhood Context in an Australian City. *Housing studies*, 2015. 30(1): p. 100-122.
- [3]Yan Liu, Cheshire Lynda, Wang Siqin, et al. A socio-spatial analysis of neighbour complaints using large-scale administrative data: The case in Brisbane, Australia[J]. *Cities*, 2019 (90) , 168-180.
- [4]Minkoff, S.L., NYC 311: A Tract-Level Analysis of Citizen–Government Contacting in New York City. *Urban Affairs Review*, 2016. 52(2): p. 211-246.
- [5]Méndez, M.L. and G. Otero, Neighbourhood conflicts, socio-spatial inequalities, and residential stigmatisation in Santiago, Chile. *Cities*, 2018. 74: p. 75-82.

84571

## Housing informality dynamics in middle-income neighbourhoods: the case of Nairobi City, Kenya

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Informality plays a significant role in housing provision and creating urban spaces across the globe. Consequently, the phenomenon of constructing housing or appropriating residential land without following the officially sanctioned approval process is a widespread reality for most urban dwellers. The non-compliance occurs in different degrees and forms and is more prevalent in the “Global South” although not absent in the “Global North”. Despite this urban reality, most research on informality is on lower-income groups. Informality beyond the poor is seldom explored in the “Global South” cities partly because it is primarily associated with lower-income groups, sub-standard housing, services, poverty and marginalisation. There has been a growing interest in informality beyond the poor, with critical attention given to elite informality, contributing to poor/elite binary juxtaposition and creating a grey area and an overlook on the demographically middle group. Drawing from the Nairobi city- Kenya case study, this article explores informal housing practices and dynamics within middle-income neighbourhoods. Through qualitative research, 52 in-depth interviews, field videos and pictures and two focused group discussions and observation, the study describes different types of housing informalities created by the middle-income group. These include unauthorised developments and subdivisions on marginal land, housing extensions and modifications, discretionary allocation and squatting/encroachment on contested public land. The findings also reveal that the diverse informalities operate in a symbiotic manner with existing formal processes for housing provision, and informality of the middle-income lead to spontaneous land uses and urban transformation, especially when they are intertwined with market trends in the cities.

Keywords: Housing informality, Unauthorised developments, Urban transformation, Middle-income, “Global South”.

### References

- Hansen, K. T., & Vaa, M. (2004). Reconsidering informality : perspectives from urban Africa. Nordiska Afrikainstitutet.
- Lemanski, C., & Tawa Lama-Rewal, S. (2012). The “missing middle”: Class and urban governance in Delhi’s unauthorised colonies. *Transactions of the Institute of British Geographers*, 38(1), 91–105.
- McFarlane, C. (2012). Rethinking Informality: Politics, Crisis, and the City. *Planning Theory and Practice*, 13(1), 89–108.
- D’Alençon, P. A., Smith, H., de Andrés, E. Á., Cabrera, C., Fokdal, J., Lombard, M., Mazzolini, A., Michelutti, E., Moretto, L., & Spire, A. (2018). Interrogating informality: Conceptualisations, practices and policies in the light of the New Urban Agenda. *Habitat International*, 75(April), 59–66.
- AlSayyad, N. (2004). Urban Informality as a “New” Way of Life. In A. Roy & N. Alsayyad

(Eds.), *Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia* (pp. 7–30). Lexington Books, Oxford.

Alterman, R., & Calor, I. (2020). Between informal and illegal in the Global North: Planning law, enforcement and justifiable noncompliance. In U. Grashoff (Ed.), *Comparative Approaches to Informal Housing Around the Globe* (pp. 150–185). UCL press.

84611

## Place Attachment, Residential Satisfaction, and Residential Mobility in the Context of Forced Migration: The Case of Bursa's "Little Aleppo" Neighbourhood

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The purpose of this article is to investigate the relationship between the attachment of Syrian refugees who fled to Turkey after the 2011 Syrian Civil War, their satisfaction with their homes, their happiness, and residential mobility intentions. While the influx of Syrians into Turkey's major cities has received much scholarly attention as one of the country's most notable recent population movements, this study is one of the few investigations conducted on this scale and scope (see Haliloğlu Kahraman, 2021; Özkan, Ergün & Çakal, 2021). The study's case is Çarşamba (recently called "Little Aleppo"), a Bursa CBD neighbourhood characterized by a substantial concentration of forcibly moved Syrian refugees. A quantitative questionnaire survey (N=155) was conducted from February to July 2021 using snowball sampling technique. The face-to-face questionnaire consists of 7 parts and 54 questions, and raw data with 294 variables. A "bivariate analysis" was performed to analyse the correlation between place attachment, residential satisfaction, happiness, and intention to residential mobility. Preliminary results of this study show that intention to residential mobility and place dependency have a negative relationship at 0.01 significance level (-0.591), while there is a positive correlation between the residential satisfaction and the social environment (0.948) and place attachment at the 0.05 significance level (0.847). Not only the findings of the study are in line with previous research (see Huang et al. 2020; Kale, 2019), but also, they draw attention to the issues such as Turkey's international migration and integration policies, as well as the resettlement and homemaking of Syrian refugees soon after the first decade of the migration.

Keywords: place attachment, residential satisfaction, residential mobility, Syrian refugees, forced migration, happiness

### References

- Haliloğlu Kahraman, E., (2021) Subjective evaluations of Syrian refugees on residential satisfaction: An exploratory study in an ethnic enclave in Turkey, *Journal of Housing and the Built Environment*. 14. <https://doi.org/10.1007/s10901-021-09867-4>
- Huang, X., He, D., Tang, S., & Li, X. (2020) Compensation, housing situation and residents' satisfaction with the outcome of forced relocation: Evidence from urban China (Vol. 96, p. 102436). <https://doi.org/10.1016/j.cities.2019.102436>
- Kale, A. (2019) Building attachments to places of settlement: A holistic approach to refugee wellbeing in Nelson, Aotearoa New Zealand. *Journal of Environmental Psychology*, 65(November 2018), 101315. <https://doi.org/10.1016/j.jenvp.2019.101315>
- Özkan, Z., Ergün, N., & Çakal, H. (2021) Positive versus negative contact and refugees' intentions to migrate: The mediating role of perceived discrimination, life satisfaction and

identification with the host society among Syrians refugees in Turkey. *Journal of Community and Applied Social Psychology*. 31:438-451. <https://doi.org/10.1002/casp.2508>

84924

## The unpleasant consequences of sustainable Nordic cities: environmental gentrification

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The objective of sustainable urban development integrates cities' economic aspirations with the global calls to meet climate neutral targets. Research shows that sustainable urban development measures, such as redeveloping brownfields, urban densification, urban greening, low-carbon transit systems and resilience infrastructures, benefit the well-off population (Anguelovski et al. 2019; Rice et al. 2020; Anguelovski & Connolly 2022, Checker 2011). Sustainable urban development investments are distributed unevenly to different neighbourhoods and different population groups, even in the most affluent cities of the global North. Rising real-estate prices and living costs cause the displacement of working classes and vulnerable groups. However, the environmental gentrification has not thus far gained space for public discussion within the Nordic countries. In our paper, we illustrate findings from a fast-growing city of Tampere, Finland. Year after year, Tampere is voted as the most desirable city to live in Finland, alluring over 3000 newcomers every year. As the city grows, the value of particular inner-city neighbourhoods has risen. Our analysis involves three case study areas: brownfield redeveloped into high-class housing, hip neighbourhood enabling “sustainable” lifestyle and diversity of services, and a historically protected neighbourhood with attractive scenic and environmental amenities.

Environmental gentrification increases the uniform social structure of these neighbourhoods and decreases opportunities for social diversification in urban planning. If this development is taking place even in the Nordic welfare states, what actually are the tools for cities to prevent sustainability-based urban segregation in the future?

Keywords: sustainable urban development, environmental gentrification, displacement, urban segregation, residential differentiation

### References

- Anguelovski, I & Connolly, J. J. T. (toim.) (2022). *The green city and social injustice: 21 tales from North America and Europe*. Abington: Routledge. <https://doi.org/10.4324/9781003183273>
- Anguelovski, I., Connolly, J. J. T., Garcia-Lamarca, M., Cole, H., & Pearsall, H. (2019). New scholarly pathways on green gentrification: what does the urban ‘green turn’ mean and where is it going? *Progress in Human Geography*, 43(6), 1064–1086. <https://doi.org/10.1177/0309132518803799>
- Checker, M. (2011). Wiped out by the “Greenwave”: environmental gentrification and the paradoxical politics of urban sustainability. *City & Society*, 23(2), 210–229. <https://doi.org/10.1111/j.1548-744X.2011.01063.x>
- Rice, J. L., Cohen, D. A., Long, J., & Jurjevich, J. R. (2020). Contradictions of the climate-friendly city: new perspectives on eco-gentrification and housing justice. *International Journal of Urban and Regional Research*, 44(1), 145–165. <https://doi.org/10.1111/1468-2427.12740>



84047

## “Vinzirast-Mittendrin” : the inclusive co-housing project for the homeless, refugees, and students in Vienna, Austria

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The residence of refugees and homeless people is an urgent problem to be solved in most EU countries[1-2]. The difficulty is not only to provide simple housing, but also to help them integrate into the local society without extra state funding[3-4]. In Vienna, Austria, there is a co-housing project called “Vinzirast-Mittendrin”, which was established by non-profitable organization to tackle the problem. It was designed to house bicycle, woodworking and sewing workshops, a restaurant, and event spaces, as well as offer the places for students, formerly homeless people, and refugees to live together. It is rather a social project than a shelter, and formerly homeless people and refugees build new skills (working in the bicycle, woodworking and sewing workshops) to get paid and restart their lives after 3-year stay here. Its speciality lies in the fact that it does not rely on state funding, but have created solidarity and social cohesion. Therefore, this article takes “Vinzirast-Mittendrin” as a case and focuses on three major research questions: (1) what players played a vital role in the operation; (2) how is it able to benefit diverse social groups; (3) how is it able to maintain without the state financial support. Through the field visits and interviews, it is found that (1) with the initial help from active students, private donors and volunteers, the first homeless groups and refugees joined forces and built everything from scratch. Then it becomes the “work downstairs-live upstairs” space with help from volunteers with special experience in restaurant and workshop; (2) it has established a mechanism of “residential care - skill training - social integration” to actively involve diverse social groups including students, volunteers, homeless people, refugees and nearby neighbors; (3) with the running of the restaurant, workshops and farms where homeless people and refugees can get trained and paid, all helps the project to maintain sustainable.

Keywords: co-housing, refugees and homeless people, social cohesion; Vinzirast-Mittendrin

### References

- [1] Gibney, Matthew J., and The Jesuit Refugee Service-Europe. *Outside the protection of the law: The situation of irregular migrants in Europe*. Refugee Studies Centre, 2000.
- [2] Lafleur, Jean-Michel, and Elsa Mescoli. "Creating undocumented EU migrants through welfare: A conceptualization of undeserving and precarious citizenship." *Sociology* 52.3 (2018): 480-496.
- [3] Warnes, Anthony M., et al. "The diversity and welfare of older migrants in Europe." *Ageing & Society* 24.3 (2004): 307-326.
- [4] Bakker, Linda, Jaco Dagevos, and Godfried Engbersen. "The importance of resources and security in the socio-economic integration of refugees. A study on the impact of length of stay in asylum accommodation and residence status on socio-economic integration for the four largest refugee groups in the Netherlands." *Journal of International Migration and Integration* 15.3 (2014): 431-448.



85068

## Cross-Border Perspectives in Housing Market Studies

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As the process of European integration has facilitated the development of contemporary cross-border regions with shared housing markets, the documentation and analysis of unique housing market configurations are underrepresented in the literature. The authors present a paper within the growing field of housing market studies by specifically approaching the field from a cross-border perspective. The project, ESPON 2020 Updating and integrating Big Data and Housing datasets, aims to analyse housing markets in cross-border regions and develop new indicators for statistical comparison across six case study regions throughout Europe. The selection of the case studies was based on encompassing a variety of different types of border regions into the project such as small rural areas, large metropolitan agglomerations and growing urban economic corridors. During the project, the authors found a gap in the literature in relation to the conceptualisation of 'cross-border housing markets'. Existing research on housing market patterns being impacted by cross-border differences remains largely case study-based, and little evidence of standardised approaches to capturing cross-border housing markets through the use of indicators was found. In the paper, the authors present a thematic analysis of relevant literature across housing market studies and cross-border studies so as to methodically identify, analyse and report patterns and themes between the literatures. In the presentation, the authors reflect on how the results from the project case studies complement and contrast findings from the literature review. Upon project finalisation in May 2022, the paper will summarise key results from three different case studies: Grand Geneva, the Dublin-Belfast Economic Corridor and the Bidasoa-Txingudi Eurodistrict. Preliminary conclusions suggests that despite the long-term integration of housing markets, pricing gaps within markets have not diminished, that despite local authority demands, national policymaking does not account for local peculiarities in unique housing markets and that finally, the current COVID-19 pandemic exacerbates existing trends for rising demand in housing across borders.

Keywords: Cross-Border Housing Markets, Housing Market Values, Webscrapping, Cross-Border Metropolitan Region, Housing Indicators

### References

Christmann, N., 2015. Dwelling trends in border regions - towards an inter-urban discourse analysis. Lisbon, European Network for Housing Research.

Claveres, G. et al., 2020. Housing and inequality The case of Luxembourg and its cross-border workers, Paris: OECD Economics Department Working Papers.

Decouville, A., Durand, F., Sohn, C. & Walther, O., 2013. Comparing Cross-border

Metropolitan Integration in Europe: Towards a Functional Typology. *Journal of Borderland Studies*, 28(2), pp. 221-237.

Le Goix, R. et al., 2019. *ESPON Big Data for Territorial Analysis and Housing Dynamics Wellbeing of European citizens regarding the affordability of housing*, Brussels: ESPON EGTC.

Sielker, F. et al., 2022. *ESPON 2020 data and maps updates II Lot 4: Updating and integrating Big Data and*, Brussels: ESPON EGTC.

84588

## Housing servitization. A proposal for urban housing

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The "planetary, national, local polycrisis", at the same time health, social, environmental, and economic, has severely exacerbated the housing issue. Housing insecurity, the risk of eviction, and the many precarious situations are increased. The young and elderly, but also migrant and seasonal workers, struggle to access housing decent, affordable, and quality housing.

Added to this are the inexorable and continuous changes in society, family structure, and the needs of the contemporary city. Families are increasingly characterized by fragility and temporary employment.

In this context, the Italian public housing stock is incapable, in its current forms, of responding to the social and economic transformations underway. It is characterized by serious conditions of structural and energy degradation, maintenance problems, functional and typological inappropriateness. Moreover, such public stock is among the lowest in quantitative terms in Europe and has declined by more than 20%, due to the sale foreseen by the National Law n. 560/1993.

A substantial innovation connected to the plan forecasts and the government of the territory is the assimilation of social housing to urban standards according to the provisions of the National Decree of 22 April 2008.

In this context, the contribution aims to investigate possible solutions to adapt and enhance the public housing stock, increasing and diversifying the offer through strategies of reuse, flexibility, and mobility of residents. To do this, the contribution analyses the Italian housing models, putting forward a model to the urban housing policy based on servitization strategy.

To achieve the objective, the contribution uses the case study research method, analyzing the public housing stock located in the Lecce Province (Italy), owned by ARCA Sud Salento, the public body responsible for their lifecycle. To address the research aim, four main phases are identified: 1. data collection, consisting of the analysis of existing documentation, field observation, and key actors interviews; 2. data analysis and recognition of main problems; 3. servitization strategies definition for the urban housing; 4. results validation.

The results showed that servitization can provide significant benefits to public housing policies, implying a necessary revision of the ways of understanding social housing. As a service, it is not be sold but should have more flexible management in terms of entry and exit criteria, needs, and priorities in its urban treatment.

The servitization approach, indeed, pursues resilience and sustainability focusing on long-term environmental goals instead of only short-term ones, enhancing the existing stock.

Nevertheless, further research is necessary to fully understand all of the effects that servitization can have on urban planning policies and their implementation, including private social housing addition.

Keywords: public and social housing, housing as a service, flexibility, mobility, servitization, urban policies

#### References

- Ceruti M. (2020), *Abitare la complessità. La sfida di un destino comune*, MIMESIS Edizioni, Milano.
- Cittalia (2010), *I comuni e la questione abitativa*, seconda edizione, ANCI, Roma.
- Federcasa (2020), *Dimensione del disagio abitativo pre e post emergenza Covid-2019*, Nonisma Spa, Bologna.
- Lodi Rizzini C. (2013), “Il Social housing e i nuovi bisogni abitativi”, in *Primo Rapporto sul secondo welfare in Italia*, Centro di Ricerca e Documentazione Luigi Einaudi, Torino.
- Mangialardi G., Palmieri P., Pellicani R., Zappatore S. (2021), “Innovazione nelle politiche abitative. L'esperienza dell'Arca Sud Salento”, *Urbanistica Informazioni*, no. 297, p. 42-44.
- Pogliani L., Grimaldi M. (2020), “Rimettere l'abitare equo al centro del progetto pubblico”, *Urbanistica Informazioni*, no. 289, p. 2-8.
- Yang X., Guo N. (2011), “Public Housing Service of China”, 2011 International Conference on Management and Service Science, IEEE, p. 1-3.

84444

## Platform facilitated housing informality in Australian cities

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With ongoing affordability pressures and eligibility criteria barriers in formal housing markets, an increasing number of individuals and households are depending on the informal housing sector. Nevertheless, housing informality has been largely hidden and geographically uneven in the global North (Durst & Wegmann, 2017; Iveson et al., 2019), making it difficult for researchers and urban authorities to detect the forms and scale of informal housing practices. Recently, digital platforms have started replacing traditional informal housing markets through user-generated rental listings (Boeing, 2020; Fields, 2019) and, in doing so, they offer useful methodological tools for researchers to understand informal housing practices and their complex processes.

This paper mobilises a practice-based approach to detect and measure different modes of informal housing by using online rental housing listings. The data were collected via web-scraping from four different platforms: realestate.com.au, gumtree.com.au, flatmates.com.au and insiderairbnb.com in August 2021 for three Australian capital cities: Sydney, Melbourne and Brisbane. In this regard, the paper provides not only a comparative perspective of housing informality among different cities but also analyses a wider spectrum of housing informality by using rental listings placed on four different platforms. The study demonstrates important and diverse ways in which informal housing are marketed online and how different platforms have their unique socio-technical structures and business models to target different users in facilitating access to housing.

The findings highlight that urban residents often trade off conventional regulatory tenancy protections or housing standards in their attempts to access lower-cost accommodation. However, informal housing practices do not always equate to increased affordability and bring a series of challenges for tenants and housing systems, including overcrowding, tenure insecurity and health and safety risks. The paper highlights the need to investigate further the extent to which this housing offers appropriate accommodation for those dependent on this sector of the housing system and to intervene with digital platforms in their role of facilitating these housing practices.

Keywords: Informal housing, low-cost housing, housing affordability, digital platforms, online rental listings, Australia

### References

- Boeing, G. (2020). Online rental housing market representation and the digital reproduction of urban inequality. *Environment and Planning A: Economy and Space*, 52(2)(2), 449-468. <https://doi.org/10.1177/0308518X19869678>
- Durst, N. J., & Wegmann, J. (2017). Informal Housing in the United States. *International Journal of Urban and Regional Research*, 41(2), 282-297. <https://doi.org/10.1111/1468-2427.12444>
- Fields, D. (2019). The Politics of Digital Transformations of Housing. In L. Porter (Ed.),

Interface in the Planning, Land and Housing in the Digital Data Revolution (pp. 575-603). 20(4),  
Planning Theory & Practice. <https://doi.org/10.1080/14649357.2019.1651997>  
Iveson, K., Lyons, C., Clark, S., & Weir, S. (2019). The informal Australian city. Australian  
Geographer, 50(1), 11-27. <https://doi.org/10.1080/00049182.2018.1505286>

85213

## Slum rehousing, place-making, and the everyday: an examination of the lived experiences of a slum rehousing scheme in the periphery of Mumbai

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N/A

This paper examines the everyday experiences of the urban poor with a ‘slum’ rehousing scheme in the periphery of Mumbai, India and presents a more complete picture of the impacts of such rehousing schemes on the urban poor. The scheme, titled Basic Services for the Urban Poor (BSUP), forms a part of a larger set of urban reforms that have been initiated in India since the turn of the new millennium (Kundu, 2014). Although the scheme aims at the social upliftment of the urban poor (c.f. Gilbert, 2004; Salcedo, 2010; Erwin, 2017), evidence from the ground however suggests that the scheme extends a project of civic rule and responsiblises the welfare subjects (Roy, 2009a; Ranganathan, Kamath, & Baidur, 2009, Kamath, 2012; Mahadevia, Bhatia, & Bhatt, 2016; Patel, 2016). Adopting the analytical lens of place-making and a qualitative, semi-ethnographic methodology (Lombard, 2015), this research analyses five key dimensions of the everyday lived experiences of the settlers, which are; material conditions, everyday political realities, perception of the self and the others, tenure security, and social networks. The analysis points out the effacement of affective connections and differential dispossession of the local community members along the lines of caste and ethnicity. The consolidation of this difference, the research highlights, happens in the process of ‘slum’ settlement’s transformation from space to place. Findings from my research foreground the significance of considering the role of place in designing housing policies for the urban poor. This requires engaging with the set of relations and practices that shape place formation and the way people develop affective connections with their lived environment (Jones & Evans, 2012; Manzo, 2014).

Keywords: housing for the poor, place-attachment, everyday lived-experiences, difference, spatial inequalities

### References

- Erwin, K. (2017). ‘You Make a Home out If It, You Make a Place of It’: Some Unexpected Narratives from a Social Housing Estate in Durban. *Transformation: Critical Perspectives on Southern Africa*, Volume 93, 2017, 68–90.
- Gilbert, A. (2004). Helping the Poor through Housing Subsidies: Lessons from Chile, Colombia and South Africa. *Habitat International*, 28(1), 13–40.
- Jones, P. & Evans, J. (2012). Rescue Geography: Place Making, Affect and Regeneration. *Urban Studies*, 49(11), 2315–2330.
- Kamath, L. (2012). New Policy Paradigms and Actual Practices in Slum Housing: The Case of Housing Projects in Bengaluru. *Economic and Political Weekly*, 47(47/48), 76–86.
- Kundu, D. (2014). Urban Development Programmes in India: A Critique of JnNURM. *Social Change*, 44(4), 615–632.

- Lombard, M. (2015). Constructing Informality and Ordinary Places: A Place-Making Approach to Urban Informal Settlements, in: Lemanski, C. and Marx, C. (Eds.), *The city in the urban poverty*, (p. 261). EADI Global Development. London, New York: Palgrave MacMillan.
- Mahadevia, D., Bhatia, N. & Bhatt, B. (2016). Decentralized Governance or Passing the Buck: The Case of Resident Welfare Associations at Resettlement Sites, Ahmedabad, India. *Environment & Urbanization*, 28(1), 294–307.
- Manzo, L. C. (2014). On Uncertain Ground: Being at Home in the Context of Public Housing Redevelopment. *International Journal of Housing Policy*, 14(4), 389–410.
- Patel, K. (2016). Encountering the State through Legal Tenure Security: Perspectives from a Low Income Resettlement Scheme in Urban India. *Land Use Policy*, 58(C), 102–113.
- Ranganathan, M., Kamath, L. & Baindur, V. (2009). Piped Water Supply to Greater Bangalore: Putting the Cart before the Horse? *Economic and Political Weekly*, 44(33), 53–62.
- Roy, A. (2009). Civic Governmentality: The Politics of Inclusion in Beirut and Mumbai. *Antipode: Wiley*, 41(1), 159–179.
- Salcedo, R. (2010). The Last Slum: Moving from Illegal Settlements to Subsidized Home Ownership in Chile. *Urban Affairs Review*, 46(1), 90–118.

85134

## Rome: "Città Utopica?" Futuring the metropolitan urban region.

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The metropolitan city of Rome, under new political leadership, is entering a strategic planning exercise to define main actions for the next decades with a new strategic plan for Rome (IT). The challenges are huge and diverse. Strategic responses need to sketch out future horizons and concrete actions. How can the planning profession future the development of a metropolitan urban region like Rome? What is our position as planners (academic, practice) in that transformation and what are our opportunities to contribute to a future proof 'oeuvre' (Lefebvre)? With whom do we side? Rome, of course, is an example that stands pars pro toto.

This is a proposal for a roundtable within T4:Housing

Speakers will include:

C Perrone: Rome a new strategic exercise for futuring the metropolitan city.

P Ache: Strategic future exercises. A comparative view.

K Grisakov: Estonian Urban Futures

NN Discussants

Keywords: strategic planning, metropolitan development, governance, process

### References

Albrechts, L. Balducci A., Hillier J. (2017). *Situated Practices of strategic Planning*. London: Routledge

Lefebvre, H. (1991). *The production of space*. Oxford: Blackwell.

Neuvonen, A., & Ache, P. (2017). Metropolitan Vision Making – Using Backcasting as a Strategic Learning Process to Shape Metropolitan Futures. *Futures, e-first(86)*, 73-83. doi:doi:10.1016/j.futures.2016.10.003

Zimmermann K., Feiertag P. (2021). *Governance and City Regions: Policy and Planning in Europe*. London: Routledge.

84357

## Social Segregation in Mixed-Income-Community from China, a case study in Beijing

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The social segregation of housing in Chinese cities has intensified in the context of market transformation and rapid urbanization in recent decades. This process can be observed worldwide, albeit to very different extents.

Since the market reform of 1978, gated communities, which can be described as a spatial symbol of social segregation, have been increasingly built in the PRC. Therefore, in 2007, the state created an instrument, the Mixed-Income Community (MIC), which allows Chinese cities to plan and build new housing projects specifically for different social groups. However, the answer, whether mixed-income development can achieve its goals, is still uncertain. Due to the late start of the project in the planned MICs in China, there is a research gap on the social segregation of the activity space in a MIC. To fill this gap will this paper present an approach that tests the effect of MIC on segregation.

The paper measures the effects of the planned MIC in Beijing by contrasting it with an unplanned MIC, which doesn't get too much intervention from the planning. To compare the segregation processes in the two communities, housing is classified into different social groups. The social segregation between residents exists not only in their residential spaces but also in their social relations and daily lives. Socio-spatial segregation in this paper is evaluated as the extensiveness and exclusivity of residents' daily activities to determine the socio-spatial segregation of activity spaces within and between the two communities. The relevant data is collected through questionnaires (511 collected from 1586 Housing). For the analysis, Welch's ANOVA was used as a specific analysis method to measure the segregation. Besides ANOVA, multiple comparisons were performed to determine pairwise differentiation between the different groups in the community.

The study supports that there is social segregation of activity spaces between the different groups within both communities. However, the degree of Segregation in the planned MIC is stronger. But the monitoring from the housing of the approach should be long-term of the MIC project to check its effectiveness.

Keywords: Social Segregation, Mixed-income-Community, Activity space, China

### References

1. Wang D G, Li F, Chai Y W. (2012). Activity spaces and sociospatial segregation in Beijing. *Urban Geography*, 33(2):
2. RJ Chaskin, ML Joseph. (2010). Building "Community"? in mixed-income developments: Assumptions, approaches, and early experiences. *Urban affairs review*.
3. Jiao Jian. (2017). Analysis on the Layout of Community Public Facilities Based on Residents' Daily Activity-Travel Characteristics——A Case Study of Communities in Xi'an.

4. M Joseph, R Chaskin. (2010). Living in a mixed-income development: Resident perceptions of the benefits and disadvantages of two developments in Chicago. *Urban Studies*.

83941

## Affordable Overnight Lodging in High-Cost, High-Need Coastal Environments

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Providing access to coastal and marine resources has long been a planning priority in many locations. At the same time, housing affordability and the lack of investment in lower-cost overnight accommodations in environmentally sensitive coastal areas have exasperated efforts to provide equitable access. While agencies have funded projects to help increase the supply of lower-cost overnight accommodations along the coast, including development of campgrounds, hostels, and other facilities, the extent of need has not been quantified and other solutions are needed to preserve and increase supply of lower-cost accommodations along the coast. Further the synergies between potential policies to address access to the coastal environment and those that promote local housing and transportation efficiency have not been investigated. Using the case of the California Coastal Commission / Conservancy, this paper quantifies the need for access studying the distribution of households at 80% of the median income level within 150 miles of the coast and finds that access to coastal lodging is limited. It hypothesizes that broader housing, transportation and equity policies need to be brought into the dialogue to help address lower-cost accommodations in parallel with local environmental, housing and transport issues. Lastly, it offers recommendations and new construction opportunities for low-cost accommodation infrastructure in these kinds of environmentally sensitive areas.

Keywords: Coastal environments; overnight accommodations; housing; affordability; sustainability

### References

- Bobo, B. F., & Shulman, D. (1977). Managing California's Coast: The Problem of Housing Distribution. *California Management Review*, 20(1), 74–80.
- Kahn, M. E., Vaughn, R., & Zasloff, J. (2010). The housing market effects of discrete land use regulations: Evidence from the California coastal boundary zone. *Journal of Housing Economics*, 19(4), 269–279.
- Lester, C., & Matella, M. (2016). Managing the coastal squeeze: Resilience planning for shoreline residential development. *Stan. Env'tl. LJ*, 36, 23.
- Liu, J., Dietz, T., Carpenter, S. R., Alberti, M., Folke, C., Moran, E., ... others. (2007). Complexity of coupled human and natural systems. *Science*, 317(5844), 1513–1516.
- Pierucci, D. F. (2015). The California Coastal Commission's Approach to Lower Cost Overnight Visitor-Serving Accommodations Mitigation: A Policy and Legal Analysis.
- Reineman, D. R., Wedding, L. M., Hartge, E. H., McEnery, W., & Reiblich, J. (2016). Coastal access equity and the implementation of the California Coastal Act. *Stan. Env'tl. LJ*, 36, 89.

Richmond, L., Dumouchel, R., Pontarelli, H., Casali, L., Smith, W., Gillick, K., ... Suarez, A. (2019). Fishing Community Sustainability Planning: A Roadmap and Examples from the California Coast. *Sustainability*, 11(7), 1904.

Riggs, W., & Pontarelli, H. (2014). Community sustainability planning as a tool for increased environmental sustainability: The case of two California cities. *Focus*, 11(1), 23.

84609

## DWELLING DECAY: HOUSING CRISIS, URBAN INSTITUTIONALISM, AND ITS UNDERSTANDING OF THE QUALITATIVE SHORTAGE. Past, present, and future of Chile's Urban Housing Policy for the Improvement of Quality and Social Integration (2006 - 2021)

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Since 2006, Chile's housing policy has undergone a paradigm shift by focusing on improving the quality of the housing stock. At that time, it was considered that the quantitative shortage had a certain degree of control by the Chilean state and its institutions, with a sustained decrease compared to the Latin American context. However, this scenario changed drastically in 2017, where the shortage, far from decreasing, showed an upward trend, currently reaching its peak since the return to democracy in the 1990s. Currently, the housing shortage in Chile is 739,603 homes (12% of the total housing stock nationwide), affecting a total of around 2.2 million people. Of this shortage, 58% corresponds to a housing shortage, mainly due to a situation of being in a situation of poverty, and 42% corresponds to housing with some type of quality requirement, affecting 23.5% of the total housing stock in Chile. Even though the qualitative shortage is the most universally measured component in Latin America, it is less addressed or prioritised than the production of new housing, since it is the one that affects the greatest number of housings. (Arriagada, 2022).

Migratory and economic crises and the current COVID-19 pandemic add to the various factors that attempt to explain this increase. However, institutional factors have not been particularly highlighted as possible causes or aggravators of the housing crisis, in the sense of understanding how the institutional framework has perceived the decay and shortages that make up the housing shortage.

This article seeks to analyse how the Chilean urban-housing institutional framework has been modelling, through plans and programmes, its Urban Housing Policy of Improving the Quality and Social Integration of Chile, in the period between 2006 (the year of the paradigmatic shift from quantity to quality housing) and the year 2021, when the shortage housing crisis was declared, as a way of understanding from where the institutions have epistemologically positioned themselves in order to generate the response to the shortage.

The hypothesis is that the Chilean urban and housing institutionalism, through its quality improvement policy, has understood the housing decay from a standardised and universalist perspective, from subsidiarity (Chaplin, 1997; Arqueros, 2016; Alvarado & Galaz, 2015), fragmenting territories and benefits and preventing the understanding of situated knowledge (Haraway, 1989), ways of dwelling (Giglia, 2012) as well as the everyday life (Jirón & Lange, 2017) of people and territorial relevance when designing policies, plans and programmes in response to the shortage of housing.

Through documentary analysis, interviews and bibliographic analysis, the research concludes that although Chile's Urban Housing Policy for the Improvement of Quality and Social

Integration was a pioneering initiative in the Latin American context, 1) it lacked a decentralised institutional support that would allow for relevance and a territorial perspective, 2) although this policy innovated in the participatory component of the interventions, it has not managed to transfer the collective perspective to the instruments that allow for an effective overcoming of the shortage. Finally, 3) the principle of subsidiarity as the epistemological pillar of Chilean housing policy has mainly influenced the fragmentation of state action and the individualisation of actors and benefits, reducing the territoriality of the instruments, silencing the territorial diversity, the ways of dwellings and the daily practices of the people, as elements to be considered in future proposals to overcome the shortage.

Keywords: housing shortage, housing policy, dwelling, decay, Chile.

#### References

- Haraway, D. 1989. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies* 14(3): 575–599.
- Giglia, A. 2012. El habitar y la cultura. Perspectivas teóricas y de investigación. Anthropos-Universidad Autónoma Metropolitana, unidad Iztapalapa, México D.F., 160 pp
- Arriagada, C. 2022. Capítulo: Carencias Habitacionales en América Latina: Formas de Cálculo y desafíos emergentes en Libro: Seminario Internacional de Investigación sobre Déficit e Inadecuación de Vivienda en Brasil: avances y desafíos. Fundación João Pinheiro.
- Chaplin, J. 1997. Subsidiarity: The concepto and the connections. *Ethical Perspectives* 4, N° 2
- Alvarado y Galaz. 2015. Subsidiariedad y vida pública: una mirada a los orígenes. Ortuzar (Ed). Subsidiariedad, más allá del Estado y el Mercado. (PP 33-52) Santiago, Chile. Institutos de la Sociedad.
- Arqueros, A. 2016. El principio de subsidiariedad en su sentido clásico y originario. Arquero y Alvarado (Ed). Subsidiariedad en Chile, justicia y libertad. (PP 57-83) Santiago, Chile: Instituto ResPública Y Fundación Jaime Guzmán.
- Jirón, P. y Langue, C. 2017. “Comprender la ciudad desde sus habitantes. Relevancia de la teoría de prácticas sociales para abordar la movilidad”.

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## NECESSITY OF ECO-HOUSING IN DEVELOPING COUNTRIES FOR PROMOTING SUSTAINABLE DEVELOPMENT

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The concept of Eco-housing by using the advantages of a self-contained commune with a building unit designed to cater the needs of approximately 15 to 20 families (500pp) is presented in this research. The provisions will be made in these housing to enable the inhabitants to produce their own energy, grow their own agricultural produces for food and recycle all the resources / waste. The building will be designed in such a way that it will use non-conventional & renewal energy sources totally and will not use any form of external energy source like electrical grid network or fossil fuels, etc. The main objective is to develop design strategies of suitable for self-sufficient housing units incorporating the necessary infrastructures, like equipment of energy generation, recycling, reuse. A Self Sufficient home may cost more up front, but saves through lower operating costs over the life of the home. These homes require fewer trips to the doctor's office. This approach applies a life cycle cost analysis for determining the appropriate up-front cost. This analytical method calculates costs over the useful life of the home. These cost-savings can only be fully realized when they are incorporated at the project's conceptual design phase with the assistance of an integrated team of professionals. The integrated systems approach ensures that the home is designed as one system rather than a collection of stand-alone systems. Some benefits, such as improving health and comfort, reducing pollution and landfill waste are not easily quantified. Consequently, they are not adequately considered in a cost analysis. For this reason, considering setting aside a small portion of the building budget to cover differential costs associated with less tangible benefits or to cover the cost of researching and analyzing Self Sufficient housing options. This development may lead to a school of thought in the inhabitants and they will thrive to become self-sufficient. Though full implementation of these concepts is rare, some good examples exist in Europe, which partially use self-sufficient concept are enlisted herewith:

- The Crophorne Autonomous Home in UK which is using renewable energy and as a result it is carbon-negative [6].
- Climate Neutral Passive House Estate in Hannover Kronsberg [7] which is using passive solar techniques along with super insulation technologies.
- Findhorn Ecovillage in UK [8] notable for low carbon and oldest community based agricultural system.

With its present growth rate (about 150 persons/ min.) the world population will be crossing 8.5 billion by the end of the year 2025. As per the projections made, 57% of this population will be urban, out of which 95% contribution will be due to the developing countries. This construction will lead to greater energy use. This research will help architects in designing mass housing with less energy consumption, conservation of natural resources and less polluted urban environment.

Keywords: Eco-housing, Self Sufficient Housing, Renewable Energy, Sustainability.

## References

- [1] SANYAL D., Self Sufficient Housing: Searching of parameters, Architects India, Bombay 1995, Vol. 7, No. 6, pp.26-27.
- [2] SANYAL D., Development of Intelligent Self Sufficient Housing as Component of Ecocity in Developing Countries, National Symposium on Sustainability and the Built Environment: Searching For Synergies, Kolkata 2014, pp.76-80.
- [3] UNCHS (Habitat), Energy efficiency in housing construction and domestic use in Developing countries, Nairobi1991, (HS/218/91/E) pp.8.
- [4] UNCHS (Habitat), Energy for buildings, Nairobi1991, (HS/250/91/E) pp.88.
- [5] Susan Hunt, Self Sufficient Housing Developments: A Case Study, (Online), 3.9.2010, <http://www.sustainablebuild.co.uk/self-sufficient-housing-developments.html>.
  
- [6] The Crophorne Autonomous Home, <http://www.crophornehouse.co.uk>.
  
- [7] Wolfgang Feist, Climate Neutral Passive House Estate in HannoverKronsberg: Construction and Measurement Results, (Online), [http://passiv.de/downloads/05\\_cepheus\\_kronsberg\\_summary\\_pep\\_en.pdf](http://passiv.de/downloads/05_cepheus_kronsberg_summary_pep_en.pdf)
- [8] The findhorn ecovillage, (Online), <http://www.ecovillagefindhorn.com>.

84387

## Learning from the pandemic: The perceived and revealed impacts of the Covid-19 pandemic on urban planning and housing

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Two years after the global outbreak of the Covid-19 pandemic, its sociospatial impact has become ever more obvious. The experiences from the temporary lockdown measures that were first imposed in Spring 2020 cleared the view for everyday social and spatial inequalities along several fracture lines, especially affecting people living in dense urban areas. Suddenly, the amenities as well as shortcomings of urban areas became literally inescapable for their residents. Hence, Covid-19 is likely to impact “our experiences of home, our experiences in home, our capacities to pay for our housing, and more“ (Rogers & Power, 2020, p. 178). The media quickly started to proclaim a “renaissance of the rural”, while in urban research, debates about a new suburbanization movement emerged (Kunzmann, 2020). Either way, the pandemic may bring changes “in the structure and morphology of cities, suburbs, and metropolitan regions” (Florida et al., 2021, p. 1).

Based on a research project about the Covid-19 pandemic’s impact on the urbanization process, we will present the first findings on the perceived and revealed impacts of the Covid-19 pandemic on residential location and housing preferences in the larger metropolitan area of Vienna, Eastern Austria. In this presentation, we will specifically focus on the learnings for urban planning and housing. We will apply a mixed methods approach, including statistical data analysis and media analysis in order to grasp the pandemic’s context in Eastern Austria for residents and the public in more general. After that, expert focus groups with urban planners, policy makers, and real estate agents will help to reveal the professionals’ opinion on urban-regional development under pandemic conditions. Ultimately, we will answer the question on how the societal experiences of the Covid-19 pandemic do impact planning practitioners’ and policy makers’ professional practices and eventually do alter their practice approaches. The empirical findings will support an outlook on possible developmental pathways (Sorensen, 2015) that urban planning practice could take based on the pandemic experiences.

Keywords: Covid-19, urbanization, residential location preferences, housing preferences, developmental pathways

### References

- Florida R, Rodríguez-Pose A, Storper M. (2021). Cities in a post-COVID world; *Urban Studies*. June 2021. <https://doi.org/10.1177/00420980211018072>
- Kunzmann, K. R. (2020). Smart Cities After Covid-19: Ten Narratives. *DisP - The Planning Review*, 56(2), 20–31. <https://doi.org/10.1080/02513625.2020.1794120>
- Rogers, D., & Power, E. (2020). Housing policy and the COVID-19 pandemic: The importance of housing research during this health emergency. *International Journal of Housing Policy*, 20(2), 177–183. <https://doi.org/10.1080/19491247.2020.1756599>

Sorensen, A. (2015) Taking path dependence seriously: an historical institutionalist research agenda in planning history, *Planning Perspectives*, 30(1), 17-38.

84706

## Neighborhood spatial planning in relation to individual building design: introducing the case of national-outline-plan TAMA38

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Urban regeneration of deteriorated urban areas is a challenge for city decision makers. Based on applying three different strategies for urban renewal, this study aims to understand the role and impact of the Israeli national-outline-plan TAMA38 on urban renewal areas. The TAMA38 plan is a national-outline-planning program for strengthening individual buildings against earthquakes (buildings built before 1980), however, currently it also functions as a catalyst for the renewal of deteriorated residential buildings in old neighborhoods, specifically in high-demand areas of the city.

In the implementation of TAMA38, the main problem is that the focus of the entrepreneur developer is on the renovation of the individual building, primarily residential, neglecting the comprehensive vision of the public and private needs of the neighborhood/site-complex, where the individual structure is just one of the components. However, when applying TAMA38, there are several comprehensive strategies that affect the built environment differently. Therefore, the application of TAMA38, under the category of urban renewal, requires a broader examination, based on the designed area of the neighborhood, and to know which TAMA38 strategy would be appropriate.

The research aim is to understand how three different urban renewal planning strategies based on the TAMA38 program produce three different urban environments. The methodology was developed based on the evaluation of different quantitative and qualitative parameters of the quality and performance of three urban environments.

The objective of this study was to assess the performance of three urban sites developed in Haifa, under the TAMA38 program, following the three main strategies: Berl-Katzenelson site (based on a new comprehensive plan led by one developer), Haviva-Reich site (based on a new comprehensive plan led by diverse developers) and De-Israeli Site (without a comprehensive plan, each building was led by a different developer). Selection of the project areas was based on existing master-plan projects already approved by the city municipality, which indicated the need for further evaluation to understand the quality of the renewed developed environment.

Keywords: Urban regeneration, urban renewal strategy, TAMA38, evaluation, urban analysis

### References

- Tallon, A. (2013). *Urban Regeneration in the UK*. Routledge.
- Keating W. Dennis, Krumholz Norman & Star Philip (1996) *Revitalizing Urban Neighborhoods*. University Press of Kansas.
- Gehl, J. (2011). *Life between buildings: using public space*. Island Press.
- Delang, C.O., and Lung, H.C. (2010) "Public housing and poverty concentration in urban neighbourhoods: The case of Hong Kong in the 1990s", *Urban studies*, 47(7), pp. 1391–1413.
- Robertson, K. A. (1997) *Downtown retail revitalization: a review of American development*

strategies. *Planning Perspectives*, 12(4), 383-401.

Reed, A., & Bennett, L. (2018). The new face of urban renewal: the Near North Redevelopment Initiative and the Cabrini-Green neighborhood. In *Without justice for all* (pp. 175-211). Routledge.

85131

## Reducing the Hidden Costs of Building Your Own House in England

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The development of the self and custom housebuilding sector can work towards increasing the supply of housing and alleviate some of the strain on the housing market in England. Although it is not a solution for everyone, improving self and custom housebuilding can add diversity to the market, increase housing affordability, and produce sustainable homes. This has been recognised by the UK Government which has introduced legislation which aims to assist self and custom builders on the journey to building their own home. The goals of the legislation are to ensure every local authority in England keeps a register of individuals who want to build their own home, to consider this register when carrying out other planning functions, and to grant sufficient planning permissions for those on the register. This paper evaluates the 'self-build and custom house-building registers' from the perspective of transaction costs and perceived effectiveness. This is achieved through semi-structured interviews with local authority planners, private-sector planners, property developers, and national bodies. The findings of this study identify that the primary transaction costs occur in the eligibility tests stage of the register application and relate to the uncertainty felt by applicants post application. The paper concludes that these could be rectified by implementing a more consistent and fair system. The perceived effectiveness of the register varies considerably. The paper determines that the policy requires significant change in order to meet the goals it set out to achieve, which includes model Supplementary Planning Guidance documents and a robust support system for applicants.

Keywords: Self-Build and Custom Housebuilding; Housing; Development Management; Policy Analysis; Transaction Costs; Effectiveness

### References

- Gallent, N.; Durrant, D.; May, N. Housing supply, investment demand and money creation: A comment on the drivers of London's housing crisis. *Urban Studies* 2017, 54, 2204-2216, doi:10.1177/0042098017705828.
- Heffernan, E.; Wilde, P.d. Group self-build housing: A bottom-up approach to environmentally and socially sustainable housing. *Journal of Cleaner Production* 2020, 243, 118657, doi:https://doi.org/10.1016/j.jclepro.2019.118657.
- Duncan, S.S.; Rowe, A. Self-provided Housing: The First World's Hidden Housing Arm. *Urban Studies* 1993, 30, 1331-1354, doi:10.1080/00420989320081291.
- Gingell, A.H.; Shahab, S. An Analysis of Self-Build and Custom Housebuilding in the South West of England. *Urban Science* 2021, 5, 9.
- Sadler, G.; Shahab, S. Self-Build and Custom Housebuilding Registers in England: A Transaction-Cost and Effectiveness Analysis. *Sustainability* 2021, 13.

84526

## Metro-induced gentrification and residential mobility in Taipei

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In recent years, the tod model of urban development driven by public transportation systems has emphasized public transportation to achieve the concept of green transportation and sustainable development. It has been proven in the literature that MRT stations can reduce air pollution and energy consumption, improve transportation efficiency, accessibility, and land value, etc. However, these changes have led to higher local affordability costs, attracting affordable communities and businesses to enter the development, replacing existing households or small and medium-sized enterprises, and leading to academic discussions on MRT-induced gentrification. This study investigates the impact of gentrification of MRT stations and the surrounding space, and examines the spatial and temporal effects of gentrification of MRT stations over ten years. The study uses the area around MRT stations in Taipei City as the target population, and discusses the significance of the distance between MRT stations and residential prices through the ratio of residential and housing price increases in Taipei City. The demographic structure was analyzed by single-factor variance data on household income, low-income households, educational attainment, and population migration to discuss the demographic characteristics of the area, and further discussed the issue of upward and downward population filtering using individual migration data.

Keywords: Gentrification, Transport, Residential mobility, Neighborhood change, Taipei

### References

- 1.Kosta, E. B. (2019). Commercial Gentrification Indexes: Using Business Directories to Map Urban Change at the Street Level. *City and Community*, 18(4), 1101-1122. doi: 10.1111/cico.12468
- 2.Sequera, J., & Nofre, J. (2020). Touristification, transnational gentrification and urban change in Lisbon: The neighbourhood of Alfama. *Urban Studies*, 57(15), 3169-3189. doi: 10.1177/0042098019883734
- 3.Hwang, J. (2020). Gentrification without Segregation? Race, Immigration, and Renewal in a Diversifying City. *City and Community*, 19(3), 538-572. doi: 10.1111/cico.12419
- 4.Hwang, J., & Sampson, R. J. (2014). Divergent pathways of gentrification: Racial inequality and the social order of renewal in Chicago neighborhoods. *American Sociological Review*, 79(4), 726-751. doi: 10.1177/0003122414535774
- 5.Lin, J.-J., & Chung, J.-C. (2017). Metro-induced gentrification: A 17-year experience in Taipei. *Cities*, 67, 53-62. doi: <https://doi.org/10.1016/j.cities.2017.04.019>

84646

## Project Series "Trial Living" - Report from a Living and Working Experiment in Görlitz / Germany

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While many large cities in Europa are experiencing population growth and increasingly congestion in the local housing market, which is often accompanied by further negative impacts on the environment or quality of life; shrinking cities, especially in peripheral locations, are facing the challenge of population loss and following increasing vacancies and the associated decay and deconstruction of infrastructures (Brabazon 2015; Chouraqui 2021). Strengthening these cities as alternative residential locations can contribute to a balanced spatial structure and sustainable spatial development in the long term.

The city of Görlitz - like many cities in Eastern Germany - has suffered major population losses after German reunification due to demographic and structural change. Among other things, this led to high vacancy rates, especially in the historically valuable and listed buildings in the city centre. The city's goal is to preserve these buildings as a whole, therefore much effort is made to generate new residents and revitalization. Since 2008, the "Trial Living" project series has been a "living and working experiment" in which interested people from outside the city can test the location for a limited period of time and verify their inhibitions and prejudice against living in a medium-sized city (Pfeil 2014). Since 2015, different projects have been carried out, where interested applicants are provided with flats, work spaces and, in the future, concrete professional network opportunities for the duration of one week to three months (Knippschild et al. 2020; Zöllter et al. 2019).

The expectations and experiences of the participants, and their wishes and needs for a potential new residential location are evaluated in a scientific monitoring. The findings provide an external perspective on urban and neighbourhood development in Görlitz and in general for medium sized cities in peripheral locations. The projects have shown that cities like Görlitz with their specific potential (available space, tranquillity, deceleration, social proximity) certainly have opportunities as residential locations. However, the participants also expressed requirements for a potential new living and working location that could not yet be fully met. Aspects such as the quality of the space offered, the transport infrastructure, but also economic networks still an important role in the competition for residents.

The projects are experiments for the administration, local partner institutions, the accompanying scientific institution and finally the local society, opening up their minds for external, also critical perspectives on local routines and conditions. Furthermore the individual participants reflected about their personal future in real life situations.

Scientific results will be presented with regard to location factors in medium-sized cities and experiences of the transdisciplinary cooperation between the project partners and participants will be discussed.

Keywords: Vacancies, experimental approaches, medium-sized cities, preservation, transdisciplinarity

#### References

Brabazon, T. (2015): *Unique Urbanity? Rethinking Third Tier Cities, Degeneration, Regeneration and Mobility*. Springer Briefs in Geography. Springer Singapore.

Chouraqui, J. (2021): Medium-sized cities in decline in France: between urban shrinkage and city centre devitalisation. In: *Spatial Research and Planning* 79 (1). pp. 3-20. DOI: 10.14512/rur.26.

Knippschild, R.; Röbber, S., Zöllter C. (2020): Renaissance of Third-Tier Cities Through In-Migration. Assumption from 'Trial Residencies' in Görlitz. In: *disP – The Planning Review* 56 (1). pp. 44-52. DOI: 10.1080/02513625.2020.1756630.

Pfeil, A. (2014): *Leerstand nutzen. Perspektivenwechsel im Umgang mit dem strukturellen Wohnungsleerstand in ostdeutschen gründerzeitgebieten*. Band 64: IÖR-Schriften. Berlin. Rhombos-Verlag.

Zöllter, C. / Röbber, S. / Knippschild, R. (2019): *Stadt auf Probe – Wohnen und Arbeiten in Görlitz. Eine Mittelstadt in peripherer Lage als zukunftsfähiger Wohn- und Arbeitsstandort*. In: *Transforming Cities*, 1-2019. pp. 48-53.

84210

## Incongruous property regulations and scattered efforts to improve housing affordability in the Amsterdam Metropolitan Region

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Scholars increasingly emphasize the diversity of property industry actors who are involved in property development processes. However, the existing literature generally presumes clear messaging and congruency between the multi-layered public sector actors who govern and regulate property development. We argue that the complex landscape of regulations that shapes residential property development is far from representing a coherent and orderly way in which the state operates. Instead, contemporary regulation of housing production is characterized by an increasing number of incongruous legal documents, policy targets, calculative practices, collaboration agreements, memorandums of understandings and other regulatory instruments. Focusing on the Metropolitan Region Amsterdam, we expose incongruous property regulations and mismatches between housing targets in the region. Furthermore, we shed light on the scattered efforts across diverse public administration scales to improve housing delivery and access across the region. Within these increasingly complex landscapes, we conclude that there is an urgent need to develop regional governance mechanisms that coordinate fragmented regulatory efforts and residential investment landscapes with the underlying aim to ensure affordability and accessibility to housing in the Metropolitan Region Amsterdam.

Keywords: property, regulations, housing, governance, fragmentation, affordability

References

N/A

85017

## Perspectives on Affordable Housing Partnerships in Canadian Cities

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A growing affordability problem affecting over 5 million people in Canada has prompted a renewed commitment of the federal government, complemented with provincial and municipal programs, to increase the supply of affordable rental housing. An effective response requires a multi-sectoral approach, including all levels of government, the private for-profit and non-profit sectors, as well as local communities (Moore and Skaburski, 2004). The last few years have seen large Canadian cities join their efforts with non-profit and private organisations to provide affordable rental housing in mixed-income, mixed-tenure projects to address vulnerabilities in the housing market as well as make Canadian cities more inclusive (Tsenkova, 2019).

The conceptual approach taken in this research is to understand how partnerships can be effective in planning, building and delivery of affordable housing (Booher & Innes 2002). A central question refers to implementation of new partnership models in the development process. Over time, the composition of actors and agencies involved has shifted drastically from public provision towards multi-actor/agency collaboration (Berry 2014). While there is a common mandate to provide housing that is affordable, the definitions and criteria for allocation and eligibility of recipients, governance and management policies, and typologies of housing forms vary widely (Carmona et al 2003). A second question relates to the design of adequate policies to develop partnerships for affordable rental housing. Canadian cities experiment with a range of innovations in public/private approaches supported by planning instruments (inclusionary zoning, community land trusts, and rezoning of public land) to address the affordability gap (Brinkerhoff & Brinkerhoff, 2011) and social integration.

The research addresses a significant gap in the evaluation of partnerships, focusing on the nature of multi-agency collaborations in the provision process (design, build, finance, operate). Partnerships capitalise on the effective role of the public sector in the mobilization of resources, the efficiencies of private agencies in the development process (design, build) and the hybridity of the non-profit institutions (management, service delivery). The research develops a conceptual framework, based on place-based and people-based outcomes, to evaluate the efficiency and effectiveness of affordable housing partnerships. The methodology is based on literature review, environmental scan of neighbourhood plans, review of 25 projects of mixed-income housing as well as key informant interviews. We have used facilitated discussion with 40 housing professionals to validate the framework and the approach for this research. Key findings from the research from case studies in the large Canadian cities—Toronto, Vancouver and Montreal identify challenges and opportunities in the mixed-income neighbourhood development model.

Keywords: partnerships, planning instruments, affordable housing, evaluation, cities

References

Booher, D. and Innes, J. (2002) "Network power in collaborative planning." *Journal of planning education and research*, 21(3), 221-236.

Brinkerhoff, D. and Brinkerhoff, J. (2011) "Public-private partnerships: perspectives on purposes, publicness, and good governance." *Public Administration and Development*, 31 (1), 2-14.

Carmona, M., Carmona, S., and Gallent, N. (2003) *Delivering New Homes: Processes, Planners, and Providers*. London: Routledge.

Moore, E., and Skaburski, A. (2004) "Canada's increasing housing affordability burdens." *Housing Studies*, 19(3), 395-413.

Tsenkova, S. (2019) "Partnerships: Creating Affordable Housing Opportunities in Canada." Forster, W.; Menking, W. (eds) *The Vienna Model 2: Housing for the City of the 21st Century*. Berlin: Jovis, 120-137.

84632

## New peripheries in the making: Analysing (de)concentrations of poverty in German city-regions

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Rising rents in recent years and an ever decreasing segment of social housing mean that low-income households face increasing competition for affordable housing in cities. In the Anglo-American literature in particular, an increase in poor and low-income households in suburban areas has been discussed for years, partly as a result of displacement from more attractive, urban areas. The suburbanisation of poverty can now be considered a general phenomenon for US cities, as there is a relative increase of poverty in suburban locations in almost all metropolitan regions (Cooke and Denton 2015; Allard 2017; Airgood-Obrycki 2019). Decentralisation processes of poverty have been observed for the UK (Bailey/Minton 2018) and for Dutch cities (Hochstenbach/Musterd 2021), too. For German city-regions, there is only selective evidence so far on dynamics and dimensions of such processes.

Our main objective with the paper is to discuss trends and drivers across countries influencing suburban concentrations of poverty. The paper engages with two (interrelated) questions and challenges: (1) Understanding the generalisability of trends and the regional and context dependent variation of suburbanization processes, and (2) identify factors mitigating the processes of suburbanisation of poverty. Empirical findings for German city-regions are discussed in the context of cross-national evidence on drivers influencing and filters mediating the dynamics and dimensions of such processes. Such filters are nationally or locally specific regulations and policies, such as social policies, affordable housing policies, tenant protection, rent brakes, or housing benefits.

The paper is based on a research project on suburbanisation of poverty in German city regions and a mixed, quantitative data-based and qualitative interpretative approach. We explore spatial development specifics and the influence of social and housing policies on displacement and the spatial distribution of poor and low income households in three German city regions (Aachen, Karlsruhe and Leipzig). Our findings so far point to social systems and housing policies in Germany as a factor mitigating the trend of suburbanisation of poverty. There is evidence of inner-urban displacement and a worrying trend of concentrating poverty in few remaining inner-city areas that are accessible to low-income households. Even if we cannot confirm the displacement of low-income households beyond the city limits as a general trend for all three study regions, our findings underline the importance of monitoring changes in the social geography of regions and evaluating the suitability and effectiveness of social policies.

Keywords: low-income households; poor households; (de)contraction of poverty in (German) city-regions; suburbanisation of poverty

## References

- Airgood-Obrycki, W. (2019): Suburban status and neighbourhood change. In: *Urban Studies* 56 (14), 2935–2952. DOI: 10.1177/0042098018811724.
- Allard, S. W. (2017): *Places in need. The changing geography of poverty*. New York.
- Bailey, N.; Minton, J. (2018): The suburbanisation of poverty in British cities, 2004-16. Extent, processes and nature. In: *Urban Geography* 39 (6), 892–915. DOI: 10.1080/02723638.2017.1405689.
- Cooke, T. J.; Denton, C. (2015): The suburbanization of poverty? An alternative perspective. In: *Urban Geography* 36 (2), 300–313. DOI: 10.1080/02723638.2014.973224.
- Hochstenbach, C.; Musterd, S. (2021): A regional geography of gentrification, displacement, and the suburbanisation of poverty: Towards an extended research agenda. In: *Area*. 2021 (53), 481–491. DOI: 10.1111/area.12708.

## TRACK 5: GOVERNANCE

85118

### Inclusive Development and Growth in Peripheral Space - Reflection on the Glass Ceiling of Development Areas in Israel

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Despite Israel's development efforts in the peripheral areas, the positive national economic ratings doesn't translate into social economic well-being among a large proportion of citizens. One of the most notable differences between the population groups that enjoy Israel's economic growth and those who don't, is the geographical location.

The research question is thus: How do the national policies and metrics, affect the regional policies and metrics, and how do they impact inclusive development and growth promotion?

This is a two-stage study: first, the study seeks to examine the policy circle of two government resolutions perceived as groundbreaking in terms of social economic development of the southern and northern periphery in Israel. Then, the study compares the annual national workplans and metrics with the aims and metrics of regional government decisions, in order to emphasize the differences between national thinking and regional thinking. The research examines the relationship between the two as a factor in creating change or preserving development in residents' lives.

The study is based on government resolutions, government documents, reports of research institutes on development in the periphery and nearly forty interviews conducted with officials from government ministries (Prime Minister's Office, Ministry of Economy, Ministry of Tourism and Ministry of Health), peripheral mayors, from the business and academic sectors, and civil society.

The process of creating government resolutions involving development of the periphery, as reflected in the "policy circle", indicates that government resolutions are made without a solid professional base aimed at developing the periphery. The sections included in the resolutions which were based on development professional knowledge, face budgeting constraints led by liberal principles of efficiency and deficit maintenance, the approach of the Ministry of Finance, without principles of balanced logic of development. In addition, and not coincidentally, the resolutions have no horizon in terms of long-term government investment or measurable goals that are inclusive of the quality of life of the residents of the area. The results of the study indicate and detail additional challenges at the political, structural and professional level and structural failures affecting the ability to create inclusive regional development by national government.

Keywords: Spatial Inequality, Public Policy, Regional Development, Inclusive Development, Periphery

References

Berg, A. & Ostry, J.(2013). Equality and Efficiency: Is there a trade-off between the two?. In Genevey, R.; Pachauri, R.K & Tubiana, L (Eds.) Reducing Inequalities: A Sustainable

Development Challenge (pp. 96-100) Paris: Cirad.

Nolan, B. (Ed.). (2018). *Inequality and Inclusive Growth in Rich Countries: Shared Challenges and Contrasting Fortunes*. Oxford: Oxford University Press.

Perrons, D., & Dunford, R. (2013). Regional development, equality and gender: Moving towards more inclusive and socially sustainable measures. *Economic and Industrial Democracy*, 34(3), 483–499. <https://doi.org/10.1177/0143831X13489044>

Pike, A, Rodríguez-Pose, A & Tomaney, J. (2017). *Local and Regional Development*. Second Edition. London: Routledge.

Teichman, J. A. (2016). *The Politics of Inclusive Development: Policy, State Capacity, and Coalition Building*. London: Palgrave Macmillan UK.

Temin, P. (2015). *The American Dual Economy: Race, Globalization, and the Politics of Exclusion*. Working Paper No. 26 New York: Institute for New Economic Thinking.

Thomas, A. (2000). "Development as practice in a liberal capitalist world," *Journal of International Development* 12(6), 773-787.

Wade, R. (2004). Is Globalization Reducing Poverty and Inequality?, *World Development*, Vol. 32, No.4, 567-589.

84090

## Values-led planning and value capture instruments for sustainable management of land-related resources

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The focus of the study is on exploring the improved spatial planning practice in relation to recognised applicable value capture instruments. Rational assumptions in planning support the optimisation of the decision-making process that considers choices between different values and existing uncertainties as well as circumstances and alternatives. However, based on this rational reasoning, the planning process also demands mutual discussions by the involved stakeholders. The introduction of values-led planning (VLP) approach has been suggested for better understanding and guiding the relevant processes and their effects in specific territories based on (1) the identified values as an outcome of experts' work and (2) the attitudes from stakeholders' preferences concerning these values. Public value capture as essential phenomenon targets to improve the refinancing of public infrastructure and keep the necessary budget for other important duties like education, health and social care. For this reason, it is one of the key factors of responsible land management and smart tools are needed for successful implementation. The recent analysis focuses on the terminology used, the specific causes of land value increase, rationales and instruments used for land value capture (LVC), and the purpose of using the collected funds. LVC as a policy approach allows municipalities to recover and reinvest land value increases resulting from public investments and government policies. LVC tools are used around the world, yet there has been little comprehensive and comparable documentation on how these tools are employed across different countries. The aim of the study is based on comparative case analysis in Latvia and Italy to demonstrate how can improved planning practice and particular instruments support sustainable land management, and what are the caveats to mitigate some of the negative consequences. The usefulness of the VLP approach is found in dynamics and potential changes in land use and its values. The potential for further land-use change first should be assessed and then supported by binding decisions. The paper gives an overview of the LVC as well as discusses how it promotes local development and what is the institutional environment supporting it in both countries. Similarities and differences in the implementation of spatial plans in both differently experienced countries are highlighted as well. The results allow the improvement of existing instruments and encourage detailed discussions with experts of other countries that have similar instruments. Both general and more specific considerations will contribute to the possible improvement of the implementation of LVC instruments as they support efficient land use – less land consumption and land thrift.

Keywords: values-led planning (VLP), value capture, land use management, sustainable development

References

Auzins A. and Chigbu U.E. Values-Led Planning Approach in Spatial Development: A Methodology. *Land*2021, 10, 461. <https://doi.org/10.3390/land10050461>

Hendricks, A. Public Value Capture – An Opportunity to Improve the Economic Situation of African Municipalities. In: Walter Timo de Vries, John, Tiah Bugri, Fatima Mandhu (eds.), *Responsible and Smart Land Management Interventions: An African Context*, CRC Press – Taylor&Francis Group, 2020, pp. 251-262.

Vejchodská, E., Barreira, A. P., Auziņš, A., Jürgenson, E., Fowles, S., Maliene, V. Bridging land value capture with land rent narratives. *Land Use Policy*, 114 (2022) 105956.

<https://doi.org/10.1016/j.landusepol.2021.105956>

OECD (2021). *Building a Global Compendium on Land Value Capture*.

<https://www.oecd.org/cfe/cities/Land-Value-Capture.htm>.

85072

## How to plan for care-full densification? Spatial organization and governance of care as a community resource

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This paper develops a conceptual framework to study the social sustainability of urban densification. Federal/national governments promote densification of the built environment legally and politically to serve the ecological sustainability goals via limiting urban sprawl. However, as a significant reorganization of urban space, densification also impacts the spatial organization of care. Our primary research question is: How can care be conceptualized as a resource that needs to be managed sustainably to serve all potential users? We start with a broad definition of care based on feminist ecological ethics as "all supporting activities that take place to maintain and repair the world we live in as well as possible" to make the connection with social sustainability (Tronto 2020). Then, we adopt the neo-institutionalist approach of the Institutional Resource Regime (IRR) framework to conceptualize care as a resource and explore its governance as a spatialized community resource. Although the care resource depends on higher-tier rules and regulations (i.e., social security), the implementation of social affairs is a local responsibility (except for some highly specialized care infrastructures, such as hospitals, which are beyond the scope of this paper). Our analytical framework postulates causal relationships between institutions (explanatory variable), actors (intermediary variable), and the condition of the resource (dependent variable) (Gerber et al., 2009). We identify public policy (welfare state, social security policy, land use planning, and housing policy) and property titles as formal institutions that aim to mitigate the "care crisis" (public problem). We also include patriarchy and heteronormative family values as informal institutions that impact actor strategies in care provision complementing the formal institutions. Actors consist of care providers (paid and unpaid, individuals and organizations) and beneficiaries (older adults and households). Finally, the condition of the care resource, our dependent variable, is a constellation of reciprocal care relations between actors and different caring arrangements via market, community, and public sector-based provision mechanisms. We hypothesize that care-full neighbourhoods require institutions that mitigate intersectional inequalities that cause differential access to care resource. To evaluate the condition of the care resource, we consider accessibility, quality, and cost. We apply this conceptual framework to a sample of densification projects from Switzerland. Our findings provide insights for urban governance structures that bring together the actors involved in care provision to secure the perpetuation of the resource and sustain care-full neighbourhoods in the long run.

Keywords: densification, social sustainability, care, urban governance, institutional resource regime, Switzerland

### References

Alam, A. and Houston, D. (2020). Rethinking care as alternate infrastructure. *Cities*, 1-10.  
Dempsey, N., Bramley, G., Power, S., and Brown, C. (2011). The social dimension of

sustainable development: Defining urban social sustainability. *Sustainable Development*, 19, 289-300.

Dowling, E. (2021). *The care crisis: What caused it and how can we end it?* London: Verso.

Gerber, J. D., Knoepfel, P., Nahrath, S., & Varone, F. (2009). Institutional Resource Regimes: Towards sustainability through the combination of property-rights theory and policy analysis. *Ecological economics*, 68(3), 798-809.

Mouratidis, K. (2018). Is compact city livable? The impact of compact versus sprawled neighborhoods on neighbourhood satisfaction. *Urban Studies*, 55(11), 2408-2430.

Tronto, J. C. (2020). *Moral boundaries: A political argument for an ethic of care*. Routledge.

Power, E. R. and Mee, K. J. (2019). Housing: an infrastructure of care. *Housing Studies*, 1-22.

85163

## Collaborative approaches in Swedish municipal planning for sustainable urban development

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Substantial efforts are needed to manage the expected urban growth and to meet sustainability goals, such as SDG 11 Sustainable Cities and Communities. This challenging agenda calls for planning processes that enhance an urban development that responds to multiple sustainability goals and merges different perspectives in the search for innovative and cohesive actions within the built environment. The contemporary situation in municipal planning requires the involvement of a multitude of actors which calls for effective collaboration to facilitate a broad and open dialogue in the planning process. Planners who are engaged in collaborative governance to address sustainability issues have to navigate in an intricate institutional landscape with fragmented responsibilities and potentially contradictory demands. They are expected to promote, facilitate, scale up collaboration that bridges societal sectors, involves and empowers citizens and enables economically efficient, socially just and environmental-friendly policies, although this may challenge or disrupt established practices in their own organizations. At the same time, as municipal planners act on behalf of the local political leadership, they are expected to adhere to and safeguard the logic of the public administration and the legitimacy and decision-making power of the municipal assembly. While there is a rather extensive literature on characteristics and outcomes of collaborative governance efforts in relation to sustainability in Swedish municipalities, few studies have investigated how municipal planners perceive and negotiate these demands. This paper presents preliminary results of an ongoing study on practitioners' experiences on collaborative processes for sustainable urban development and identify critical factors for a successful collaboration between representatives from different administrations. Furthermore, the paper discusses the institutional context for collaborative projects through the lens of "institutional logics" i.e. "public sector logics" and "experimental logics". The study is based on interviews and focus-group interviews with municipal planners in the cities of Stockholm, Göteborg and Malmö. Some highlights from the results are

- (i) The collaboration process changes over time, new knowledge is added, it is a learning process which calls for flexibility and allows the target image to change.
- (ii) Complex issues like climate change demand engagement of different organisations and a joint ownership of the process and the outcome e.g. through rotating leadership.
- (iii) There is a need to embed the process in the organisations involved and establish support among public and private actors
- (iv) Ensure follow up after finalizing the collaboration process to enhance learning and institutional capacity building
- (v) Institutional development that enables to promote sustainability issues takes place between proponents of the experimental and public sector logics.

Keywords: Collaboration, municipalities, sustainability, urban development, practitioners' perspectives, governance

#### References

Coaffee, J. and Healey, P. 2003. "My Voice: My Place": Tracking Transformations in urban governance. *Urban Studies*, vol. 40, no. 10, pp. 1979–99

Högström, J., Balfors, B. and Hammer, M. 2018. Planning for sustainability in expansive metropolitan regions: exploring practices and planners' expectations in Stockholm, Sweden *European planning studies*, Vol.26 (3), p.439-457

Högström, J., Brokking, P., Balfors, B. and Hammer, M. 2021. Approaching Sustainability in Local Spatial Planning Processes: A Case Study in the Stockholm Region, Sweden. *Sustainability*, Vol.13 (5), p.2601

McCormick, K., Anderberg, S., Coenen, L., & Neij, L. (2013). Advancing Sustainable Urban Transformation. *Journal of Cleaner Production*, 50, 1-11.  
<https://doi.org/10.1016/j.jclepro.2013.01.003>

Smedby, N. and Neij, L. 2013. Experiences in urban governance for sustainability: The Constructive Dialogue in Swedish municipalities, *Journal of Cleaner Production* 50:148-158, DOI:10.1016/j.jclepro.2012.11.044

Thornton, P. H., & Ocasio, W. C. (2008). Institutional Logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The SAGE Handbook of Organizational Institutionalism* (1 ed., pp. 99-129). SAGE Publishing. <https://doi.org/10.4135/9781849200387.n4>

84858

## Between opportunity and cooperation: the new governance model for Maritime Spatial Planning (MSP) in Italy

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In response to the intense pressures that are threatening coastal and maritime environments, the European Commission, with Directive 2014/89, established the framework for Maritime Spatial Planning. The coastal Member States were required to draw up a strategic plan capable of responding promptly to the impacts (social, economic, environmental, and climatic) and management (to date conflicting) of the spaces and resources in which many activities compete. In Italy, the actualization of the directive has been implemented with the Legislative Decree n. 201/2016 jointly with the DPCM of December 1, 2017, approving the guidelines, i.e. addresses and criteria to elaborate for the management of the Maritime Space.

The preparation of the strategic tool on a national scale, especially in the maritime sphere, where knowledge is minimal (only 5% of the world's seabed has been explored, Schmidt Ocean Institute) and interests very high, has made it necessary to adopt a multi-scalar approach, able to intervene spatially on different scales and integrally on the respective actors and sectors.

For this reason, the article focuses on the configuration of the governance model within the Italian maritime planning process, evaluating in an analytical perspective, the various information and operational gaps carried out during the articulation of the phases of which the plan is composed and in the relationships of cooperation and coordination between the various actors involved in the different levels of order.

At the methodological level, the study recognizes three areas of investigation: the reconstruction of the cognitive framework, the development of the strategy, and the ability to integrate the sectoral urban planning tools, present, and future.

Specifically, the first area investigates the process of collection and organization, in a single system, of the ministerial and regional information layers and the integrative contributions of the superintendencies on the landscape theme.

The second area presents the planning techniques undertaken in the process. It intends to analyze the coherence of the strategic objectives set at the national level and their declination in the specific regional goals and the fragmentation of the sea from existing uses to planning units as a result of strategic direction.

The last scope defines how landscape plans, SCI and SPAs management plans, and sectoral plans (fishing, aquaculture, etc. ..) got integrated into the plan's sea.

The expected outcome of the study is to observe and evaluate, in an analytically way, how the different existing competencies can synergistically contribute to the drafting of the first national maritime strategic plan and what fallout this process entails in the planning system.

Keywords: maritime spatial planning, new governance, integrated planning, landscape, institute cooperation

References

Decreto Legislativo 22 gennaio 2004, n. 42 “Codice dei beni culturali e del paesaggio”

Decreto Legislativo 17 ottobre 2016, n. 201 “Attuazione della direttiva 2014/89/UE che istituisce un quadro per la pianificazione dello spazio marittimo”

Decreto del Presidente del Consiglio dei Ministri 1 dicembre 2017 “Approvazione delle linee guida contenenti gli indirizzi e i criteri per la predisposizione dei piani di gestione dello spazio marittimo”

EC. (2014a). Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 Establishing a Framework for Maritime Spatial Planning. Official Journal of the European Union, L 257/135.

Ehler, C. (2017). World-Wide Status and Trends of Maritime/Marine Spatial Planning. Presented at the 2nd International Conference on Marine/Maritime Spatial Planning, UNESCO, Paris.

Trouillet, B., & Jay, S. (2021). The complex relationships between marine protected areas and marine spatial planning: Towards an analytical framework. *Marine Policy*, 127, 104441. doi:10.1016/j.marpol.2021.1044

Zaucha, J., & Gee, K. (2019). *Maritime Spatial Planning: past, present, future*. Palgrave Macmillan

85307

## New form of community: a model of relational proximity

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This contribute begins from a critique of institutionalized italian participation and attempts to identify bottom-up processes as the way to strengthen the bond of trust with institutions. In this contest appear the strong asymmetry between questions from below and institutional answer, in particularly when interested supra local level.

The purpose of contribution is introducing a reflection on the perception of the community and on the role that is attributed to it in participatory processes of spatial planning. This investigation puts in tension the concept of “participation”, understood as institutional practice, and not always carried out respecting the inspiring principles, and the concept of “community”, which for too long has been an ideal.

In this context, two elements strongly emerge: the profound disconnection between the actors (active citizenship and institutions) and the inability of the Institution to renew itself and to transfer the demands of citizenship into policies and actions, from local to regional planning. How can we achieve a collaborative dimension between communities and institutions to build shared visions in regional planning?

The contribution uses a qualitative and comparative method between two case studies of Italians River Agreements in an action research frame, to investigate the role of actors in the process: Ombrone River Agreement (Tuscany) and Simeto River Agreement (Sicily).

The contribution interprets the river agreement as a field, of observation able to activate collaboration between institutions, citizens and stakeholders at the territorial scale.

The aim of the research is to propose an experimental cyclical approach for collaborative planning at a regional scale, collective learning that revolves around three actors, which is also realized through the introduction of some elements of the community organizing. In this approach the construction of an organized community becomes the trigger of the collaborative planning process and, vice versa, the planning tool becomes the place of experimentation of local practices and innovation.

The main goal of the research is to define a model of relational proximity between organized community, university and institutions, for realize a shared future vision of the territory and opening to the experimentation of a new season for regional planning.

Keywords: community - collaborative planning - governance - community organizing – action research

### References

- Alinsky S. D. (1971), *Rules for Radicals: A Pragmatic Primer for Realistic Radicals*, Random House, New York
- Dewey J. (1971), *Comunità e potere*, La Nuova Italia, Firenze
- Friedman J. (1979), *The good society*, MIT Press

Healey P. (2002), Collaborative Planning. Shaping places in fragmented societies, Univ of British Columbia Pr  
Lingua V., Balz V. (2020), Shaping Regional Futures, Springer  
Saija L., Pappalardo G. (2018), “An Argument for Action Research-Inspired Participatory Mapping”, Journal of Planning Education and Research

84815

## Italian metropolitan cities in search of a European dimension. Evidence from Torino.

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Metropolitan areas are important players in the development of the European territory. However, they still have a limited role and room for action in the programming and implementation of the EU cohesion policy. Drawing on the results of the ESPON METRO project, this paper aims to explore and discuss, on the one hand, the contribution of the Metropolitan City of Turin (Italy) to the implementation of the cohesion policy and, on the other hand, the added value of the latter on metropolitan development and governance. To this aim, the paper focuses on the Metropolitan City of Turin's role, institutional context, capabilities and perspectives in the framework of the EU cohesion policy, also in relation to the national and regional contexts.

Metropolitan Cities are administrative units formally established in Italy by the reform of local authorities (National Law 56/2014), replacing the respective Province authorities. They still perform all the functions of the previous Province authorities and have gained additional functions, such as strategic, spatial and mobility planning, organization of coordinated systems for the management of public services, mobility and transport, promotion and coordination of digitalization and economic and social development.

The Metropolitan City of Turin is the wide area, a second level local authority that replaced the former Province of Turin from January the 1st, 2015. The metropolitan institution brings together 312 municipalities, covering a large and heterogeneous territory, from dense urban areas to small towns and villages, much larger than the functional urban area of Turin. It is the largest metropolitan city in Italy, fourth in population size (2.2Mln inhabitants) and seventh in population density (330 inh/km<sup>2</sup>).

The contribution will show that despite the high level of institutionalization and competencies granted to Italian Metropolitan Cities, which are formally acknowledged as an entity also enjoying a supranational relevance when it comes to access EU funds, the Metropolitan City of Turin did not play any relevant role neither in the elaboration of key policy and programming documents of the EU cohesion policy nor in their management and implementation, while the Region and the national level remain the main actors steering the process.

Keywords: EU Cohesion policy, metropolitan governance, metropolitan city of Turin, metropolitan development, ESPON

### References

Boggero, G. (2016), The Establishment of Metropolitan Cities in Italy: An Advance or a Setback for Italian Regionalism?, *Perspectives on Federalism*, 8(3), E-1.

Crivello, S., Staricco, L. (2017), Institutionalizing Metropolitan cities in Italy. Success and limits of a centralistic, simplifying approach, *Urban Research & Practice*, 10:2, 228-238

Cotella, G., Vitale Brovarone, E., Staricco, L., Casavola, D. (2021), METRO - The role and future perspectives of Cohesion Policy in the planning of Metropolitan Areas and Cities. Annex III: Metropolitan City of Turin case study, Luxembourg, ESPON pp. 1-90

Cotella, G.; Vitale Brovarone, E.; Berisha, E.; Casavola, D.; Pioletti, M.; Demazière, ... (2021), METRO - The role and future perspectives of Cohesion Policy in the planning of Metropolitan Areas and Cities. Final report, Luxembourg, ESPON pp. 1-76

84702

## Metropolitan harmony, sectoral cacophony: insights from the Metropolitan Area of Lisbon

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Since 1991, Lisbon has had a metropolitan agency, which was to be tasked with inter-municipal coordination and to absorb sectoral responsibilities at the regional/supramunicipal scale. During the past three decades, the scope of responsibilities that were to be devolved to this metropolitan body expanded significantly. At least, that is what is spelled out in the legal framework. Yet, this theoretical harmony - a fully developed metropolitan governance agency is tasked with multi-sectoral policy and implementation - has little correspondence with the reality, as we explore in this communication through cross content-analysis of strategic and legal documents related to governance in the Metropolitan Area of Lisbon (MAL) and interviews with decision-makers and experts.

In reality, most of the sectors remain either firmly under the control of municipalities, which often pursue individualistic strategies, or are managed through central government agencies, with little regard for local specificities. The ever-expanding body of legal documents supporting the transference of sectoral management to the metropolitan body has barely been realized, with municipalities and the central government seeming reluctant to give up their current competencies and resources.

The post-1974 (re)affirmation of local governments was in its infancy when the metropolitan agencies were first established in 1991. This would help explain the resistance municipalities have shown towards the strengthening of an inter-municipal entity, with a corresponding bottom-up delegation of competencies and pooling of resources. Also, there is a protracted and incomplete devolution of resources and mandates from central government agencies onto the Metropolitan Area, expressed in hesitations in the full implementation of the inter-municipal agency's competencies and unclear identification of leading entities in strategic documents. Among this cacophony, there are some glimpses of hope for a more finely tuned metropolitan governance. The creation of a single metropolitan transport pass and transference of a transport network planning mandate and the appropriate human and financial resources to pursue it proves that, with incentives and clear policy definition, it is indeed possible to engage all municipalities and central government agencies in transferring onto the Metropolitan Area the sectoral management of a strategic sector. It remains to be seen whether other sectors will follow the lead.

Keywords: Metropolitan governance, Metropolitan Area of Lisbon, inter-municipal cooperation, public policies

### References

Brenner, N. (1998). Global cities, glocal states: global city formation and state territorial restructuring in contemporary Europe. *Review of International Political Economy* 5(1): 1-37.

- Bressers, H., Bressers, N., Kuks, S., and Larrue, C. (2016). The governance assessment tool and its use. In *Governance for Drought Resilience* (pp. 45-65). Springer, Cham.
- Charbit, C. (2011). Governance of public policies in decentralised contexts: The multi-level approach. *OECD Regional Development Working Papers*.
- Crespo, J.L. and Cabral, J. (2010). The institutional dimension to urban governance and territorial management in the Lisbon metropolitan area. *Análise Social* 45(197): 639-662.
- Pereira, M. and Carranca, M.A. (2009). Governance in the Lisbon Metropolitan Area: between the ambition of reinforcing the international rank and the will for deeper internal territorial cohesion. In *Conference Papers City Futures* (Vol. 9, pp. 4-6).
- Seixas, J., Albet, I. and Mas, A., Eds. (2012). *Urban Governance in Southern Europe*. Farnham: Ashgate.
- Zimmermann, K., Galland, D. and Harrison, J. (Eds.) (2020). *Metropolitan regions, planning and governance*. Berlin: Springer.

82937

## The role of metropolitan areas in the EU cohesion policy. Much ado about nothing?

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Metropolitan areas have usurped the role of cities as catalysts and drivers of global development, as a consequence of complex processes of socioeconomic reorganisation and rescaling (Brenner, 2003; Gross et al., 2018). This challenges traditional spatial governance models, with existing territorial units that are ill-equipped to deal with phenomena hardly manageable within their fixed administrative boundaries (Salet et al., 2015; Zimmerman et al., 2020; Berisha et al., 2021). A growing number of institutional experimentations have emerged in European countries and regions, aiming to address the metropolitan dimension. At the same time, the importance of metropolisation processes has been also recognised by EU that, through time, have progressively adapted its cohesion policy to cater to the needs of metropolitan areas (Atkinson & Zimmermann, 2016, Cotella, 2019). However, to adopt suitable metropolitan governance arrangements that can exploit the opportunities offered by the EU cohesion policy remains a challenge, and metropolitan areas often lack the tools, jurisdiction and funding that would allow them to embrace their role to a full extent. Aiming at shedding light on the matter, the author draws on the results of the ESPON METRO project (ESPON, 2022) to answer two main policy questions: (i) what role do metropolitan areas play in the development, management and implementation of the cohesion policy? (ii) What is the added value of the cohesion policy in the planning and implementation of metropolitan policies? More in detail, the contribution reflects on how the high heterogeneity that characterises the metropolitan phenomenon and its governance has until now prevented the emergence of a true metropolitan dimension in the EU cohesion policy. In the 2014-2020 programming period, metropolitan areas have played a rather limited role in the programming, management and implementation of the EU cohesion policy and only in the new programming period some advancements in this concern are noticeable. On the other hand, in all metropolitan areas under investigation a high level of coherence between the metropolitan development goals and the EU cohesion policy priorities has been detected and practical evidence of the added value of the EU cohesion policy identified.

Keywords: Metropolitan areas, territorial governance, rescaling, EU cohesion policy, Europeanisation, ESPON.

### References

- Atkinson, R., & Zimmermann, K. (2016), Cohesion policy and cities: An ambivalent relationship. In Piattoni S., Polverari L. (eds.) Handbook on cohesion policy in the EU. Edward Elgar Publishing.
- Berisha, E., Cotella, G., Janin Rivolin, U., & Solly, A. (2021). Spatial governance and planning systems in the public control of spatial development: a European typology. *European planning studies*, 29(1), 181-200.
- Brenner, N. (2003). Metropolitan institutional reform and the rescaling of state space in

contemporary Western Europe. *European urban and regional studies*, 10(4), 297-324.

Cotella G. (2019). The Urban Dimension of EU cohesion policy. In E. Medeiros (Ed.) *Territorial Cohesion. The Urban Dimension*, Springer. pp.133-151.

Gross, J. S., Gualini, E., & Ye, L. (Eds.). (2018). *Constructing metropolitan space: Actors, policies and processes of rescaling in world metropolises*. London: Routledge.

ESPON (2022 - forthcoming). *ESPON METRO – The role and future perspectives of Cohesion Policy in the planning of Metropolitan Areas and Cities*. Luxembourg: ESPON EGTC [Available at: <https://www.espon.eu/metro>]

Salet, W., Vermeulen, R., Savini, F., Dembski, S., Thierstein, A., Nears, P. & al. (2015). Planning for the new European metropolis: functions, politics, and symbols. *Planning Theory & Practice*, 16(2), 251-275.

Zimmermann, K., Galland, D., & Harrison, J. (Eds.). (2020). *Metropolitan regions, planning and governance*. Berlin: Springer.

83059

## Spatial governance and planning systems and the sustainability of spatial development in Europe

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The attention on the sustainability of development processes and of the spatial transformations that they entail has grown incrementally in the last decade (Salet, 2014; Ronchi et al., 2019; Debski et al., 2020; Solly et al., 2021). Aiming at shedding light on the matter, the ESPON SUPER project (2018-2020) investigated, through quantitative and qualitative means, the actual sustainability of urbanization processes and land use practices in Europe and the capacity of spatial governance and planning systems to steer and manage them (ESPON, 2020, Cotella et al., 2020). Through an online survey the project gathered the opinions of 163 experts from 37 European countries (26 EU + 11 non-EU) in relation to these aspects. In particular, the respondents were required to discuss whether in their national context spatial development has become more or less sustainable since 2000, and to specify whether the main obstacles to the sustainability of spatial transformations have been political – i.e. depending on the lack of a more or less explicit political will – or technical – i.e. depending on the nature and effectiveness of the spatial governance and planning system and related instruments and practices. The results of the survey were then correlated with quantitative data from the Corine Land Cover database on land use change across European countries and regions from 2000 to 2018. The proposed contribution draws on the results of this activity and on the authors' previous research on the public control of spatial development (Janin Rivolin, 2017; Berisha et al. 2021) to develop a typology of spatial governance and planning systems in Europe in relation to their capacity to influence, in positive or negative terms, the sustainability of spatial development. Overall, the results of the analysis suggest that the latter is a function of different variables, which include the power relations between state and market actors that permeate the decision-making arena, the actual political will of the public actor to pursue spatial development trajectories that are more sustainable and the availability of spatial governance and planning instruments that are appropriate for this task.

Keywords: Spatial governance and planning systems, spatial development, sustainable urbanisation, land use, public control, ESPON

### References

Berisha, E., Cotella, G., Janin Rivolin, U., & Solly, A. (2021). Spatial governance and planning systems in the public control of spatial development: a European typology. *European planning studies*, 29(1), 181-200.

Cotella, G.; Evers, D.; Janin Rivolin, U.; Solly, A.; Berisha, (2020) SUPER – Sustainable Urbanisation and Land-Use Practices in European Regions. A Guide to Sustainable Urbanisation and Land Use, ESPON EGTC, Luxembourg 2020. [Available at: [https://www.espon.eu/sites/default/files/attachments/2020\\_ESPON\\_SUPER\\_Guide\\_final\\_A4\\_screnview.pdf](https://www.espon.eu/sites/default/files/attachments/2020_ESPON_SUPER_Guide_final_A4_screnview.pdf) ]

Dembski, S., Hartmann, T., Hengstermann, A., & Dunning, R. (2020). Introduction enhancing understanding of strategies of land policy for urban densification. *The Town Planning Review*, 91(3), 209-216.

ESPON (2020) ESPON SUPER - Sustainable Urbanization and Land-use Practices in European Regions, Final Report, Luxembourg: ESPON EGTC. [Available at: <https://www.espon.eu/super>]

Janin Rivolin, U. (2017). Global crisis and the systems of spatial governance and planning: a European comparison. *European Planning Studies*, 25(6), 994-1012.

Ronchi, S., Salata, S., Arcidiacono, A., Piroli, E., & Montanarella, L. (2019). Policy instruments for soil protection among the EU member states: A comparative analysis. *Land Use Policy*, 82, 763-780.

Salet, W. (2014). The ladder of sustainable urbanization. *disP-The Planning Review*, 50(4), pp. 4-5.

Solly, A., Berisha, E., & Cotella, G. (2021). Towards Sustainable Urbanization. Learning from What's Out There. *Land*, 10(4), 356.

85281

## The Marine Protected Area Contract as a collaborative governance tool: the pilots in Lazio region, Italy

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The Mediterranean Basin is acknowledged as a major biodiversity hotspot in the world. It hosts 1,215 Marine Protected Areas (MPAs) and Other Effective area-based Conservation Measures (OECMs), covering 171,362 km<sup>2</sup> which places a surface of 6.81% under a legal designation and over 72.77% of the surface covered is located in the Western Mediterranean, 90.05% of the total surface covered by MPAs and OECMs are found in EU waters (MedPan, 2016).

In Marine Protected Areas, however, the protection of nature and economic development issues configure extensive conflicts between local actors and management purposes. To fill this gap, the project InterregMED TUNE UP-Promoting multilevel governance for tuning up biodiversity protection in marine areas has applied and assessed the effectiveness of the Environmental Contract in Marine Protected in order to improve coordination between institutions and community at all levels.

The Environmental Contracts has been introduced in France the 1980s as technical and financial agreements between stakeholders interested in integrated river management. In Italy they were introduced in the Lombardy Region at the beginning of the 2000s and legally recognized in 2015 in the Environmental Code. They are "voluntary strategic and negotiated tools that pursue the protection, correct management of water resources and enhancement of river areas, together with safeguarding from hydraulic risk, contributing to local development".

TUNE UP, which began in November 2019, gathers 12 partners and 10 pilot cases from 7 Mediterranean countries (Albania, France, Greece, Italy, Montenegro, Slovenia and Spain). The project aims to promote coordination and strengthen the effectiveness of the management of Marine Protected Areas by implementing and capitalizing on a multi-stakeholder governance tool of Environmental Contract.

The contribution intends to bring the results of the participatory processes activated in the Marine Protected Areas of Lazio, with the coordination of the Department of Architecture of the Roma Tre University as a project partner.

In Lazio, two Marine Protected Area Contract processes were launched in the "Ventotene and Santo Stefano" MPA in Latina Province and "Secche di Tor Paterno" MPA in Metropolitan City of Rome, in order to test the governance tool of the Contract and to create synergies between the two AMPs.

Currently, in Italy, the Environmental Contracts have been regulated and applied to rivers, lakes and coasts. Analyzing (i) the results of the focus groups and participatory thematic workshops conducted both separately and jointly in the two MPAs and (ii) the legislative framework on Environmental Contracts in Lazio, the article intends to provide guidelines in order to be able to implement the tool also in protected areas.

Keywords: environmental governance, Mediterranean Marine Protected Areas, nature protection, local development

## References

European Court of Auditors (2020), Marine environment: EU protection is wide but not deep. Special report 26/2020. Available online:

[https://www.eca.europa.eu/Lists/ECADocuments/SR20\\_26/SR\\_Marine\\_environment\\_EN.pdf](https://www.eca.europa.eu/Lists/ECADocuments/SR20_26/SR_Marine_environment_EN.pdf)

Gomei M., Abdulla A., Schröder C., Yadav S., Sánchez A., Rodríguez D., Abdul Malak D. (2019), TOWARDS 2020: How Mediterranean countries are performing to protect their sea.

Available online:

[https://d24qi7hsckwe9l.cloudfront.net/downloads/fact\\_check\\_su\\_mediterraneoief\\_it\\_25112109\\_int\\_low.pdf](https://d24qi7hsckwe9l.cloudfront.net/downloads/fact_check_su_mediterraneoief_it_25112109_int_low.pdf)

MedPAN and SPA/RAC (2019), The 2016 status of Marine Protected Areas in the Mediterranean. By Meola B. and Webster C. Ed SPA/RAC & MedPAN. Available online:

<https://medpan.org/marine-protected-areas/mediterranean-mpas/>

Palazzo A. L., Muccitelli S., D'Ascanio R., Pozzi C., Magaudda S. (eds, 2021), Environmental Contracts in Marine Protected Areas: methodology and pilot cases from TUNE UP, leNote di U3, n. 3. Available online: [http://www.urbanisticatre.uniroma3.it/dipsu/?page\\_id=7423](http://www.urbanisticatre.uniroma3.it/dipsu/?page_id=7423)

85120

## Territorial governance and collaborative planning practices: Lessons learned from a case of a River, Lake and Coastal Contract in Lazio Region, Italy.

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The contribution aims at discussing planning tools that fail because they promise integrated approaches without creating effective transformation or improvement on the governance system. These practices formally draw references, terms, and techniques from collaborative planning for facing complex challenges but in the end, they are not able to integrate institutions, actors, and policies nor to achieve tangible and long-term impacts.

Based on the research experience about the River, Lake, and Coastal Contract “Marta-Bolsena-Tarquinia”, in the Lazio Region, the contribution outlines how in these kinds of practices, “integration” is merely translated as a composition of different actors and institutions, instead of aiming at a deeper collaboration of competencies, knowledge, and powers. Moreover, within the complex but also controversial debate on the relevance of collaborative practices to the effectiveness of planning tools, this River Contract shows how participatory processes could allow the creation of arenas for stakeholders engagement at different levels by facilitating multi-actor interactions and negotiated processes aiming at sustainable development, but their weak impact on the governance system in itself limited any potentiality and transformative power.

From one side, the contribution argues that despite the ambitious premises, this integrated planning tool is mostly used only for the resolution of contingent issues leaning towards management arrangements, then not producing changes in existing governance dynamics. From the other, it provides learning opportunities for different use - so far frequently too instrumental and simplified - of collaborative practices by showing as: a) integrated and multidisciplinary vision presupposes a complex change to switch from a ‘management’ coalition to cooperative governance; b) redistribution of responsibilities, powers, and knowledge requires coproducing strategies and visions for dealing with uncertainty, challenges, and inequalities. Last but not least, the contribution intends to share and debate these findings also by comparing and discussing similar European experiences and perspectives.

Keywords: territorial governance, collaborative planning, river contracts

### References

Barbanente, A., & Monno, V. (2005). Changing discourses, practices and spaces of coexistence: Perspectives for the environmental regeneration of the Ofanto River Basin. *Planning Theory & Practice*, 6(2), 171-190.

Harris, N. (2002) ‘Collaborative Planning: From Critical Foundations to Practice Forms’, in P. Allmendinger and M. Tewdwr-Jones (eds) *Planning Futures: New Directions for Planning*

Theory, pp. 21–43. London: Routledge.

Healey, P. (2006). Transforming governance: Challenges of institutional adaptation and a new politics of space. *European planning studies*, 14(3), 299-320, DOI: 10.1080/09654310500420792

Pisano, C., & Lingua, V. (2021). The Impact of Regional Design on River Agreements: The Case of the Ombrone River in Tuscany. *Planning Practice & Research*, 1-22.

Saija, L., De Leo, D., Forester, J., Pappalardo, G., Rocha, I., Sletto, B., ... & Magnaghi, A. (2017). Learning from practice: environmental and community mapping as participatory action research in planning. *Planning Theory & Practice*, 18(1), 127-153.

84389

## Community-oriented local development strategies: distilling the underlying processes and meanings

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Over the last two decades, development strategies based on community potentials and capabilities have been increasingly employed by the World Bank, European Commission and UN to foster local development worldwide. They encompass a diversity of forms under several concepts: CBD (Community-based development), CDD (Community-driven development), CED (Community Economic Development) and CLLD (community-led local development) among others. While in Europe these have been conceived as strategies aiming at improving territorial cohesion and resilience, in developing countries they have been used in rather stressful post-conflict or post-disaster situations, or whenever governmental institutions are weak. These people-centred, bottom-up, place-based development strategies emphasize community participation and/or control in both planning decisions and the allocation of investment resources.

Regardless their emergence in recent literature and international agendas, these local development strategies have been mentioned interchangeably rendering ambiguous the very nature of practices and meanings they encompass. This has led to implementation and evaluation challenges, hindering their evolution and betterment. To shed light on this still unclear theme, this paper is divided in three parts: Firstly, a brief historical outline of community-oriented strategies. Secondly, an analysis of eight key features of each strategy (geography; promoter; ethos, objectives; governance arrangement; leadership; ‘soft’ and ‘hard’ outputs). Thirdly, a case study of each one, selected according to the accomplishment of trustworthy evaluation processes. Arguably, beyond being an opportunity for communities to take part in decision-making processes, these strategies deliver ‘soft’ outputs, inter alia, community capacitation, social capital building, social inclusion, resilience and on a hopeful note, societal change. While productive economic infrastructure, urbanistic interventions, creation of jobs and services are tangible contributions, ‘soft’ outputs still represent evaluation challenges.

These development approaches share the main characteristics of soft planning strategies – simultaneity with statutory system; dependency on innovative governance arrangements; own definition of intervention territory – therefore, their in-depth analysis can contribute as well to the international soft policy debate. This paper is part of an on-going PhD research focused on CLLD (Community-Led Local Development) – the EU-led soft policy instrument designed to empower and capacitate communities so they can take part in the decision-making process of EU fund allocation.

**Keywords:** Community Engagement, Territorial Governance, Soft Planning, Integrated Place-based Approaches, Participation, CLLD (Community-Led Local Development)

References

Barca, F., Mccann, P., & Rodríguez-Pose, A. (2012). The case for regional development intervention: Place-based versus place-neutral approaches. *Journal of Regional Science*, 52(1), 134–152. <https://doi.org/10.1111/j.1467-9787.2011.00756.x>

Haughton, G. (2013). *Community economic development*. Routledge.

Mansuri, G, & Vijayendra, R. (2013). *Localizing Development Does Participation Work? In The World Bank*.

Mohan, G. (2014). Beyond participation : strategies for deeper empowerment. In *Participation: The New Tyranny?* (Issue January 2001, pp. 153–167.). Zed Books.

Nadin, V., Stead, D., Dąbrowski, M., & Fernandez-Maldonado, A. M. (2021). Integrated, adaptive and participatory spatial planning: trends across Europe. *Regional Studies*, 55(5), 791–803. <https://doi.org/10.1080/00343404.2020.1817363>

Owen, D., & Vercruysse, J.-P. (2014). Community Driven Development and Community-Led Local Development Comparing Experiences of the World Bank and the European Commission. *European Structural & Investment Funds Journal*, 2(4).

Servillo, L. (2019). Tailored polities in the shadow of the state’s hierarchy. The CLLD implementation and a future research agenda. *European Planning Studies*, 27(4), 678–698. <https://doi.org/10.1080/09654313.2019.1569595>

Wong, S., & Guggenheim, S. (2018). *Community-Driven Development: Myths and Realities*. In *Community-Driven Development: Myths and Realities* (Issue May). World Bank, Washington, DC. <https://doi.org/10.1596/1813-9450-8435>

84968

## Spatial planning as a regional governance tool: towards a cooperative framework for secondary cities in China

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The causes for uneven development within and between regions in China have been widely discussed (Harrison, & Gu, 2019). To address such imbalanced dynamics, the potential of secondary cities is valued (Cardoso, & Meijers, 2017), and the central government tries to create a cooperation-oriented regional system, providing opportunities for the development of small and medium-sized cities (Houkai, Le, & Meng, 2021). Spatial planning, as one of the fundamental mechanisms for regional governance in China (Wu, 2016), is crucial for this regional integration and cooperation (Chen, 2020). Since 2020, China's former urban and rural planning doctrine has been replaced by the new "Territorial Spatial Planning System". Most provinces have formulated new planning documents in the past months based on the national guidelines (Liu, & Zhou, 2021). This new planning doctrine is the main object of this research, to explore the question of how spatial planning can support regional governance in China towards a cooperative framework able to harness the potential of Chinese secondary cities.

This research aims to examine Chinese Territorial Spatial Planning Systems from the perspective of secondary cities and explore regional governance implementation to understand the alignment between regional cooperation and secondary cities development. Although the current system tries to improve this situation, the mechanisms and approaches need to be further criticized and optimized.

This research is structured into three steps. First, the theoretical underpinning of the contemporary Chinese planning system is discussed, which explain the relations between spatial planning and regional governance, as well as the narratives of spatial planning development in China. Second, three main implementation trajectories of the Territorial Spatial Planning System are conceptualized critically from 24 planning documents into (1) metropolitan structural planning, (2) functional positioning for specific spatial zones, and (3) setting up promotion strategies, as these are the dimensions of the system that most significantly affect regional cooperation and secondary city development. Third, the remaining conflicts contained in these trajectories are explored. The focus is on how the Core-Periphery mindset continues to control metropolitan structural planning and secondary cities still lack a louder voice in this system; how the functional positioning of specific zones is idealized in planning, which may conflict with the interests of the secondary cities; and how the promotion strategies ensure the implementation of planning actions which do not enable resilience in secondary cities.

Keywords: Spatial planning; regional governance; secondary city; regional inequality; implementation trajectories; cooperation-oriented regional system

## References

- Wu, F. (2016). China's emergent city-region governance: a new form of state spatial selectivity through state-orchestrated rescaling. *International Journal of Urban and Regional Research*, 40(6), 1134-1151.
- Harrison, J., & Gu, H. (2019). Planning megaregional futures: spatial imaginaries and megaregion formation in China. *Regional Studies*, 1-13.
- Cardoso, R. V., & Meijers, E. J. (2017). Secondary Yet metropolitan? The challenges of metropolitan integration for second-tier cities. *Planning Theory & Practice*, 18(4), 616-635.
- Houkai, W., Le, L., & Meng, N. (2021). China's Urbanization Strategy and Policy During the 14th Five-Year Plan Period. *Chinese Journal of Urban and Environmental Studies*, 2150002.
- Chen, P. (2020). Research on the coordinated development of urban agglomerations. PhD dissertation, East China University of Political Science and Law.
- Liu, Y., & Zhou, Y. (2021). Territory spatial planning and national governance system in China. *Land Use Policy*, 102, 105288.

85186

## Tracing the rationales and potential implications of claiming ‘a just Europe’: the new Territorial Agenda 2030

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The recently adopted Territorial Agenda claims a ‘Just Europe that offers future perspectives for all places and people’ and further argues that “[t]he priorities for a Just Europe underline the territorial dimension and spatial planning contributions to overarching policy priorities. These priorities include economic, social and territorial cohesion, the European Pillar of Social Rights, a Europe closer to citizens, a more inclusive, sustainable and integrated development of places, Just Transition and territorial integration in Europe” (Ministers responsible for Spatial Planning and Territorial Development and/or Territorial Cohesion 2020, 13). We argue that this is a notable new argumentative frame in the European spatial planning discourse which may turn into a powerful guiding concept for European territorial policy, thus requiring critical inspection. Therefore, this paper explores this new argumentative frame by questioning its underlying rationales and how it has been developed to underpin Cohesion policy and other related EU territorial policy fields. We firstly conduct a textual analysis between the most recent and earlier Territorial Agendas and other important European territorial policy papers. We then further trace the rationales and potential implications of introducing a “just Europe” as a new argumentative frame by drawing upon five in-depth interviews with a wide array of key informants directly involved in the TA 2030 writing process and other close observers (including members of the NTCCP, the EC DG Regio, and the CoR). Against the background of the most recent academic debate dealing with spatial justice (e.g. Jones et al. 2020; Madanipour et al. 2021; Moroni 2019) our results discuss the significance and implications for territorial governance of this new argumentative frame of a “just Europe”. To that end, we examine whether this frame is rather a placeholder fitting well the current political rhetoric of leaving no places behind, or whether it is a well-substantiated EU policy frame with the potential to become a powerful guiding concept for European spatial planning in the near future.

Keywords: just Europe, Territorial Agenda, spatial justice, ‘left behind’ places, European spatial planning, territorial governance

### References

Jones, R.; Goodwin-Hawkins, B.; Woods, M. (2020). From Territorial Cohesion to Regional Spatial Justice: The Well-Being of Future Generations Act in Wales; *International Journal of Urban and Regional Research*, DOI: 10.1111/1468-2427.12909

Madanipour, A.; Shucksmith, M. & Brooks, E. (2021). The concept of spatial justice and the European Union’s territorial cohesion, *European Planning Studies*, DOI: 10.1080/09654313.2021.1928040

Ministers responsible for Spatial Planning and Territorial Development and/or Territorial Cohesion (2020) Territorial Agenda 2030. A Future for all Places.  
[https://territorialagenda.eu/wp-content/uploads/TA2030\\_jun2021\\_en.pdf](https://territorialagenda.eu/wp-content/uploads/TA2030_jun2021_en.pdf)

Moroni, S. (2019). The just city. Three background issues: Institutional justice and spatial justice, social justice and distributive justice, concept of justice and conceptions of justice. *Planning Theory*, 19(3), 251–267.

84678

## From European territorial to spatial planning

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Criticised for neglecting the planning object, I recast my planning theory in terms of a ‘decision-centred’ view while doing research Dutch practice. This led me amongst others to discover of the secret of its success in the 20th century: its having had a ‘planning doctrine’ conceptualising the territory and how to deal with it in terms easy to understand. Turning to researching the making of the ‘European Spatial Development Perspective’, I foresaw that, with the EU a cascade of state territories, a doctrine would be more problematic. Finally, in ‘The Poverty of Territorialism’ (Faludi 2018) I conclude that state territories cannot be the exclusive building blocks. There are other spatial formations, like places and functional areas. Places are ad-hoc formations depending on the constellation of actors concerned and their aspirations. (Healey 2010) Functional areas, too, overlap territorial boundaries. They require ‘Type 2’ multi-level governance (Hooghe, Marks 2010) next to the conventional ‘Type 1’, cooperation between government levels. Places can also be of a fleeting, and functional areas like river basins or climate zones transcending territories of a more durable nature. With neither necessarily coinciding with their territories, state authorities have difficulties in dealing with either. This has consequences for the EU, also and in particular in planning: The European Spatial Development Perspective descended into oblivion. Though dependent on Commission support, member states had insisted on being in charge. Ceasing with assisting them, the Commission banked on a new EU competence for territorial cohesion giving it leverage. But by the time this came on the books, give-and-take ten years later, the discourse on the EU’s global competitiveness had taken centre stage. Territorial cohesion never became a major concern. Commenting on the current situation, Gyelnik and Ocskay (2021) ask for a paradigm shift. They dismiss the EU becoming a (super-)state, but do not wholeheartedly embrace neo-medievalism either. Our world is fundamentally different from that of the Middle Ages, they say. But their option, ‘experimentalist governance’, leads them to propose – variable – spatiality instead of – fixed – territoriality as the organising principle. This is close to my thinking. They tentatively suggest also that this implies a paradigm shift in Cohesion policy. In this paper I will encourage them to overcome whatever hesitation they may have, widening their remit also to include all forms of spatial planning. It must no longer be conceived as uniquely and exclusively territorial and as such an exclusive matter for the authorities. Instead, it should be seen as dealing with the existing **multitude of spatial co**

Keywords: European spatial planning - Territorialism - Multi-level governance - Experimentalist governance – Neomedievalism

### References

Faludi, A. (2018) *The Poverty of Territorialism, A Neo-medieval View of Europe and European Planning* (Elgar Studies in Planning Theory, Policy and Practice), Edgar Elgar Publishing,

Cheltenham, UK and Northampton, MA, USA.

Gyelnik, T., Ocskay, Gy. (2021) 'Systems error: Reflections on the permanent failure of territoriality in the European cohesion policy, EUROPA XXI, 39, 5-25. Available at: <https://doi.org/10.7163/Eu21.2020.39.7> Last Accessed 160122.

Healey, P. (2010) *Making Better Places*, Palgrave, London.

Hooghe, L., Marks, G. (2010) 'Types of multi-level governance', in: H. Enderlein, et al. (Eds) *Types of Multilevel Governance*, Edward Elgar, Cheltenham, 17-31.

84383

## Patterns of continuity and change in the planning and governance of emblematic metropolitan regions

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The planning and governance of metropolitan regions has attracted wide academic interest over the past two decades. Studies include seminal accounts that situate metropolitan regions within the contours of globalisation dynamics and neoliberalism (e.g., Brenner 2004; Storper 2013), through to more systematic approaches that compare shifting metropolitan policies and governance arrangements across different national contexts (e.g., Salet et al. 2003; Zimmermann & Getimis 2017), and more recent perspectives that analyse key drivers and features of metropolitan change through the logics of periodisation and phronesis (Galland & Harrison 2020).

While rooted in widely diverse methodologies, these approaches to the question of metropolitan planning and governance pursue the common goal of understanding metropolitan change through distinctive processes by which it respectively unfolds and compares within and across well-defined time periods. However, much less scholarly attention has been devoted to the analysis of processes of continuity in attempting to understand how metropolitan planning and governance evolves. In developing a more comprehensive and nuanced understanding of the factors shaping metropolitan governance and development over time, this paper takes on a historical institutionalist approach to examine how combined patterns of continuity and change play out across an extended time frame of several decades.

Inspired by Sorensen's (2015) historical institutionalist research agenda, the paper outlines a framework for analysing the evolution of metropolitan planning institutions through (i) critical junctures and developmental pathways of institutional development (Capoccia & Kelemen 2007); (ii) patterns of path dependence and positive feedback effects (Pierson 2000); and (iii) patterns and processes of gradual incremental institutional change (Mahoney & Thelen 2010). Focusing on long-term changes in emblematic metropolitan regions in Denmark and the Netherlands, the paper develops an historical account of institutionalised processes of continuity and change. More specifically, the paper considers (i) the timing and sequencing of key institutional developments; (ii) the patterns of institutional embeddedness and the degree of path dependence of metropolitan institutions; and (iii) the linkages between different scales of governance in determining patterns of metropolitan institutional design. The paper concludes by discussing the degree of leverage of the proposed institutionalist framework to the study of metropolitan planning history whilst reflecting on implications for international comparative planning research.

Keywords: metropolitan planning and governance; international comparative planning; historical institutionalism; critical junctures; path dependence; positive feedback

## References

- Brenner, N., 2004. *New state spaces: Urban governance and the rescaling of statehood*. Oxford: Oxford University Press.
- Capoccia, G. and Kelemen, R.D., 2007. The study of critical junctures: Theory, narrative, and counterfactuals in historical institutionalism. *World Politics*, 59(3), 341–369.
- Galland, D. and Harrison, J., 2020. Conceptualising metropolitan regions: How institutions, policies, spatial imaginaries and planning are influencing metropolitan development. In K. Zimmermann, D. Galland, J. Harrison (Eds.) *Metropolitan regions, planning and governance* (1–21). Cham: Springer.
- Mahoney, J. and Thelen, K., (Eds.), 2010. *Explaining institutional change: Ambiguity, agency, and power*. Cambridge: Cambridge University Press.
- Pierson, P., 2000. Increasing returns, path dependence, and the study of politics. *American Political Science Review*, 94(2), 251–267.
- Salet, W., Thornley, A., & Kreukels, A., (Eds.), 2003. *Metropolitan governance and spatial planning: Comparative case studies of European city-regions*. London: Spon Press.
- Sorensen, A., 2015. Taking path dependence seriously: an historical institutionalist research agenda in planning history. *Planning Perspectives*, 30(1), 17–38.
- Storper, M., 2013. *Keys to the city: How economics, institutions, social interaction, and politics shape development*. Princeton, NJ: Princeton University Press.
- Zimmerman, K., & Getimis, P., 2017. Rescaling of metropolitan governance and spatial planning in Europe. *Raumforschung und Raumordnung*, 75(3), 203–209.

85086

## Exploring the Governance of Implementation: Dutch Energy Strategy-Making as a Case of Path Creation

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Determining what governance modes are best suited to implement renewable energy transition strategies is a complex issue (Valkenburg & Cotella, 2016). Not only may the actors and knowledge required for successful implementation differ across socio-spatial conditions, these conditions themselves may transform over time too. Understanding how and why region-specific governance modes for implementation are created and evolve over time should thus be “mapped” empirically (Gerritsen et al., 2022).

This contribution therefore analyses how actors in the Metropolitan Region of Eindhoven (MRE), the Netherlands, explore possible governance modes for implementing the renewable energy strategy of their region (RES MRE 1.0). Theoretically, the paper builds on insights from Evolutionary Governance Theory (EGT) (Beunen et al., 2015; Van Assche et al., 2014). Empirically, the paper draws on ethnographic data collected through participant observation of a working group in the MRE between January and July 2021. This working group comprised representatives of an advisory bureau, the MRE process organization, and a number of MRE member municipalities.

The empirical analysis of this paper illustrates how the actors in the working group had diverging interpretations of the past, present, and future of governance in the Eindhoven region. These different ways of observing regional governance influenced their respective views on how the regional energy strategy should (not) be implemented. The analysis furthermore shows that actors in the working group used their unique power and knowledge positions to renegotiate the meaning of the past, present, and future of governance in the region. In doing so, the actors engaged in “path creation” (Beunen & Van Assche, 2021; Van Assche et al., 2021): they used the working group as a platform to steer decision-making on the regional governance of implementation along the pathways they preferred.

In light of this, the paper argues that the working group is an illustrative case of how path creation efforts can significantly shape the governance modes of implementation that emerge in practice. The contribution therefore calls for an in-depth and ongoing reflection on the mechanisms through which actors can(not) mobilize their expertise and ways of seeing to exert influence on the governance pathways through which renewable energy transition strategies are implemented in their contexts.

**Keywords:** Governance modes of implementation; energy transition; regional energy strategies; path creation; the Netherlands

References

Beunen, R., & Van Assche, K. (2021). Steering in Governance: Evolutionary Perspectives. *Politics and Governance*, 9(2), 365–368. <https://doi.org/10.17645/pag.v9i2.4489>

Beunen, R., Van Assche, K., & Duineveld, M. (Eds.). (2015). *Evolutionary Governance Theory: Theory and Applications*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-12274-8>

Gerritsen, M., Kooij, H.-J., Groenleer, M., & van der Krabben, E. (2022). To See, or Not to See, That Is the Question: Studying Dutch Experimentalist Energy Transition Governance through an Evolutionary Lens. *Sustainability*, 14(3), 1540. <https://doi.org/10.3390/su14031540>

Valkenburg, G., & Cotella, G. (2016). Governance of energy transitions: About inclusion and closure in complex sociotechnical problems. *Energy, Sustainability and Society*, 6(1), 20. <https://doi.org/10.1186/s13705-016-0086-8>

Van Assche, K., Beunen, R., & Duineveld, M. (2014). *Evolutionary Governance Theory: An Introduction*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-00984-1>

Van Assche, K., Duineveld, M., Gruezmacher, M., & Beunen, R. (2021). Steering as Path Creation: Leadership and the Art of Managing Dependencies and Reality Effects. *Politics and Governance*, 9(2), 369–380. <https://doi.org/10.17645/pag.v9i2.4027>

85014

## Building on the existing. Implementing Metropolitan Governance in a context of conflict, cooperation, and competitiveness. Notes from Lisbon Metropolitan Area.

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Metropolitan areas are extensive urban territories with millions of inhabitants. We know today that productivity, innovation, entrepreneurship and competitiveness increase with the [size] and density of urban and metropolitan populations (Wilson, 2020). The creation of ideas, their manipulation and their ceaseless reconfiguration are the result of human interaction and metropolitan areas are where it reaches its highest exponent. But they also face many obstacles that culminate in spatial injustices, conflicts, and inefficiencies.

[Divided by municipal boundaries inherited from past centuries, the adjustment of intermunicipal action to these political boundaries and local authorities is one of] the most decisive challenges for their development.

The central paradigms of metropolitan governance [] offer the fundamental theoretical support for the analysis of the strategies that each of these territories follows, but elements of different paradigms - Metropolitan Reform, Public Choice, New Regionalism - [must often] be combined to [adequately explain] any individual [territorial] context. Through this [hybrid] framework, [adjusted to] a new culture of power, allows us a reading of the path of institutionalization of the Lisbon Metropolitan Area and of the crossroads it is at today.

For this paper we combine the history of the Lisbon Metropolitan Area (LMA) with three different conceptual elements: change from government to governance; paradigms of metropolitan governance; and factors specific to metropolitan areas. Through these, we reveal the complex institutional architecture and metropolitan dynamics at play in the Lisbon Metropolitan Area.

Finally, we explore to what extent these are related to the evolution of the legal framework and contextual pressures, and how the latter often seem to be conditioned more by conjunctural impulses than by a long-term vision.

Keywords: Metropolitan Governance; Metropolitan Area; Institutional reform; New regionalism; Public choice;

### References

- Wilson, B. (2020). *Metropolis. A History of the City, Humankind's Greatest Invention*. New York: Doubleday
- da Cruz N Rode P and McQuarrie M (2019) New urban governance: A review of current themes and future priorities. *Journal of Urban Affairs* 41(1):1-19.
- Tavares AF (2018) Municipal amalgamations and their effects: a literature review. *Miscellanea Geographica* 22(1): 5-15.
- Zimmermann K Galland D and Harrison J (Eds.) (2020) *Metropolitan regions, planning and*

governance. Berlin: Springer.

Storper M (2014) Governing the large metropolis. *Territory, Politics, Governance* 2(2), 115-134.

84656

## Finding a place for Business Improvement Districts in Portugal. The shift from conservative retail planning to a liberal approach

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The relation between retail and cities is ancient. From the deep relationship that led to the formation of several urban agglomerations until present days, retail continues to play an important role, both in urban growth and in maintaining the vitality and viability of town centres. Aware of the relevance of retail in the supply of the population of the goods it needs, local authorities develop measures to control the evolution of urban retail systems. Usually designed as retail planning policies, this type of intervention can be very broad and adjustable to each country specificities and to the political and governing ideologies, varying from a conservative approach – usually designed to protect the established retail environment – to a more liberal stance, traditionally developed to foster economic modernization. In the European context, among the restrictive measures, one may enhance the restrictions to peripheral implementation of new retail floor space. Town Centre First Policy established in the UK is one of the most recognized initiatives of the kind. With time, restrictive measures softened, as the focus began to be to highlight the advantages of the consolidated commercial destinations within established town centres. In this period, that we may broadly situate in the late 1990s onwards depending on the country, retail-led urban regeneration initiatives were widely developed, actively rehabilitating town centres and promoting the opening of new retail floorspace or the rehabilitation of already existent retail facilities in these premises. In addition, Town Centre Management schemes and similar initiatives took place under direct incentive of public authorities, both from the Central Government and City Councils. Already in the new millennium, business improvement districts (BID) started to gain attention in several European countries. BIDs are originally from north America and, on its basis, constitute a business-oriented urban regeneration model based on the mandatory tax contribution by entrepreneurs of a delimited area, to develop activities that complement the ones already develop by local authorities, fostering them and contributing to the economic enhancement of the respective area. The involvement of different public and private agents in the design and implementation of BIDs projects, means that we are facing a new model of urban governance, whose goal of urban revitalization is pursued within a process of co-creation e co- accountability. In Portugal, after several decades of different type of retail planning measures and legislation, BID model is under discussion. The aim of this presentation is to analyse the possible incorporation of BID legislation in the Portuguese national retail planning framework, further discussing the relevance, challenges and added value of an intervention based on a public-private model of urban governance, regarding the revitalization of town centres of Portuguese cities.

Keywords: Business Improvement Districts; Urban Governance; Retailing; Portugal; Retail-Led Urban Regeneration

References

- Briffault, R. (1999), A Government for Our Time? Business Improvement Districts and Urban Governance. *Columbia Law Review*, 99, pp. 365–477
- De Magalhães, C. (2012), Business Improvement Districts and the recession: Implications for public realm governance and management in England. *Progress in Planning*, 77, pp. 143–177
- Guimarães, P. (2021), Business Improvement Districts: A Systematic Review of an Urban Governance Model towards City Center Revitalization. *Land*, 10, 922
- Morçöl, G.; Karagoz, T. (2020), Accountability of Business Improvement District in Urban Governance Networks: An Investigation of State Enabling Laws. *Urban Affairs Review*, 56, pp. 888–918
- Ziebarth, D. (2020), Business Improvement Districts and Contemporary Local Governance. *State and Local Government Review*, 52, pp. 128–137

85246

## Governing Sharing Practices: The Role of Planning in the Co-production and Collaborative Use of Urban Resources

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The notion of sharing is drawing increasing attention as one possible way to deal with prevailing urban challenges in European cities—among others, the shortage of affordable housing, the growing privatization of public goods and public space, increasing gentrification, and the unsustainable use of resources. From a governance perspective sharing could be one collaborative and place-sensitive possibility for city planners to handle these questions and manage spatial resources cooperatively. Within the framework of the ProSHARE research project, we refer to sharing as the co-production and/or collaborative use of resources i.e., when people give something to others, take something from others, borrow, exchange, or use something together, on a non-commercial basis. By bringing people together, practices of sharing can contribute to civic engagement and community building, and in the long term, facilitate creating networks for social cohesion—particularly relevant in the context of heterogeneous neighbourhoods. Ultimately, in the field of housing and public space, sharing practices can contribute to reduce space competition, and thereby counter gentrification and segregation. Despite their potential, sharing practices require resources and infrastructures to be realised, and these, we argue, can be influenced by planning processes. Against this backdrop, we explore the context and role of city planning in fostering or constraining sharing practices in the fields of housing and public space by asking: What goals, ideas, instruments, and legal frameworks do planners resort to for supporting or preventing sharing practices across different European cities? What kind of national and local differences within planning and governance arrangements are important for the development and expansion of sharing practices? To do that, we draw on qualitative interviews with planners, administrators of housing companies, local urban initiatives, and activists across different European cities. The paper highlights on the one hand the potentials and pitfalls of sharing practices with regard to the influence of city planning. On the other hand, it sheds light on how organized sharing practices can be better sustained when integrated into multi-actors governance arrangements. The role of planning in sharing practices however, with its different governance settings and mechanisms across European cities, remains inherently political.

Keywords: sharing, city planning, collaborative governance, urban development, comparative studies, co-production

References

Bernhardt, F., Cermeño, H., Keller, C. and Koch, F. (2020) 'Stadtmachen durch StadtTeilen: Typen und Logiken des Teilens in innerstädtischen Nachbarschaften', *Forum Wohnen und Stadtentwicklung*, pp. 123–126.

Franta, L. and Hamedinger, A. (2017) 'Commons als Beitrag zu einer partizipativen urbanen Raumproduktion? Überlegungen aus planungs- und raumtheoretischer Sicht', in Suitner, J., Giffinger, R. and Plank, L. (eds) *Innovation in der Raumproduktion*, Wien, NWV Verlag, pp. 203–222

Holmqvist, E. Bergsten, Z. (2009) 'Swedish social mix policy', *Journal of Housing and the Built Environment*, 24(4), pp. 477-490

Hult, A. and Bradley, K. (2017) 'Planning for sharing—Providing infrastructure for citizens to be makers and sharers', *Planning theory & practice*, vol. 18, no. 4, pp. 597–615

Kazepov, Y. (2005) 'Cities of Europe: Changing contexts, local arrangements, and the challenge to social cohesion', *Cities of Europe*, vol. 1, pp. 3–3

Koch, F., Hampel, L., Keller, C. and Bernhardt, F. (2020) 'StadtTeilen – Öffentlicher Raum und Wohnen als neue Gemeingüter in sozial gemischten Nachbarschaften', in Brokow-Loga, A. and Eckardt, F. (eds) *Postwachstumsstadt: Konturen einer solidarischen Stadtpolitik*, München, Oekom-Verlag, pp. 224–237

Petrescu D, Petcou C (2021) *How to Design, Defend, and Sustain Urban Commons and How to Demonstrate Their Value for Resilience?* *New Geographies 12 Commons*, Harvard University Press

Schalk, M., Kristiansson, T. and Mazé, R., eds. (2017) *Feminist futures of spatial practice: Materialisms, activisms, dialogues, pedagogies, projections*, AADR/Spurbuchverlag

84205

## Actors, arenas and aims: A conceptual framework for public participation

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Public participation has become a widely used concept in the rhetoric and practice of planning, and an accepted approach in the formulation and implementation of spatial plans, urban policies, or development projects (Tippett & How, 2020). However, while participation is typically recognised as a distinct practice, it is rarely explicitly defined; it remains abstract and encompasses a variety of meanings and forms (Cornwall, 2008).

This paper systematises knowledge of public participation by bringing together existing concepts and theories from the planning literature to conceptualise the 3A3-framework of participation. The framework presents participation as embedded in a wider – more or less organised – planning process that is nested within a particular context. We furthermore adopt a view of participation being emergent and thus never completely definable *ex ante* (Garau, 2012). What evolves from this is an understanding of participation as a phenomenon that does not pre-exist, but instead is continuously being made and shaped through its dimensions (Chilvers & Kearnes, 2016).

The 3A3-framework presents three dimensions of participation: actors, arenas and aims. Each of these dimensions consists of three interacting elements. The framework highlights interactions and interdependencies of these different dimensions and elements and thus provides a conceptualization for better understanding what shapes the phenomenon of participation. In doing so, it allows a comparison of different empirical examples of participation, spanning informal community-led actions and more institutionalised forms of participation. Accordingly, the framework can be used as an analytical tool, to gain a better understanding of how the different elements are linked and how their continuous interaction informs the phenomena of participation. We furthermore suggest that it can be used as an operational tool, as it may provide guidance for refined, more contextually situated forms of participation in practice. This may help planning scholars and practitioners to navigate through the terminological and ideological vagueness and to develop more subtle and context-sensitive understandings of and approaches to public participation in both planning theory and practice.

Keywords: public participation, conceptual framework, planning theory, planning

### References

- Chilvers, J., & Kearnes, M. (2016). Science, Democracy and Emergent Publics. In J. Chilvers & M. Kearnes (Eds.), *Remaking participation: science, environment and emergent publics* (pp. 1-27). Abingdon, Oxon: Routledge.
- Cornwall, A. (2008). Unpacking 'Participation': models, meanings and practices. *Community Development Journal*, 43(3), 269-283. doi:10.1093/cdj/bsn010

Garau, C. (2012). Citizen participation in public planning: A literature review. *International Journal of Sciences*, 1(12), 21-44.

Tippett, J., & How, F. (2020). Where to lean the ladder of participation: a normative heuristic for effective coproduction processes. *Town Planning Review*, 91(2), 109-132.

doi:10.3828/tpr.2020.7

84704

## The role of urban intermediary organisations in market-oriented planning systems-using Taipei Urban Regeneration Centre as a case study

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Many researchers have discussed local governments in multiple countries are highly reliant on private finance and investment revenue through land development (Ferm and Raco, 2018; Weber, 2010). This reliance is especially crucial in the context of developmental-state regimes where land redevelopment is not only a mean for capital accumulation but is also part of a wider set of strategies to consolidate the legitimacy of political regimes (Chen and Shin, 2019). The aim of this paper is to analyse urban renewal in Taiwan which is a developmental-state country that has experienced significant market-oriented reforms during the 2010s and to discuss the extent to which financial imperatives now dominate urban development planning.

Taking Taipei Urban Regeneration Centre (TURC) as a study case, the paper analyses the role and impact of TURC in the planning delivery process. The study concludes that under the pressure of financial return and political achievements through land development, the quango sector-TURC has become a primary promoter of urban financialisation. Composed of planning professionals recruited from both private and public institutions, the TURC plays a key role in project contracting, financial calculation and negotiations between local governments and the private sector, and the responsabilisation of local development through community reskilling and empowerment. Whilst the presence of the quango actor has increased the speed of land financialisation, it is argued that the ambiguity of the organisation also causes tensions and contradictions between private sectors and communities and even deepened the regional inequality of Taipei city.

Keywords: urban governance, market-oriented planning system, urban intermediary organisations, developmental-state

### References

Ferm, J., & Raco, M. (2020). Viability planning, value capture and the geographies of market-led planning reform in England. *Planning Theory & Practice*, 21(2), 218-235.

Weber, R. (2010). Selling city futures: The financialization of urban redevelopment policy. *Economic geography*, 86(3), 251-274.

Chen, Y. L., & Shin, H. B. (Eds.). (2019). *Neoliberal urbanism, contested cities and housing in Asia*. Springer.

85175

# Social sustainability as a policy goal: exploring effective governance mechanisms for expanding residents' urban capability in area-based development projects

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Recently, occurring trends in European cities such as socioeconomic segregation, economic inequalities and cultural polarisation are arousing a renewed attention for social sustainability goals on justice, equity, and well-being in urban policy-making. In the context of area-based urban development projects, this paper perceives social sustainability as one of the various policy goals that planners aim to implement in a demarcated area within a city. During this implementation process, however, a number of challenges occur that can lead to ineffective policy outcomes, e.g., the risk that social sustainability goals are negotiated against economic or environmental policy goal, that they are 'faded out' along the duration of the project, or that their eventual operationalization does not align with planner's original intentions anymore. Inspired on Amartya Sen's Capability Approach, this paper defines social sustainability as "the opportunities a person has to perform those urban functionings that he/she has reason to value for a good quality of life in the neighbourhood where he/she lives" – i.e., as "urban capability". The aim of the paper is to analyse which governance mechanisms are effective to integrate "urban capability" in urban policy implementation processes. Based on a multiple case-study of two area-based development projects in Amsterdam and in Rotterdam, the study reveals a set of enabling governance mechanisms that are permissive to resident's expansion of urban capability. It is concluded that a mix of both a regulative governance approach, based on rules, regulations, and defined responsibility, and a collaborative governance approach, based on common discovery, 'open-endedness', and adaptability, is needed for a better alignment between policy outcomes of social sustainability goals in area-based development projects and the experienced opportunities of the residents who actually live in the areas of those projects.

Keywords: social sustainability, area-based development projects, collaborative governance, urban capability

## References

- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of public administration research and theory*, 22(1), 1-29.
- Healey, P. (1998). Building Institutional Capacity through Collaborative Approaches to Urban Planning. *Environment and Planning A: Economy and Space*, 30(9), 1531-1546. doi:10.1068/a301531
- Hill, M., & Hupe, P. (2002). *Implementing public policy: Governance in theory and in practice*: Sage.
- Moroni, S. (2010). Rethinking the theory and practice of land-use regulation: Towards nomocracy. *Planning Theory*, 9(2), 137-155. doi:10.1177/1473095209357868
- O'Toole, L. (2004). *Implementation theory and the challenge of sustainable development: the*

transformative role of learning. Governance for sustainable development: the challenge of  
adapting form to function, 32-60.  
Sen, A. (2009). The idea of justice: Harvard University Press.

84523

## Mobilizing inward development potential. How municipalities can contribute to compact settlements

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Densification, or inward development, is a central paradigm of spatial planning policy. By reducing sprawl, densification can contribute to protecting undeveloped land, reducing CO<sub>2</sub> emissions, and providing affordable housing (Siedentop & Fina 2012). In many European countries (Ladner et al. 2017), and particularly in the case of Switzerland (Weilenmann et al. 2017), municipalities are responsible for developing municipal land-use plans and can implement further spatial planning policy instruments and thereby are a crucial actor in implementing inward development. Since land is a scarce resource and can be under public, private or other kinds of ownership, mobilizing land with inward development potential is a necessary but demanding task for local authorities (Rudolf et al. 2018). In this paper, we examine densification dynamics in Swiss municipalities and argue that, next to qualitative characteristics of the building land and factors such as private or public ownership, a pro-active spatial planning approach by the municipalities, regulative land-use policy instruments and a professionalized local public administration can explain variation in the mobilization of inward development potential (Bovet et al., 2018; González & Healey, 2005). We analyze the mobilization of inward development potential in all 77 municipalities of the Swiss canton of St. Gallen using comprehensive panel data on built-up areas as a share of the total area of the municipality, utilization densities and the effective mobilization of parcels with high inward development potential. We examine determinants such as different local spatial planning policies that explain differences in mobilization rates by using multi-level logistic regressions as well as case studies of systematically selected municipalities. Preliminary results support the hypotheses on the importance of pro-active regulations and a professionalized public administration of municipalities. With the case studies, we shed light on, first, if and how the mobilization contributes to the desired effects of densification and second, through which mechanisms of local governance different land-use policies can ensure a sustainable use of land. The paper shows how professionalization, pro-active governance and regulative instruments can promote to more sustainable inward development in urban as well as in rural areas.

Keywords: inward development, multi-level governance, spatial planning policy, local governance, multi-method research,

### References

- Bovet, J., Reese, M., & Köck, W. (2018). Taming expansive land use dynamics – Sustainable land use regulation and urban sprawl in a comparative perspective. *Land Use Policy*, 77, 837–845. <https://doi.org/10.1016/j.landusepol.2017.03.024>
- González, S., & Healey, P. (2005). A Sociological Institutional Approach to the Study of Innovation in Governance Capacity. *Urban Studies*, 42(11), 2055–2069. <https://doi.org/10.1080/00420980500279778>

- Ladner, A., Keuffer, N., & Baldersheim, H. (2016). Measuring Local Autonomy in 39 Countries (1990–2014). *Regional & Federal Studies*, 26(3), 321–357. <https://doi.org/10.1080/13597566.2016.1214911>
- Rudolf, S. C., Kienast, F., & Hersperger, A. M. (2018). Planning for compact urban forms: Local growth-management approaches and their evolution over time. *Journal of Environmental Planning and Management*, 61(3), 474–492. <https://doi.org/10.1080/09640568.2017.1318749>
- Siedentop S, Fina S. (2012). Who Sprawls Most? Exploring the Patterns of Urban Growth across 26 European Countries. *Environment and Planning A: Economy and Space*. ;44(11):2765-2784. doi:10.1068/a4580
- Weilenmann, B., Seidl, I., & Schulz, T. (2017). The socio-economic determinants of urban sprawl between 1980 and 2010 in Switzerland. *Landscape and Urban Planning*, 157, 468–482. <https://doi.org/10.1016/j.landurbplan.2016.08.002>

84812

## Integrating spatial planning and strategic energy planning in the Netherlands

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The energy transition towards a carbon-neutral energy production demands not only a new and decentralized energy system, but also includes a different land use through further integrating land use functions related to renewable energy production and its infrastructure. This contribution sketches out what the renewable energy transition implies for the Dutch spatial planning system in relation to the energy system. It draws on a recent attempt of integrating spatial planning and renewable energy production planning: the use of a new planning instrument called Regional Energy Strategy. We place this new attempt in historical perspective to understand earlier attempts to integrate both systems. We use Niklas Luhmann's systems theory to analyze the coupling of the energy system and spatial planning system and the perturbations between them. The case of the Dutch Regional Energy Strategy illustrates the difficulties that the spatial planning system has in internalizing the system logics of the energy system and vice versa. The paper concludes that there is a need to 'energize' the spatial planning system and 'spatialize' the energy system and puts forward ways to engage in strategic energy planning.

Keywords: Spatial Planning, Energy System, Renewable Energy, Regional Energy Strategy, Social Systems Theory, Niklas Luhmann,

### References

Gerritsen, M., Kooij, H. J., Groenleer, M., & Van der Krabben, E. (forthcoming). To see, or not to see, that is the question: studying Dutch experimentalist energy transition governance through an evolutionary lens. *Sustainability*.

Krog, L., & Sperling, K. (2019). A comprehensive framework for strategic energy planning based on Danish and international insights. *Energy Strategy Reviews*, 24(December 2018), 83–93. <https://doi.org/10.1016/j.esr.2019.02.005>

Van Assche, K. A. M., & Verschraegen, G. (2008). The Limits of Planning: Niklas Luhmann's Systems Theory and the Analysis of Planning and Planning Ambitions. *Planning Theory*, 7(3), 263–283. <https://doi.org/10.1177/1473095208094824>

Wretling, V., Gunnarsson-Östling, U., Hörnberg, C., & Balfors, B. (2018). Strategic municipal energy planning in Sweden – Examining current energy planning practice and its influence on comprehensive planning. *Energy Policy*, 113(June 2017), 688–700. <https://doi.org/10.1016/j.enpol.2017.11.006>



84336

## Dealing with uncertainty in infrastructure planning From area-oriented infrastructure planning to land use transport integration

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Infrastructure planning (roads, railways, waterways, energy, aviation) is increasingly confronted with its dynamic environment and an engaged society. This necessitates interaction of infrastructure projects with their environment and consequently increases uncertainty in decision-making. How are decisions made given that uncertainty and what role may area development have in making that uncertainty manageable? These are the central questions of this contribution. Based on three infrastructure cases in the Netherlands – a road expansion, an airport conversion and a river adaptation – that were analyzed over a period of 20 years, typical patterns in infrastructure decision-making in relation to adjacent area development were analyzed. What we see is a constant shift between giving more space for area development, in particular to create support for decision-making, and systematically limiting of uncertainty by strongly regulating that space in order to be able to make targeted decisions. We see that decision-makers of the analyzed infrastructure projects only proceed with area development if they are 'forced' to do so. Area development is then mainly deployed in the form of a 'package deal'. Participation takes place within strict frameworks and is mainly aimed at 'reaching consensus' and less on 'mapping out diversity'. Understanding these mechanisms helps to improve 'true' integration of area and infrastructure planning. After all, infrastructure serves to make areas accessible and to connect them and is therefore inherently linked to area development. Our recommendation is therefore to give room in infrastructure planning to uncertainty, to the wishes and ideas of stakeholders and to related challenges. One sided and too quick reduction of uncertainty may lead to polarization and difficult decision-making, exactly the opposite of what is often intended.

Keywords: infrastructure planning, decision making, uncertainty, area development

### References

[1] Woltjer, J. (2000). Consensus Planning. The relevance of communicative theory in Dutch infrastructure planning. Ashgate: Aldershot.

[2] Heeres, N. (2017). Towards area-oriented approaches in infrastructure planning. Development of national highway networks in a local context. PhD, University of Groningen: Groningen

[3] Zandvoort, M., van der Vlist, M., Klijn, F. & van den Brink, A. (2018). Navigating amid Uncertainty in Spatial Planning. *Planning Theory*, 17(9), 96-116.

[4] Van Geet, M. (2021). Policy design and infrastructure planning. Finding tools to promote

lands use transport integration. PhD, University of Groningen: Groningen.

[5] Veenma, K. (2021). Ruimte voor Onzekerheid. Interactie tussen actoren in de dynamiek van infrastructuurplanning (Dealing with Uncertainty in Spatial and Infrastructure Planning). Phd, University of Groningen: Groningen.

85100

## Design Governance in Delivering' Human-centred Urban Development': A Case Study of Shanghai, China

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Human-centred urban development has been high on the agenda of city governments to achieve the Sustainable Development Goals, as specified in UNESCO's Global Report on Culture. City leaders and managers in China are aware of the positive contribution of urban environment quality in promoting local development. Chinese Guidelines for Urban Design have acknowledged that urban design determines the quality of public space and life in the urban environment. However, to which extent and how urban design outcomes achieve the intended goals to 'humanise' urban spaces, especially in the context of ongoing urban regeneration, is often unquestioned and remains yet to be fully understood.

This paper explores how the planning authorities can achieve human-centred development ambitions by investigating China's planning institution framework and its review and decision-making process to govern urban design projects. It investigates the formal design governance instruments in the international context, and then identifies the key actors involved in design-led planning approaches in China. Conducting a qualitative case study research on Shanghai, one of the leading Chinese cities that pioneer human-oriented urban development, the research examines the institutional reform made since the Reform and Opening Up on controlling design practice, the instruments introduced by the local planning authority and the associated challenges in delivering quality urban spaces for public interests. Preliminary findings suggest that the Shanghai Municipal Government has made a good attempt to offer more discretion to private investors and developers in the planning permit application process. However, it is discernible that a mismatch between the public sector's expectations and the developer's ambitions, leading negative influences on the implementation of design outcomes. The paper concludes that well-designed urban practices require additional political support for interventions, more skilful staff knowing the principle of providing design quality within the planning bureau, creating a mechanism to regularise planning negotiation.

Keywords: Chinese planning authorities, human-centred, urban design, design governance, institutional design, Shanghai

### References

- Carmona, M. (2016). Design governance: Theorizing an urban design sub-field. *Journal of Urban Design*, 21 (6), 705-730.
- Carmona, M. (2019). Place value: Place quality and Its Impact On Health, Social, Economic and Environmental Outcomes. *Journal of Urban Design*, 24 (1), 1-48.
- Chen, F. & White, J. (2020). Urban Design Governance in Three Chinese 'Pioneer Cities'. *International Planning Studies*, 26(2), 130-148.
- Papanek, V. (1984). *Design for the Real World: Human Ecology and Social Change*. London:

Thames & Hudson

Punter, J. (2019). Design Review in Wales: The Role of the Design Commission for Wales. *Journal of Urban Design*, 24(4), 605–612.

White, J. & Chapple, H. (2019). Beyond Design Review: Collaborating to Create Well-Designed Places in Scotland. *Journal of Urban Design*, 24(4), 597–604.

White, J. & Punter, J. (2017). Toronto's 'Vancouverism': developer adaptation, planning responses and the challenge of design quality, *Town Planning Review*, 88 (2), 173-200.

84530

## Research on the Drawing of Urban Blue Lines in Chinese Territorial Spatial Planning System

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Urban water systems are significant elements for human settlements related to water supply, flood safety, shipping, waterfront landscape and economic development. In the Chinese context, a Blue-line Plan is always used by different water sectors, as well as the spatial planning sector, to regulate urban development and organise waterfront ecologicalisation, water resources protection and flood prevention. However, departmental segregation and vague policy documents often lead to the mismatches of blue lines across vertical layers and horizontal sectors, which create long-term institutional disputes in water governance. Those disputes come with uncontrolled urban sprawl and environmental problems, for instance, the erosion of water bodies, the degradation of hydrological connections, and the weakness of waterways' discharge capacity. To resolve these water problems and improve water governance, this paper, firstly, compares water-related policy documents in the field of spatial planning and water management, which clarifies their conflicts in the process of blue lines drawing. Secondly, the study proposes a five-component approach to mitigate institutional mismatches, namely, 'Three Lines Two Zones'. It consists of (1) bank control lines, (2) surface water control lines, (3) central water lines, (4) waterfront/shoreline areas, and (5) flood stage areas. This tool, as a way out of traditional planning, is helpful to clarify the responsibilities of spatial planning and water management spatially and offer joint-work opportunities in water affairs. Thirdly, this paper explains how this approach fits in the newly renovated territorial spatial planning system in a mainstreaming way and how this tool enhances the involvement of planning sector in water affairs. The paper concludes with the future of this new approach in implementation, for instance, combining it with detailed water resource assessment at the early stage of planning, with comprehensive public participation to build the common knowledge of historical water systems, and with policy determination concerning economic and ecological benefits.

Keywords: Blue Lines; Territorial Spatial Planning; water management; Governance model

### References

- [1] Ministry of Construction of the People's Republic of China. Measures for the Administration of the Urban Blue Line [S]. No. 145, 2005-12.
- [2] Wu Yan, He Xusheng, Yang Ling. Compilation Conception of City and County Level Blue-Green Space System Specialized Planning under National Territory Spatial Planning System [J]. *Landscape Architecture*, 2020,27(01): 30-34.
- [3] Yang Peifeng, Li Jingbo. Ecology Oriented Blue Line Planning Compilation Innovation: Liuxi River, Conghua, Guangzhou [J]. *Planner*, 2014,30(07): 56-62.
- [4] Yu Lu, Ding Nian. An Analysis of the Methodology in Urban Blue Line Planning—“Shenzhen Blue Line Planning” as an Example[J]. *Urban Planning Forum*, 2010(S1): 88-92.
- [5] Chen Yewei. Thoughts and Practice on Urban Planning Methods of Blue Line: A Case Study

of Blue Line Planning of River in Shanghai Central City [J]. Shanghai Urban Planning Review, 2018(03): 123-127.

[6] State Council. Regulations of the People's Republic of China on River Management [S]. No. 3, 1988-06.

[7] The Ministry of Water Resources of the People's Republic of China, Guidelines for Compilation of River and Lake Shoreline Protection and Utilization Planning (Trial), [S].2019.

[8] GB 50513-2009, "Urban Water System Planning Code" [S]. Ministry of Housing and Urban-Rural Development of the People's Republic of China, 2009.

84586

## Reflection on the importance and effectiveness of information disclosure for multiple interests ——Take the installation of elevators in old residential areas in Guangzhou as an example

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Building an efficient and transparent system of social information disclosure is an important foundation for safeguarding the public interest. In recent years, the Chinese government has continued to advocate the establishment of an open government information system in an attempt to build a more enlightened and stable social environment and market operation expectations by disclosing sufficient information as far as possible. However, in addition to top-down information disclosure, the construction of a socially desensitized information exchange platform, as an important part of the planning support system, is also an important tool to reduce social transaction costs. If multi-stakeholders have access to a free exchange of information, they can share their interests and expectations, make their own reasonable judgements about the risks of an event, and use transactional and non-transactional means to reach a specific agreement on the event.

Guangzhou, a city with a thousand-year history of urban development, had a large number of "unitary" compounds between 1949 and 2000, most of which are now called old residential areas due to ageing facilities and deteriorating living environment. Traditionally, the lack of necessary lifts in old residential areas has led to inconvenience for residents, and Guangzhou was an early adopter of lift retrofitting projects in old residential areas. However, negotiation and gaming dilemmas have arisen due to the unequal distribution of residents' contributions in the retrofitting of lifts, the high expectations of private property appreciation and the significant negative effects brought about by the construction of lifts. In this paper, through the interpretation of Guangzhou's policy on the retrofitting of lifts in old districts, we explore the successful and unsuccessful negotiation cases, analyze the interest demands of the stakeholders involved, attempt to explore the construction of an open information mechanism and platform. The combination of "Big government" and "Small community" is proposed to facilitate the realization of the goal of lift retrofitting.

Keywords: Information disclosure; multi-stakeholder negotiation; planning support system; benefit distribution

### References

- [1]Rittenbruch, Markus, et al. "Co-Designing Planning Support Systems in Urban Science: The Questions They Answer and the Questions They Raise." *Journal of Urban Technology* (2021): 1-26.
- [2]Lev, Baruch. "Information disclosure strategy." *California Management Review* 34.4 (1992): 9-32.
- [3]Hermalin, Benjamin E., and Michael S. Weisbach. "Information disclosure and corporate governance." *The journal of finance* 67.1 (2012): 195-233.

[4]Lambert, Richard, Christian Leuz, and Robert E. Verrecchia. "Accounting information, disclosure, and the cost of capital." *Journal of accounting research* 45.2 (2007): 385-420.

[5]Faysse, Nicolas. "Troubles on the way: An analysis of the challenges faced by multi-stakeholder platforms." *Natural Resources Forum*. Vol. 30. No. 3. Oxford, UK: Blackwell Publishing Ltd, 2006.

[6]Kusters, Koen, et al. "Participatory planning, monitoring and evaluation of multi-stakeholder platforms in integrated landscape initiatives." *Environmental management* 62.1 (2018): 170-181.

84324

## Towards Neo-Endogenous Rural Development in China? A Case Study on the Actor Network of a Rural Revitalisation Programme of Jiangsu Province

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With the rapid urbanisation, rural regions of China have faced many challenges, such as the hollowing-out, the weak rural economy and the decline of natural villages. Implementing top-down rural development programs is the main approach for achieving China's "rural revitalisation strategy", addressing rural issues and enhancing the rural economy. According to the actor-network theory, multiple actors (human/non-human) from both public and private sectors are involved in the implementation process, resulting in the rural socio-economic restructuring. Exploring the dynamics and actor networks of the rural revitalisation programs is significant for understanding rural development issues in contemporary China and facilitating future rural policy-making.

This paper aims to explore the partnership and collaboration among actors under the rural revitalisation programs and examine the impacts on local socio-economic development. This research investigates the implementation of the "Characteristic Idyllic Countryside" program (i.e. a representative and comprehensive rural revitalisation program of Jiangsu Province) in the case of Linghu village (Suzhou, Jiangsu). By conducting semi-structured in-depth interviews with diverse actors (e.g. town government, village committee, cooperatives, village-run enterprises, private enterprises and villagers), this research indicates that bottom-up initiatives and strong leadership of village committees (key actor) are vital for the neo-endogenous rural development of China to align with rural policies and top-down programs. Meanwhile, the empirical findings show that implementing rural revitalisation programs contributes to the local development in terms of rural diversification (e.g. rural tourism), employment and the improvement of living environment and infrastructure. Finally, this paper offers policy recommendations for nurturing rural collectives to boost endogenous development combined with top-down rural programs.

Keywords: actor-network theory, neo-endogenous development, rural collectives, rural revitalization program, rural diversification

### References

- Li, Y., Westlund, H., Zheng, X. & Liu, Y. (2016). Bottom-up Initiatives and Revival in the Face of Rural Decline: Case Studies from China and Sweden. *Journal of Rural Studies*, 47, 506–513.
- Lowe, P., Murdoch, J. & Ward, N. (1995). Networks in Rural Development: Beyond Exogenous and Endogenous Models. *Beyond modernisation*, 87–105.
- Murdoch, J. (2000). Networks — a New Paradigm of Rural Development? *Journal of Rural Studies*, 16(4), 407–419.

Shen, M. (2020). *Rural Revitalization Through State-Led Programs: Planning, Governance and Challenge*. Singapore: Springer Singapore.

84472

## Adaptive governance for health and social equity: A case study of Hangzhou's Xiaoying alley

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Adaptive governance has been widely adopted by scholars in various fields as a type of governance arrangement that has arisen in systems characterized by a mass of complexity, dynamism and uncertainty. Despite it having been frequently discussed recently, very little research has examined the impetus for the adaptation process in Chinese urban contexts and one-party political settings. This paper aims to reveal the adaptive governance process and the driving forces behind it in Hangzhou Xiaoying alley which has a long and famous history as a typical example of patriotic health campaign in China for decades since the period of chairman Maozedong and limited health and welfare resources to satisfy the residents who live nearby since the new century. With a framework developed from the institutionalism's perspective, a case study of Xiaoying alley's integrative health promotion initiative for health and social equity was undertaken to reveal the features characterized its adaptive governance and the driving forces behind it. The research found that the subdistrict office and the residents of the community indirectly and gradually united as a passionate coalition, which strived for achievements to win the "promotion tournament" that is popular in China while the urban government with its priority on social stability had rare interest in enhancing the health and welfare quality and equity. Consequently, the coalition of the subdistrict office and residents moved the adaptation from the typical hierarchy governance to a more inclusive type, the adaptation process reshaped the relationship between stakeholders who possessed different interests and there were still institutional challenges and barriers in regulation and facilitating cooperation. It is necessary to combine the existing practical experience of other cities and the direct guidance from the superior level government to solve the problems mentioned above.

Keywords: adaptive governance, urban health, healthy China 2030, institution, policy instruments

### References

1. Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). Adaptive governance of social-ecological systems. *Annu. Rev. Environ. Resour.*, 30, 441-473.
2. Healey, P. (2006). Transforming governance: Challenges of institutional adaptation and a new politics of space. *European planning studies*, 14(3), 299-320.
3. Burris, S., Hancock, T., Lin, V., & Herzog, A. (2007). Emerging strategies for healthy urban governance. *Journal of Urban Health*, 84(1), 154-163.
4. Chaffin, B. C., Gosnell, H., & Cosens, B. A. (2014). A decade of adaptive governance scholarship: synthesis and future directions. *Ecology and Society*, 19(3).
5. Karpouzoglou, T., Dewulf, A., & Clark, J. (2016). Advancing adaptive governance of social-ecological systems through theoretical multiplicity. *Environmental Science & Policy*, 57, 1-9.

6. Sharma-Wallace, L., Velarde, S. J., & Wreford, A. (2018). Adaptive governance good practice: Show me the evidence!. *Journal of Environmental Management*, 222, 174-184.

84514

## Territorial Impact Assessment – a policy assessment tool for better integration of planning and other sectors?

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Beginning of Territorial Impact Assessment dates back to year 2004 when ESPON commissioned first study on the topic. The whole idea was to increase the territorial sensitiveness of other sectors and support them in thinking spatially about their policies and measures. Since then, European Commission has committed itself to promote the TIA as a tool to support policy making both on the European and the national level. The latest efforts of the Commission have materialised in the pilot actions in support of implementation of the newly adopted Territorial Agenda 2030. In the pilot action we are presenting in this contribution, TIA is aimed to provide the assessment of (un)balanced impacts of the selected sectoral policies on the cross-border areas of participating member states (Slovenia, The Netherlands, Poland, Czech Republic and Germany). More particularly, we will focus on presenting the assessment approach to evaluate the (un)wanted territorial impacts of the national cultural heritage strategy 2020-2023 onto the countryside area on Slovenian-Croatian border. This exercise will enable us to reflect on how sensitive sectoral policies are towards territorial objectives, do they cause territorial imbalances and are thus contradictory to Territorial Agenda's objectives. Furthermore, participative approach to the assessment will enable us to deliberate how aware the local stakeholders are towards the national and European territorial objectives and of territorial impact of sectoral policies. Another added value of the approach is by deliberating the territorial impacts in the cross-border context, thus, to assess the spill-over affects of one national policy. All in all, the contribution will present an assessment approach which could if applied on different administrative level, contribute to better and more elaborated policy making and implementation.

Keywords: Territorial Impact Assessment, policy making, strategic planning, Territorial Agenda 2030, integration

### References

- Kostanjšek, B., Krošelj, M., & Marot, N. (2022). Report on the TIA process in the cross-border area Obsotelje and Kozjansko, Slovenia. Ljubljana, Univerza v Ljubljani.
- Marot, N., Fischer, T. B., Sykes, O., Golobič, M., Muthoora, T., & González, A. (2021). Territorial impact assessment: a policy assessment-like strategic environmental assessment in action. In *Handbook on Strategic Environmental Assessment*. Edward Elgar Publishing.
- Marot, N., Golobič, M., & Fischer, T. B. (2020). The ESPON EATIA: A Qualitative Approach to Territorial Impact Assessment. In *Territorial Impact Assessment* (pp. 77-99). Springer, Cham.
- Golobič, M., Marot, N., Kolarič, Š., & Fischer, T. B. (2015). Applying territorial impact assessment in a multi-level policy-making context—the case of Slovenia. *Impact Assessment and Project Appraisal*, 33(1), 43-56.

85292

## Transboundary Marine Governance: a case study of the Irish Sea

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Marine governance is highly complex. Due to its multifaceted and international nature, effective integrated marine governance requires transboundary coordination. Indeed, transboundary planning is viewed as a necessary component of effective Marine Spatial Planning (MSP) particularly in shared seas. Yet, calls for transboundary MSP, both in policy and academia, tend to underplay the significance and complexity of maritime borders. Governing shared waters, involves complex interactions between actors and institutions, which are often embedded in different legislative approaches, cultures and administrative procedures. Using the Irish Sea as a case study, this research critically explores transboundary MSP and seeks to identify how inclusive, socially just and equitable approaches to MSP can be nurtured in transboundary seas. The Irish Sea offers a unique context within which to explore such issues. Historically, the governance and property rights regime of the Irish Sea has best been characterised as complex, piecemeal and sectoral. It is governed by, for example, EU Directives and international conventions, four separate pieces of primary legislation, four different national plan approaches and five nations are carrying out Marine Spatial Planning (MSP). The climate crisis and uncertainty emerging from 'BREXIT' further complicates marine governance in this context. Applying a bespoke evaluative framework, and utilising an in depth policy review, stakeholder workshops and qualitative interviews, this paper critically explores the extent to which MSP systems and plans emerging across the Irish Sea promote transboundary integration. The discussion ends with an identification of present and future issues and opportunities which may emerge post-Brexit and recommendations are made to advance integrated marine management in that context. This paper contributes to the ongoing dialogue in relation to the emergence of MSP, its relationship to terrestrial planning and the evolution of marine governance across the Irish Sea, and elsewhere.

Keywords: Marine Spatial Planning, Governance, Transboundary, Shared Seas, Irish Sea

### References

- Ansong, JO., McElduff, L. and Ritchie, H. (2021) Institutional Integration in Transboundary Marine Spatial Planning: A theory-based 1 evaluative framework for Practice, Ocean and Coastal Management, 202.
- Ritchie, H. and McElduff, L. (2020) The whence and whither of marine spatial planning: revisiting the social reconstruction of the marine environment in the UK, *Maritime Studies*, 19 229-240.
- Ritchie, H., Flannery, W., O'Hagan, AM, O'Mahoney, C. Twomey, S. (2019) Transboundary integration of Marine Spatial Planning, Brexit and the island of Ireland, *Irish Geography*.
- Ritchie, H. and Flannery, W, (2017) Advancing Integrated Marine Spatial Planning in Northern Ireland, in S.McKay and M.Murray (Eds) *Planning Law and Practice in Northern Ireland*,

Abington, Routledge.

85193

## Difficulties and lessons of the ongoing planning reform in China for sustainable development goals

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Divergent sectoral policy ambitions and economic priorities have led to many problems in China's urban development process, such as degraded ecological environment, uncontrolled urban sprawl, spoiled land resources, and unbalance development. To resolve those problems, a top-down institutional revolution has been launched among the sectors of urban planning, land use, economic development, coastal management, farming, etc., since 2018 for the integrated territorial governance. To understand the difficulties and lessons of this reform journey, this study, firstly, examines the dynamic organisational structures at the national level since 1949, which reveals the path-dependent features of conventional policy-making systems. Following that, the paper elaborates how these features have caused bottlenecks in governance, for instance, (1) conflicts between strict rules and planning discretion (2) a big white elephant in policy negotiation, (3) mismatches between local economic benefits and national requirement, (4) missing lands in a directory relating to sectoral coordination, and (5) too big ambitions to attempt. The paper concludes with suggestions to resolve these challenges and future work need to be considered.

Keywords: territorial governance, institutional reform, land use policy, planning discretion, sectoral coordination

### References

1. Faludi, A., 2000. The performance of spatial planning. *Plan. Pract. Res.* 15 (4), 299–318.
2. Hajer, M., Zonneveld, W., 2000. Spatial planning in the network society-rethinking the principles of planning in the Netherlands. *Eur. Plan. Stud.* 8 (3), 337–355.
- Healey, P., 1997.
3. An institutionalist approach to spatial planning. In: Healey, P., Khakee, A., Motte, A., Needham, B. (Eds.), *Making Strategic Spatial Plans: Innovation in Europe*. UCL Press, London, pp. 21–36.
4. Nadin, V., Stead, D., 2008. European spatial planning systems, social models and learning. *DISP – Plan. Rev.* 44 (172), 35–47.

85353

## Collective actions for the production of inclusive urban spaces: hopes, limits and transformative possibilities

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In the recent years, several studies have outlined the profound changes in the forms of collective action produced by the rise of urban governance and highlighted their positive/negative effects in terms of production of democracy from below or in co-production with local governments. Only rarely have these studies linked such transformations to the issues of learning of values of coexistence, solidarity and equity in local communities/populations and production of inclusive urban spaces. In this paper, I address such issue and propose a possible classification of the multiplicity of collective actions inhabiting the contemporary city in order to uncover their embedded hopes, limits and transformative possibilities. In particular, I propose to consider three typologies of collective action that impact differently on the production of inclusive urban spaces. The paper is divided into three parts. The first part discusses the theories of collective action to identify a series of categories for decoding the relationship between collective action and sustainable change. In the second part, through the previously selected categories of learning the paper analyses different cases of study in which collective actions have promoted social inclusion against marginality. In the third part, the paper identifies the individualizing, purifying and generative forms of collective action and describes their learning content and influence on the transformative possibilities of urban space in terms of equity and inclusiveness. In particular, it shows as several collective actions have individualizing and purifying effects and do not produce any emancipatory change in the community and inclusiveness of urban spaces. Hopes are instead associated to generative collective actions.

Keywords:

### References

- Mayer M, Boudreau JA (2012) Social movements in urban politics: trends in research and practice. In: Mossberger K, Clarke SE, John P (eds) Oxford handbook on urban politics. Oxford University Press, Oxford, pp 273–291
- Usubillaga J 2022, Change by Activism: Insurgency, Autonomy, and Political Activism in Potosí-Jerusalén, Bogotá, Colombia, *Urbna Planning*, 7, 1, 72-81.
- Rosanvallon P (2013) *The society of equals*. Harvard University Press, Cambridge
- Uitermark J, Nicholls W, Loopmans M (2012) Cities and social movements. Theorizing beyond the right to the city. *Environ Plan A* 44(11):2546–2554

84553

## Experimental Rural Governance – the Complex Dilemma of Swedish Water Planners

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The increasing predominance of wicked environmental problems has illuminated gaps in traditional governance structures, demonstrating a need for new and experimental forms of governance. Challenges such as climate change, biodiversity loss, and mass migrations arise in complex arenas that involve many actors and cross geographical boundaries, placing high demands on the planners that seek to address them. This study focuses on the role of rural water coordinators in Sweden as they address one such wicked problem of eutrophication through the Leva project, a nationally funded platform to support implementation of better water management measures.

Through Leva, the water coordinators engage with landowners and other actors to identify where measure can be introduced, often in processes that require the balancing of multiple interests and priorities. They are employed by different organizations both within and outside traditional hierarchical governance structures but profess to operate primarily to further the interests of farmers and landowners. This dynamic creates tensions as the planners are publicly funded and mandated to improve environmental conditions but often identify with farmer interests. Planners are thus required to contribute with scientific, legislative, and process expertise and to navigate a complicated legislative landscape. The purpose of this paper is to examine the role of these planners and as they work to make sense of their role in multi-actor and multi-scalar landscape.

Through interviews and focus groups with key actors, we seek to understand the challenges the planners face and the techniques they employ to achieve the projects aim: to create a long-term approach for the implementation of more measures to combat eutrophication. By conceptualizing the Leva project as a form of experimental governance, we demonstrate the complex dynamics at play as the coordinators work crosses institutional boundaries and balances multiple priorities and interests. We find that this unique governance experiment places planners in a role that is full of contradictions. This case contributes to an ongoing conversation about environmental governance by exploring the possibilities and limitations of experimental planning arrangements.

Keywords:

### References

- AGRAWAL, A. 2005. *Environmentality: Technologies of Government and the Making of Subjects*, Duke University Press.
- EDWARDS, G. A. S. & BULKELEY, H. 2017. *Heterotopia and the urban politics of climate change experimentation*. *Environment and Planning D: Society and Space*.
- ENEQVIST, E. & KARVONEN, A. 2021. *Experimental Governance and Urban Planning*

Futures: Five Strategic Functions for Municipalities in Local Innovation. *Urban Planning*, 6.  
MURRAY LI, T. 2016. Governing rural Indonesia: convergene on the project system. *Critical Policy Studies*, 10.

85084

## Deliberation in times of urgency. Is there a need to reimagine communicative planning theory?

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Planners are increasingly having to address urgent sustainability challenges such as climate change impacts, rapid immigration and pressing socio economic problems. Accordingly, there are growing policy and legislative efforts to speed up planning process in order to reach decisions and tackle these challenges swiftly (Mäntysalo et al., 2015). Efforts for faster and more efficient decision-making are underpinned mainly by neoliberal ideals and New Public Management principles. As a consequence, participatory and deliberative practices are considered to be time-consuming and an obstacle for effectiveness in planning (Niitamo, 2021, Falleth and Saglie, 2011, Grange, 2017). Meanwhile, proponents of participation, including communicative planning theory scholars, continue to promote ideals and practices similar to those of the deliberative turn in planning (Healey, 2005, Forester, 1999), arguing that these, despite requiring extra time and resources, are better suited to address complex sustainability challenges (Innes and Booher, 2016, Baker et al., 2007). There is no doubt that deliberative ideals, along the lines of communicative planning theory, provide important guidance for democratically addressing complex problems. Even so, how suitable are such ideals for tackling the urgency of the challenges that many cities around the world are experiencing today? Based on a literature review, this paper aims at assessing how communicative planning theory is responding to the increased calls for faster decision making in order to swiftly address urgent sustainability challenges. Are there any developments in the theory that recognise the need for speed in decision-making and provide guidance for planning to be more efficient and capable to swiftly address urgent sustainability challenges, albeit in a deliberate manner? The overarching research question guiding the assessment made by the paper is if (and potentially how) communicative planning theory needs to be reimaged in order to meet the urgencies of our time.

**Keywords:** Communicative planning theory, urgent sustainability challenges, participation, deliberation, swift planning

### References

- BAKER, M., COAFFEE, J. & SHERRIFF, G. 2007. Achieving successful participation in the new UK spatial planning system. *Planning Practice & Research*, 22, 79-93.
- FALLETH, E. & SAGLIE, I.-L. 2011. Democracy or efficiency: contradictory national guidelines in urban planning in Norway. *Urban Research & Practice*, 4, 58-71.
- FORESTER, J. 1999. *The deliberative practitioner. Encouraging participatory planning processes*, London, MIT Press.
- GRANGE, K. 2017. Planners – A silenced profession? The politicisation of planning and the need for fearless speech. *Planning Theory*, 16, 275-295.
- HEALEY, P. 2005. *Collaborative planning: shaping places in fragmented societies*,

Gordonsville, Palgrave.

INNES, J. E. & BOOHER, D. E. 2016. Collaborative rationality as a strategy for working with wicked problems. *Landscape and Urban Planning*, 154, 8-10.

MÄNTYSALO, R., JARENKO, K., NILSSON, K. L. & SAGLIE, I.-L. 2015. Legitimacy of Informal Strategic Urban Planning—Observations from Finland, Sweden and Norway. *European Planning Studies*, 23, 349-366.

NIITAMO, A. 2021. Planning in no one's backyard: municipal planners' discourses of participation in brownfield projects in Helsinki, Amsterdam and Copenhagen. *European Planning Studies*, 29, 844-861.

84920

## Regional Governance through Administrative Annexation: The Case of City-County Merger in China

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In the context of globalisation and urbanisation, as cities have outgrown their administrative boundaries, metropolitan areas are strategic areas for countries worldwide to realise the overall coordinated development. For decades, the governance of metropolitan areas has been a critical debate in public administration. The three waves of governance reform since the 1950s represented by Regionalism, Public Choice, and New Regionalism have resulted in different organisational systems applied to metropolitan areas—respectively characterised by centralised, polycentric, and collaborative governance. The reform trend shows that changes to government structure through the merger to attain various goals of metropolitan governance (which is best exemplified by Regionalism) have been long criticised because of the difficulty in implementation and the neglect of collaborative processes. Intriguingly, administrative annexation has been one of the significant planning instruments employed by Chinese local governments to achieve urbanisation, and the most typical case is the merger of city and county – known as 'Turning County into District'. In the face of multiple governance methods to overcome administrative barriers, this research investigates why China has an annexation preference—a conflict-prone approach to strengthen metropolitan governance.

This research adopts qualitative methods, including document review, process-tracing, and case studies to answer the 'why' pro-merger phenomenon prevailing in China. To have an in-depth insight into why annexation has prevailed, it unpacks the current administrative system and the phenomenon of city-county mergers since the founding of the People's Republic of China (1949). This research systematically introduces the spatial economic phenomenon of overlapping administrative regions and economic regions in China, which was proposed by local Chinese scholars that coin in the term 'Administrative-territorial Economy(行政区经济)'(Liu and Lin, 2015). Based on the understanding of 'Administrative-territorial Economy', an overview of China's urbanisation and policy change since the opening up in 1978 and three case studies has been done to understand Chinese characteristics of urbanisation. The findings from the desk study suggest that globalisation, national control and regulation, decentralisation and the commercialisation of housing have stimulated China's regional economic vitality and unlocked urban land values, which turns urban areas into the main battlefield for economic activities and then sets off the urban scale competition. The crux of the problem lies in the fact that the reform of the policy system lags behind social progress, making administrative annexation a path dependence for local governments to achieve state-led urbanisation.

Keywords: metropolitan governance, administrative annexation, state-led urbanisation, city-county merger

## References

LIU, J. & LIN, T. 2015. China's Administrative-territorial Economy and Administrative Divisions in China: Theory and Practice. 中国行政区经济与行政区划：理论与实践, Nanjing, Southeast University Press.

84331

## Overarching land-use strategy (LUS) in small rural municipalities in Norway - involvement of politicians and citizens in the LUS-processes

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In 2019, the national planning authorities issued an “expectation document” urging the municipalities to elaborate land use strategies (LUS) to improve the connection between the overall comprehensive plan and the land use plan. Among the 356 Norwegian municipalities, more than 200 have less than 2500 inhabitants. The national planning authorities were concerned about the implementation of the LUS in small municipalities and particularly their planning of the outfields.

Our research question is: To what degree are politicians and citizens involved in the LUS-processes, and how does the participation matter to the output of the planning process. In Norway, and several other countries, participation is enshrined in the Planning and Building Act, and citizen participation and collaborative forms of policy development are perceived of as a widening of the democracy. We find these ideas in the research areas of participatory democracy (Pateman, 1970), communicative theory (Habermas, 1984) planning (Healey, 1997) and communicative planning (Innes and Booher 2010). Also, strategic planning has gained importance in the municipal planning system, in Norway as in many other countries (Ringholm & Hofstad, 2018; Albrechts & Balducci 2013). So has citizen participation (Smith, 2009; Fung, 2006). In the 2008 revision of the Planning and building Act, both participative and strategic elements were emphasized. One ambition with the revision was to strengthen the politicians’ engagement in planning, an ambition that seem slow in fulfilling when it comes to the overarching “Plan strategy” (Kvalvik 2020).

We do, however, have little knowledge of how citizen and political participation take place in the more particular strategies, such as LUS. We also know little of how it plays out in small municipalities. These often face challenges. One is the capacity for and competence of shaping adequate participation arenas, as the planning staff is small and deals with a multitude of tasks and planning processes. Another challenge is demography; a rapidly ageing population. Young people are in general hard to engage in planning participation, and this increases the challenge. Such challenges may lead to participation being downsized and kept on a minimum. On the other hand, we may observe creative and innovative forms of participation that can serve as an example for other municipalities. A set of sub-questions will guide the analysis of these themes in relation to the research question.

The data stems from a pilot R&D-project commissioned by The Ministry of Local Government and Regional Development. The project is carried out by a research team from the Inland Norway University of Applied Sciences and the UiT The Arctic University of Norway. Altogether 8 periphery municipalities participate in the project. The data consist of interviews, observation of participatory arenas, document studies and experiences from meetings with planners and leaders in the 8 municipalities.

Keywords: municipal planning, land-use strategy, political participation, citizen participation, communicative planning

#### References

- Fung, A. (2006). Varieties of Participation in Complex Governance. *Public Administration Review*. December
- Habermas, J. (1984). *The theory of communicative action*. Beacon Press, Boston
- Healey, P. (1997). *Collaborative Planning. Shaping Places in Fragmented Societies*. Macmillan, London
- Innes, J. and Booher, D (2010). *Planning with Complexity*. Routledge, London
- Kvalvik, K. (2020): *Planlegging og politikk: «Når ikkje alt går etter planen»*. PhD-dissertation. UiT The Arctic University of Norway
- Pateman, C (1979). *Participation and democratic theory*. Cambridge University Press, Cambridge
- Ringholm, T. og H. Hofstad (2018): *Strategisk vending i planleggingen?* In Hanssen, G. S. & N. Aarsæther (ed.): *Plan- og bygningsloven – en plan for vår tid*, pp. 107-122. Oslo: Universitetsforlaget
- Smith, G. (2009). *Democratic innovations*. Cambridge University Press, Cambridge

84958

## Rethinking urban energy transition: actors, processes and policies.

Federica Rotondo

POLITO

Current societies face unprecedented challenges and risks resulting from social, environmental and climate changes. Whereas technocentric approaches tend to focus on energy and the environment as fields to approach through continuous technical innovations, little attention is given to social practices and organisational assets that could have a role in favouring and supporting the transition towards a low-carbon society.

In order to shed light on the matter, this research shifts the focus to current governance practices and, in particular, on the involved actors and their relation in energy-related initiatives or projects of existing public housing neighbourhoods. The main research questions revolve around: (i) the socio-political context and specific spatial conditions of specific neighbourhoods; (ii) the variety of actors involved in the decision-making processes and the relations among different actors and interests; (iii) the socio-spatial and governance implications of the considered energy-related initiatives or projects.

To this end, a limited number of Italian case studies are considered, in order to retrospectively and diachronically analyse in-depth specific energy-related projects and initiatives promoted in existing public housing neighbourhoods. The proposed research methodology combines document review, semi-structured interviews with privileged actors, and on-site observation, as well as quantitative investigation of the impact of the analysed interventions.

Expected outcomes move from understanding interests and actors relations along the decision-making process to the identification of levers and catalysts to trigger process innovation in the shaping of urban policies and spatial planning for urban energy transition.

Keywords: Energy transition, urban governance, sustainable neighbourhoods, Italy

### References

Betsill, M., & Bulkeley, H., 2007. Looking Back and Thinking Ahead: A Decade of Cities and Climate Change Research. *Local Environment*, 12(5), pp. 447–456.

<https://doi.org/10.1080/13549830701659683>

Luque-Ayala, A., Marvin, S., Bulkeley, H. (Eds.), 2018. *Rethinking Urban Transitions: Politics in the Low Carbon City*, 1st ed. Routledge, Abingdon, Oxon; New York, NY : Routledge, 2018.

Parag, Y., Hamilton, J., White, V., Hogan, B., 2013a. Network approach for local and community governance of energy: The case of Oxfordshire. *Energy Policy* 62, pp. 1064–1077. <https://doi.org/10.1016/j.enpol.2013.06.027>

Rotondo, F., Abastante, F., Cotella, G., Lami, I.M., 2020. Questioning Low-Carbon Transition Governance: A Comparative Analysis of European Case Studies. *Sustainability* 12, 10460.

Valkenburg G, Cotella G (2016) Governance of energy transition: about inclusion and closure in complex sociotechnical problems. *Energy Sustain Soc*, 6, 20. <https://doi.org/10.1186/s13705-016-0086-8>

84644

## Policy failure, institutional complexity and the challenges of implementing urban regeneration in Oviedo (Spain).

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This paper presents the findings of an investigation into urban policy, based on expert interviews and government document textual analysis, and their underlying rationales. The analytical framework developed herein is presented to guide future scholarship in the systematic critical analysis of urban policy. To do so, I present the case study of Oviedo's (Spain) IuB urban regeneration strategy. Using this case study, I examine the concepts of governance, participatory and advocacy planning and policy failure which underpin the outcomes of this initiative, and help identify the institutional mechanisms, ideologies, mobilisations, and regulatory practices through which urban development projects have worked in Oviedo (Wells, 2019; Davidson, 2019; Temenos and Lauermaann, 2020). This research argues how new governance practices such as participatory and advocacy planning are dynamic processes that sometimes do not lead to successful outcomes. Regeneration politics in Oviedo, where an unresolved dilemma over the a redevelopment strategy in vulnerable neighbourhoods of the city has effectively defined the nature of development politics for a generation, results in ongoing policy incongruity and failure. Findings suggest the need for a broader idea of the power structures behind the processes of creation, development and implementation of urban policies. This study provides insight into Oviedo's urban policies and fragmented urban fabric, which has commonly been overlooked when studying the Spanish planning system. Finally, I conclude with a summary of the key perspectives this paper has presented, and identification of potential avenues for future research within Oviedo's urban policies and their implementation strategies, which could also shed light on urban policy research more broadly in the foreseeable future of this field.

Keywords: Urban geography, policy failure, politics of dissonance, governance structures, urban planning, regional planning.

### References

Davidson, M. (2019). "Going bust two ways? Epistemic communities and the study of urban policy failure", *Urban Geography*, 41(9), pp. 1119-1138.

Obeso Muñiz, I. (2019). The spatial diffusion of economic activity in the Oviedo region (1970-2018). *Investigaciones Geográficas*, (72), pp. 189-207.

Temenos, C. and Lauermaann, J. (2020). "The Urban Politics of Policy Failure", *Urban Geography*, 41(9), pp. 1109-1118.

Wells, K. (2019b). "Policyfailing: The Case of Public Property Disposal in Washington, D.C." *ACME: An International Journal for Critical Geographies*, 13(3), pp. 473-494.

85087

## Making room for soft planning practices: the meandering route of EU's lesson-drawing urban policy initiatives

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Enhancing territorial cohesion and development through policy coordination and place-based approaches has deserved increasing attention in the consecutive programming cycles of the EU's Cohesion Policy (ECP). With no formal spatial planning duties, the emphasis has been placed on integrated territorial approaches to foster soft spaces and soft planning practices and strengthen the territorialization of urban and regional policies. This has been the case of the several EU-led policy initiatives (Integrated Territorial Investments - ITI; Community-Led Local Developments - CLLD and Integrated Sustainable Urban Development – ISUD/Article 7 ERDF) made available in the last 2014-2020 programming period.

However, the success of the ECP on achieving such goals has been a matter of growing concern in academic literature, and results seem not to come up to expectations. Among the reasons have been the difficulties faced when meeting statutory domestic frameworks. Several questions are raised thus: How do European, national and sub-national political goals combine? How do European non-binding strategic guidance, national statutory and legally binding arrangements, and the relative normativity of Cohesion Policy funding frameworks coexist? How converging or agonistic are these policy transfer processes?

This presentation aims to bring this discussion centerstage by examining the implementation of integrated sustainable urban development in Lisbon's Metropolitan Area in the 2014-2020 programming cycle. The study involved an extended survey and mapping of the actions implemented under article 7 ERDF and its correlation with both ITI and CLLD operations, as well as interviews with experts.

Findings show multiple tensions and contradictions that challenge a narrative of a successful accomplishment of the fundamental goals. Among these are: the rigidity and uniformization of the implementation apparatus vis-a-vis the flexibility and softness inherent to territorial governance and capacity-building purposes; the atomization of interventions through pulverization of instruments and targeted areas versus the aim of concentrate resources; the financialization of integrated sustainable urban development through the labyrinthine financial engineering of EU funding that often supplants planning and governance approaches. In countries such as Portugal with higher usage of EU funding, these tensions tend to be sharpened with clear territorial impacts.

Keywords: European Cohesion Policy; Integrated Territorial Approaches; Soft Planning; Soft Spaces; Sustainable Urban Development

## References

- Allmendinger P, Chilla T and Sielker F (2020) Europeanizing territoriality—towards soft spaces? *Environment and Planning A* 46(11): 2703–2717. DOI: 10.1068/a130037p.
- Havlík V (2018) Competing discourses of territorial development: tensions between cities and regions as a result of the new regionalism. *European Planning Studies* 26(10). Taylor & Francis: 1999–2014. DOI: 10.1080/09654313.2018.1504894.
- Luukkonen J and Moilanen H (2012) Territoriality in the Strategies and Practices of the Territorial Cohesion Policy of the European Union: Territorial Challenges in Implementing ‘Soft Planning’. *European Planning Studies* 20(3): 481–500. DOI: 10.1080/09654313.2012.651806.
- Metzger J and Schmitt P (2012) When soft spaces harden: the EU strategy for the Baltic Sea Region. *Environment and Planning A* 44: 263–281. DOI: 10.1068/a44188.
- Nosek Š (2017) Territorial cohesion storylines in 2014–2020 Cohesion Policy. *European Planning Studies* 25(12). Taylor & Francis: 2157–2174. DOI: 10.1080/09654313.2017.1349079.
- Purkarthofer E (2016) When soft planning and hard planning meet: Conceptualising the encounter of european, national and sub-national planning. *European Journal of Spatial Development* 61(61): 1–20.
- Servillo L (2019) Tailored polities in the shadow of the state’s hierarchy. The CLLD implementation and a future research agenda. *European Planning Studies* 27(4). Taylor & Francis: 678–698. DOI: 10.1080/09654313.2019.1569595.
- Tosics I (2008) Integrated territorial investment: A missed opportunity ? In: Bachtler J, Berkowitz P, Hardy S, et al. (eds) *EU Cohesion Policy*. London: Routledge, pp. 284–296.

84607

## Introducing the concept of ‚Synergetic Regional Governance‘: Steering regional development through multi-layered regional governance networks

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Focussing on the complex mechanisms of regional development processes, regional governance has become a widely used concept, encompassing a wide array of spatial modes such as metropolitan, rural or territorial governance. The concept has either been used i) to describe and analyse complex regional coordination processes between actors with different backgrounds and agendas, ii) to describe and analyse the redistribution and rescaling of state responsibilities to the regional level, or iii) in a more normative fashion, to strengthen sustainable development and enhance the performance of regions (Willi, Pütz, and Müller 2018, 776).

Focussing on the cooperation of state and non-state actors to foster territorial development, regional governance is seen as useful approach to realize strategic spatial planning (Albrechts, Healey, and Kunzmann 2003) or integrated rural development (Böcher 2008). In Rural Studies, the approach – in both, its analytical as well as normative understanding – not least has gained importance since the OECD’s call for a ‘New Rural Paradigm’. The practice of rural governance is often characterized by geographically and thematically overlapping governance networks. However, from a scientific perspective, empirical studies on rural governance usually concentrate on individual regional governance and ignore the wider contexts and partnerships to other networks; from a professional perspective, practitioners hardly manage to adequately integrate this cognition on the multi-layered networks existent into their conceptual considerations and activities (Nischwitz et al. 2020) and to take advantage of these overlapping arrangements.

Based on a comparative case study about the multi-layered governance arrangements involved in promoting a youth-sensitive regional development agenda in four shrinking rural regions in Austria and Germany, this paper presents examples for the successful collaboration of geographically and thematically overlapping governance networks on a regional scale. The analysis reveals the modes and means of interaction of the different actor-networks involved through introducing the concept of ‚Synergetic Regional Governance‘. This novel concept describes the cooperation of overlapping governance networks on a regional scale, forming a ‚network of actor networks‘. Through the mode of ‚Synergetic Regional Governance‘, several governance-networks are coordinating their strategies and measures to realize sustainable regional development and to gain “governance capacity” (Healey 1998).

Keywords: regional governance, comparative case study, multi-actor, coordination, governance capacity

### References

Albrechts, Louis, Patsy Healey, and Klaus R. Kunzmann. 2003. ‘Strategic Spatial Planning and Regional Governance in Europe’. *Journal of the American Planning Association* 69(2): 113–29.

- Böcher, Michael. 2008. 'Regional Governance and Rural Development in Germany: The Implementation of LEADER+'. *Sociologia Ruralis* 48(4): 372–88.
- Healey, P. 1998. 'Building Institutional Capacity through Collaborative Approaches to Urban Planning'. *Environment and Planning A: Economy and Space* 30(9): 1531–46.
- Nischwitz, Guido, Christian Diller, Patrick Chojnowski, and Martin Kohl. 2020. 'Entwicklung eines neuen Modells zur Analyse regionaler Governanceprozesse' [=Development of a new model for the analysis of regional governance processes]. *disP - The Planning Review* 56(2): 32–50.
- Willi, Yasmine, Marco Pütz, and Martin Müller. 2018. 'Towards a Versatile and Multidimensional Framework to Analyse Regional Governance'. *Environment and Planning C: Politics and Space* 36(5): 775–95.

85210

## Challenge-oriented approach and scoped territories: innovation at stake

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Spatial development strategies and the pursuing of forms of social innovation and local development have been at the forefront of the planning and policy debate. However, they have been suffering from a strong urban-centric bias. The way these aspects have been pursued in territories with various degrees of urbanization, characterized by small and medium towns and intertwined with rural areas, remains less explored.

The paper mobilizes a series of studies and debates with the aim of supporting an encompassing way of addressing them in non-metropolitan territories.

First, it investigates the convergence between strategic spatial planning and place-based approach, and the implications that a challenge-oriented approach poses to the conceiving and the handling of a policy agenda in these territories.

Second, it reflects on the way the soft planning debate has addressed the complexity of designing a functional territory, intersecting the pragmatism of political choices with the interpretation of the places in relation to the political scope.

Third, the institutionalist and multilevel governance studies are brought together to identify the aspects that are mobilized for the articulation of the institutional configurations and processes.

Finally, the paper concludes by conceiving an encompassing frame to understand the dimensions that characterize the innovation processes that happen in territories with various degrees of urbanization. Some lessons drawn from a series of examples, using the EU cohesion policy as a background reference, form the basis for setting up a coherent interpretative frame as much a normative approach for initiatives in these territories.

Keywords: strategic planning, soft planning, scoped territory, functional area, multilevel governance

### References

Servillo L. (2019) Tailored polities in the shadow of the state's hierarchy. *The CLLD implementation and a future research agenda*, *European Planning Studies*, 27(4), 678-698.

Barca, F. Place-based policy and politics. *Renewal: A Journal of Labour Politics*, 27(1), 84-95. 2019.

Houghton, G., Allmendinger, P., Counsell, D., & Vigar, G. *The new spatial planning: Territorial management with soft spaces and fuzzy boundaries*. Routledge. 2019.

OECD, *Delineating Functional Areas in All Territories*, 2020. Available at:

<https://www.oecd.org/publications/delineating-functional-areas-in-all-territories-07970966-en.htm>

85243

## Alternative forms of governance against energy poverty: the energy communities experience

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The proposed topic focuses on governance arrangements in order to deal with energy poverty and their indirect outcomes. Findings from previous research show that the effects of climate change and the consequent emergence of new challenges can lead to unexpected solutions, impacting the way organizations evolve and co-evolve and consequently affecting related planning responses.

Although housing scarcity remains a major issue worldwide, there are regional discrepancies in the way housing problems manifest. In Europe during the last decades, demographic trends reduced the pressure over housing markets. In the meantime, households, while providing shelter, are still a major concern at different levels, namely at the household ability to maintain an adequate thermal comfort inside poorly isolated residential spaces, during winter and/or summer time(1). This is a manifold problem to which almost all solutions are costly. Some residents are in the position to spend huge amounts of money on energy bills, although solving the problem only in the short-term and with high environmental impacts. Most medium and low-income families are not in this position. An environmentally adequate, long-term solution would be to invest in renovation and better building insulation, but it's an expenditure that is often hardly affordable. This results with a significant number of families that simply cannot afford to keep their houses warm, or cool, with severe consequences on standards of living and health(2). The numbers in Europe vary regionally but they can be higher than 20% of the households in some countries (e. g. Portugal(3)). Paradoxically, some southern European countries with milder climates are those where energy poverty is more relevant(4).

In order to respond to these needs, small scale solutions are among the typologies of arrangements that are emerging; in Italy, different forms of collective production and self-consumption of energy from renewable sources, such as RECs (Renewable Energy Communities(5)), became increasingly popular(6).

The presentation will address the reasons behind energy poverty (from tangible to intangible levels), the role of REC in dealing with energy poverty and the outcomes of REC beyond the fulfillment of immediate needs, as a door to new governance arrangements in dealing / addressing other urban policies.

During the research, a database of existing REC in Italy has been created with the goal of defining their profiles based on Tuckman's(7) stages of group development. An inquiry is undergoing. Expected results will shed light on the processes of formation of these communities, how did they form and how did they evolve until they started performing with this specific goal. In addition, the survey will contribute to understanding the secondary outcomes of the energy related process; how communities innovate on performing other tasks, namely on gaining a voice in other policy issues rather than dealing with energy poverty.

Keywords: energy poverty, governance, energy communities, transition, urban policy

#### References

1. Li, K., Lloyd, B., Liang, X.-J., Wei, Y.-M, (2014): Energy poor or fuel poor: What are the differences? *Energy Policy* 2014, 68, 476–481.
2. Fowler, T., Murray, V. (2014): Excess winter deaths in Europe: a multi-country descriptive analysis. *Eur. J. Public Health*, 25 (2) 339-345
3. Horta, A., Gouveia, J.P., Schmidt, L., Sousa, J.C., Palma, P., Simões, S.,(2019): Energy poverty in Portugal: Combining vulnerability mapping with household interviews, *Energy and Buildings*, Volume 203, 2019, 109423, ISSN 0378-7788
4. Bollino, C. A., and Botti, F. (2017): Energy poverty in Europe: A multidimensional approach. *PSL Quarterly Review*, 70 (283), 473-507.
5. Renewable Energy Directive (Directive (EU) 2018/2001). Available online (accessed on 7 December 2021)
6. De Vidovich, L., Tricarico, L., Zulianello, M., (2021): COMMUNITY ENERGY MAP Una ricognizione delle prime esperienze di comunità energetiche rinnovabili. Franco Angeli Editore
7. Tuckman, B. W., (1965): Developmental sequence in small groups. *Psychological bulletin*, v. 63, n. 6, p. 384

85319

## Understanding Responsibilities in Flood Risk Governance

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Governments worldwide are looking to diversify their flood risk management and adaptation strategies, amongst others, by increasing resident involvement in flood risk governance processes. Such involvement of individuals shifts responsibilities from public to private actors. A clear understanding of the implications of this shift is difficult to reach as theoretical perspectives on the concept of responsibility vary. Moreover, grounds for attributing responsibility for flood preparedness and response are context-dependent. This lack of theoretical and empirical clarity complicates academic and policy discourses on what it actually means to 'be responsible'. This contribution presents a conceptual framework that distinguishes four theoretical notions of responsibility; legal responsibility, accountability, perceived responsibility, and moral responsibility. Although these notions are closely intertwined, they account for miscommunications and assumptions regarding responsibility divisions in flood risk governance approaches between governmental authorities, market parties and residents. Specifically, how residents perceive their own responsibility, and that of others, varies greatly in comparison to how responsibilities are legally divided or what actors are held to account for. Examples of flood risk governance approaches from England and the Netherlands are provided to demonstrate how the four notions provide clarification to a concept that is ambiguous and open to interpretation. Furthermore, through conscious use of the concept of responsibility, miscommunication could be prevented and potential false assumptions could be identified. This contribution proposes to (re)consider how responsibility divisions are enacted and understood among the actors involved in flood risk governance processes.

Keywords: Responsibility, Flood Risk Governance, Residents

References

84288

## Control and flexibility: A paradoxical challenge in urban planning

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Local communities increasingly take an active role in the (re)development of urban areas and become more involved with professional actors in urban planning. This has created new opportunities and challenges for professional planning actors as they now face a paradoxical challenge. On the one hand, there is a desire to give room to community initiatives, while on the other hand, there is also a need to retain (some degree of) control, especially given the many societal and sustainability challenges that we confront today. While studies have described the shift from top-down policies towards more facilitating policies, less is known on how this paradox unfolds in practice, and how planning actors work with community initiatives. To explore this paradox in practice, we draw on the case of Makers District, an urban development process in the port city of Rotterdam, the Netherlands. To examine how the leading planning actors, the municipality and port authority, deal with the paradoxical challenge, 15 relevant policy publications such as visions, strategies, and advisory reports published between 2011 and 2021 were identified and analysed. In addition, we conducted exploratory interviews with planners and researchers involved in the development of Makers District. We found that the approach of the municipality and port authority towards community initiatives has changed over time, and we highlight three examples of how they adapted roles to work with community initiatives. First, the municipality and port authority actively try to mobilise and support community initiatives, giving them also an important role in managing and generating relevant knowledge about the development process. Second, they move away from fixed master plans towards creating adaptive planning frameworks that provide the overall direction but retain sufficient room to respond to new ideas. Third, they started changing their tendering approach, balancing societal benefits instead of favouring financial profits. Despite these examples, we conclude that a paradoxical challenge of control and flexibility indeed unfolds in practice, and that finding a balance between the two is a continuing search and challenge. Our findings raise new questions about the role of professional planning actors in the light of the many societal and sustainability challenges that we confront today.

Keywords: urban planning, planning actors, community initiatives, sustainability challenges, the Netherlands

### References

Berisha, E., Cotella, G., Janin Rivolin, U. & Solly, A. (2021). Spatial governance and planning systems in the public control of spatial development: A European typology. *European Planning Studies*, 29(1), 181-200.

Buitelaar, E., Galle, M. & Sorel, N. (2014). The public planning of private planning: An analysis of controlled spontaneity in the Netherlands, in: Andersson and Moroni (Eds.) *Cities and Private Planning*, Cheltenham: Edward Elgar Publishing, 1-16.

Ernst, L., de Graaf-van Dinther, R., Peek, G.J. & Loorbach, D. (2016). Sustainable urban transformation and sustainability transitions: Conceptual framework and case study, *Journal of Cleaner Production*, 112(4), 2988-2999.

Grin, J. (2020). 'Doing' system innovations from within the heart of the regime. *Journal of Environmental Policy & Planning*, 22(5), 682-694.

Jay, J., Soderstrom, S. & Grant, G. (2017). Navigating the paradoxes of sustainability. In: Smith et al. (Eds.) *The Oxford Handbook of Organizational Paradox*, Oxford: Oxford University Press, 353-372.

Peek, G.J. (2015). *Veranderstad: Stedelijke gebiedsontwikkeling in transitie*. Rotterdam: Hogeschool Rotterdam Uitgeverij.

Tasan-Kok, T., van den Hurk, M., Özogul, S., & Bittencourt, S. (2019). Changing public accountability mechanisms in the governance of Dutch urban regeneration. *European Planning Studies*, 27(6), 1107-1128.

84438

## Regional planning gamification – A game-based approach for activating regional planning strategies

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“Progress! Your community succeeds in attracting a leading company as a cash cow. Play this card to discard any other card.”

Game-based media can present facts in an abbreviated yet concise way, formal regulations as usual in planning are abstract and difficult to understand for non-experts such as political decision-makers. Developed as a part of a project in the Master's programme "Urban and Regional Development" at Technische Universität Kaiserslautern, this paper presents a game-based approach on activating regional planning strategies. While gamification has already been a topic of discussion for years, the reality of planning does look different.

In this paper, issues are depicted on the region of Stuttgart. Well-known for global players such as Daimler, Porsche and Bosch even Stuttgart faces several challenges. Due to its administrative fragmentation and widespread competitive thinking, regional development is hampered by intercommunal tensions, stagnation induced by saturated communities and plainly unsolidaristic public acting. An increased NIMBY phenomenon is also to be mentioned in this context. In addition, the regional plan as an "overall spatial planning concept" that has to take integrated account of the functional interrelations of the region and mediate between competing uses, is often met with incomprehension, reluctance or even headwind - corresponding with negative consequences for the acceptance and appreciation of the plan. Even though the Stuttgart Regional Plan serves as a strong brake and already exploits the instrument's frame through restrictive regulations, it still reaches its limits, lacking the ability to activate and force the relevant actors in order to keep the region's pole position.

Thus, this work proposes a card game as an approach for the outlined issues. As a low-threshold medium it is suitable to break down planning principles, options for political and both good and bad regional action for a broad target group. While playing, political decision-makers slip into the role of communities in order to determine their future development, being shown the consequences of different (non)actions and trends on 60 different illustrated cards. Stakeholders can therefore benefit from a learning effect and an increase in experience with regard to political actions.

Keywords: gamification, playful approach, card game, activating decision makers, regional planning strategies

### References

BISCHOFF, Ariane / SELLE, Klaus / SINNING, Heidi: Informieren, Beteiligen, Kooperieren. Dortmund, 2005.

Christoph; KIWITT, Thomas: Gute Bremsen, aber kein Gaspedal!; In Akademie für Raumforschung und Landesplanung (ARL) (Hrsg.): Nachrichten der ARL 01/2018, S. 33-35.

ÖAR-REGIONALBERATUNG GMBH: Systemische Instrumente für die Regionalentwicklung, Endbericht. Graz, 2002. SCHOLLES, Frank: Planspiel, In: Fürst, Dietrich / Scholles, Frank (Hrsg.): Handbuch Theorien + Methoden der Raum- und Umweltplanung, S.326-333. Dortmund, 2001. TUROWSKI, Gerd: Raumplanung, In: Akademie für Raumforschung und Landesplanung (Hrsg.), Handwörterbuch der Raumordnung, S. 893-898. Hannover, 2005.

Bundesstiftung Baukultur (BSBK) Reiner Nagel: Baukultur braucht Bildung. Ein Handbuch, 2020.

84350

## Deliberation and institutional design for collaborative planning: A case study of Enning Road redevelopment project in Guangzhou city, China

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In the past few decades, deliberation and new institutional designs emerged in policy-making and planning practices in the authoritarian context of China as a response to the increasing complexity and conflicts brought about by the economic reform and opening-up. Planning scholars argue a ‘communicative turn’ in Chinese spatial planning, while political scientists refer this paradoxical phenomenon as authoritarian deliberation that combines non-inclusive power and deliberative influence. Nonetheless, the forms, access rules, and boundaries of deliberation may vary at different stages of collaborative planning processes. It also remains unclear about the relations among deliberation, multiple actors, and institutional design. This research fills the gaps by developing theoretical understanding and providing empirical evidence regarding the forms of deliberation that involve a variety of actors in collaborative planning processes and the institutional design which facilitates such practices. It takes the redevelopment project of Enning Road in Guangzhou City as an in-depth case study. The data are collected through semi-structured interviews with a number of participants from the public, private, and civic sector, combined with reviewing policies, project documents, and online information. The result shows that the space for deliberation and its influence has been improved during the 16-year planning process of this project. The actions of Guangzhou citizens who have a strong awareness of civic rights, the news coverage by relatively free local press (together with new media), and active civil society organizations have contributed substantially to opening the space for deliberation and changing the local planning decisions. The influence has also reached the national level, as Guangzhou's planning experience has been endorsed by the central government. As a result, a series of national and local institutional designs (e.g. guidance for micro-regeneration) are formulated to not only formalize but also open more space for public participation and deliberation in the planning procedures of urban regeneration. In conclusion, the actions of civic actors and the interactions between public and civil society actors in the planning process have given rise to various forms of deliberation and new institutional designs, which gradually become an important tool to tackle emerging challenges in territorial governance in China.

Keywords: collaborative planning, authoritarian deliberation, institutional design, multiple actors, urban regeneration

### References

- He, B., & Warren, M. E. (2011). Authoritarian deliberation: The deliberative turn in Chinese political development. *Perspectives on politics*, 9(2), 269-289.
- Healey, P. (1997). *Collaborative Planning: Shaping Places in Fragmented Societies*. UBC Press.
- Hu, Y., de Roo, G., & Lu, B. (2013). ‘Communicative turn’ in Chinese spatial planning? Exploring possibilities in Chinese contexts. *Cities*, 35, 42-50.
- Innes, J. E., & Booher, D. E. (2010). *Planning with complexity: An introduction to collaborative*

rationality for public policy. Routledge.

Jiang, M. (2010). Authoritarian deliberation on Chinese internet. Jiang, M.(2010). Authoritarian deliberation on Chinese Internet. *Electronic Journal of Communication*, 20.

Li, X., Zhang, F., Hui, E. C. M., & Lang, W. (2020). Collaborative workshop and community participation: A new approach to urban regeneration in China. *Cities*, 102, 102743.

85019

## Understanding the Governance of Urban Regeneration in Public-Private Partnerships: Contributions from a systematic literature review

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With the changing paradigm of state functions and the increasing participation of the private sector in urban management, public-private partnership practices gain prominence in the development of cities, either in the construction and operation of new infrastructures or in the intervention in urbanized areas. Regarding urbanized areas, urban regeneration practices are proving to be an important response in the face of urban degradation observed in different cities. Despite their use in different contexts, PPPs in urban regeneration projects encounter many obstacles related to different aspects, such as high investment risk, low financial and social return, numerous factors of uncertainty, and the complexity involving different stakeholders.

Given the growing constellation of actors involved, their diverse and sometimes conflicting interests, governance assumes a prominent role, since it becomes essential to manage the different actors and possible conflicts, for the smooth running of the partnership and the project to be developed. Moreover, new PPP agreements favor new forms of governance. The paper thus consists of a descriptive analysis about the topic of governance, drawn from a more comprehensive literature review on PPPs in the urban regeneration sector. The descriptive analysis discusses the importance of governance, the different partnership arrangements that can be observed and their advantages, the diverse forms of governance, and the stakeholders that are involved in PPPs for urban regeneration.

The results suggest a variety of arrangements, stakeholders, and barriers to be discussed within governance. Among the arrangements, it is possible to identify partnerships called public-private-people partnerships and public-civil collaboration. Among the stakeholders, the roles of local authorities, local communities, residents, independent and new agencies, and non-profit organizations stand out. Finally, among the barriers, issues related to gentrification, accountability, and conflicts of interest are highlighted. The paper thus allows for a critical review of governance in the urban regeneration sector, especially regarding PPP projects. The reflection around these results can support the definition of political and technical frameworks more adjusted to governance, making it more agile, operational, and inclusive.

Keywords: public-private partnership, urban regeneration, literature review, descriptive analysis, governance, stakeholders

### References

Barata-Salgueiro, T., Guimarães, P. (2020). Public policy for sustainability and retail resilience in Lisbon city center. *Sustainability (Switzerland)*, 12 (22), art. no. 9433, pp. 1-22.

Fanelli, S., Lanza, G. (2017). A local authority governance model: the case of Parma and

‘MasterTown’. *International Review of Public Administration*, 22 (1), pp. 1-13.

Farhat, R. (2018). Accountability in urban regeneration partnerships: A role for design centers. *Cities*, 72, pp. 8-16.

Fraser, J.C., Kick, E.L. (2014). Governing urban restructuring with city-building nonprofits. *Environment and Planning A*, 46 (6), pp. 1445-1461.

Guarneros-Meza, V. (2009). Mexican urban governance: How old and new institutions coexist and interact. *International Journal of Urban and Regional Research*, 33 (2), pp. 463-482.

Jones, M.T. (2019). Framing regeneration: Embracing the inhabitants. *Urban Studies*, 56 (9), pp. 1901-1917.

Kort, M., Klijn, E.-H. (2013). Public-Private Partnerships in Urban Regeneration: Democratic Legitimacy and its Relation with Performance and Trust. *Local Government Studies*, 39 (1), pp. 89-106.

Lee, J.-W., Sung, J.-S. (2017). Conflicts of interest and change in original intent: A case study of vacant and abandoned homes repurposed as community gardens in a Shrinking City, Daegu, South Korea. *Sustainability (Switzerland)*, 9 (11), art. no. 2140.

84559

## Transport Decision Making: Developing an International Governance Framework for Integration of Transport Services in a Metro Region

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Though public transport and infrastructure are an essential backbone to any urban structure, land use, and solutions to global warming, there is surprisingly little written about the governance of public transit systems, particularly international comparative work. This lack of knowledge could lead to inefficient use of funds when building new infrastructure, with unsatisfactory results—for example, multiple ticketing systems, poorly timed transfers, and services that don't go where people live. (As an example of poor coordination, the Chicago El does not serve any of the city's major train stations, as they were historically operated by different organizations). This qualitative case study analysis compares transit governance in two cities in Germany, two in Israel and two in the US, chosen for the fragmentation of their political and funding systems, and differing levels of government at which decisions are made. Germany was chosen for its use of regional transit management corporations to overcome local fragmentation. Israel was chosen for its high degree of top-down funding and political decision making. And the US was chosen for its high localization of decision making. For each case, we use a combination of annual reports, policy documents, tax collection information, fare information and interviews, in order to understand the link between governance and service outcomes like coverage and trip time to work. We examine the level of government, the funding source, and various methods for interlocal agreements to coordinate otherwise fragmented services are effective in serving a higher percentage of the population. In doing so, we understand how different levels of government, and different models for overcoming fragmentation can have an impact on service outcomes like accessibility and coverage, and develop an international framework for understanding transport governance.

Keywords: Governance, Transport, Fragmentation

### References

Briffault, R., 2000. Localism and regionalism. *Buff Rev* 48, 1.

Buehler, R., Pucher, J., Gerike, R., & Götschi, T. (2017). Reducing car dependence in the heart of Europe: lessons from Germany, Austria, and Switzerland. *Transport reviews*, 37(1), 4-28.

Goldman, T., 2007. Transportation tax ballot initiatives as regional planning processes. *Transp. Res. Rec.* 1997, 9–16.

Homburger, W. S., & Vuchic, V. R. (1972). Transit Federation--A Solution for Service Integration. *UITP Revue*, 2, 84.

Ida, Y., & Talit, G. (2018). What we can learn 17 years after the reform in public bus transportation in Israel. *Case Studies on Transport Policy*, 6(4), 510-517.

Lam, A., Miller, M.A., 2002. Investigating Institutional Aspects of Multi-Agency Transit Operations-Review of the Literature.

Schröder, N.J.S., 2018. The lens of polycentricity: Identifying polycentric governance systems illustrated through examples from the field of water governance. *Environ. Policy Gov.* 28, 236–251.

Skuzinski, T., 2017. *The risk of regional governance: Cultural theory and interlocal cooperation.* Routledge.

84113

## Bridging land value capture with land rent narratives

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Urban land values have reached unprecedented levels in many parts of the world. Many scholars direct their research on their utilisation for public purposes. Two established research communities can be traced – the community referring to land value capture comprised mainly of urban planners and lawyers, and the community of economists discussing land rent. The relatively low level of interrelations between these communities prevents an effective sharing of their research outcomes.

This contribution seeks to strengthen interconnections between these communities by characterising the narratives of both research communities, and synthesising their views. The research is largely built on systematic literature review with content analysis undertaken using the NVivo software. The analysis focussed on the terminology used, the specific causes of land value increase, rationales and instruments used for land value capture, and the purpose of using the collected money to investigate the interconnections between both research communities. Both communities can also be mutually supportive. The approaches of both communities can operate in practice parallel to each other tackling land rents in their complexity, as each community has a different interest in focus. Land value capture community focuses on land undergoing large increases in land values and seeks acquiring resources for the needs of new development. Land rent community does not distinguish between new and earlier development and seeks to tax land rent of all land, mainly urban land. For land rent community, increasing efficiency and equity together with other general social needs such as stabilisation democracy thanks to land rent taxation is the subject of social debate which they seek to solve.

Keywords: land value; land rent; value capture; taxation; land

### References

- Alterman, R., 2012. Land use regulations and property values: the ‘Windfalls Capture’ idea revisited. In: Brooks, N., Donaghy, K., Knaap, G.J. (Eds.), *The Oxford Handbook of Urban Economics and Planning*. Oxford University Press, Oxford, pp. 755–786.
- Muñoz Gielen, D. & Van der Krabben, E. (Eds.). (2019). *Public infrastructure, private finance: developer obligations and responsibilities*. Routledge.
- Piketty, T. (2014). *Capital in the 21st Century*, Harvard University Press.
- Ryan-Collins, J., Lloyd, T. & Macfarlane, L. (2017). *Rethinking the economics of land and housing*. Zed Books Ltd.

Stiglitz, J. E. (2015). The origins of inequality, and policies to contain it. *National Tax Journal*, 68(2), pp. 425-448.

Vickrey, W. S. (2001). Site Value Taxes and the Optimal Pricing of Public Services. *The American journal of economics and sociology*, 60(5), 85-96.

84408

## A Study on the Characteristics of Collaborative Governance in the Chinese Context for the Conservation Implementation of Historic and Cultural Cities-- A case study of Guangzhou

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Recently, the theory of collaborative governance has gradually become an international research trend. The system of historical and cultural heritage conservation in Chinese cities is moving from a top-down approach to an interactive and cooperative governance pattern, and the theory of collaborative governance can help redefine and improve the Chinese historical and cultural heritage system in the new era. Since the concept of collaborative governance was introduced into China, there have been some differences in its connotation, its extension and its expression in both domestic and international contexts. The theory currently has less practical research in the field of historical and cultural heritage conservation in China. Addressing this research gap, this study enriches the research methodology and content of collaborative governance from the perspective of the conservation of historical and cultural cities.

Guangzhou is one of the most representative historical and cultural cities in China. The city has a solid foundation of social participation and a strong political and normative context for collaborative governance. This paper takes Guangzhou as a case study, and uses the conservation policy of historic and cultural cities as the object of study, and analyses the characteristics of collaborative governance in the implementation of historic and cultural city conservation in the Chinese context, via the model proposed by Ansell & Gash as the underlying framework.

Firstly, the national and local level policies on the protection of historic and cultural cities are sorted and analyzed through the literature research method. Then, combining the Guangzhou practice cases since 2003, and through semi-structured interviews with government officials, experts, planners and residents involved in the practice cases, the characteristics of collaborative governance in the various stages of Guangzhou's historic and cultural city are analyzed in five dimensions: starting conditions, facilitative leadership, institutional design, collaborative process and collaborative outcomes.

Preliminary conclusions,

1. In contrast to the concept of "collaborative governance" in the international context, the leadership of the Chinese Communist Party is embedded in the chain of collaborative governance, which is the most essential feature of collaborative governance in the Chinese context.

2. In the implementation of historical and cultural conservation, Guangzhou's collaborative governance is characterized by the plurality of governance subjects, the initial formation of an autonomous network, the limited autonomous power of the network and the lack of institutional guarantee.

3. The existing collaborative governance pattern in Guangzhou has effectively contributed to the conservation of its historic and cultural city, but there are still imitations that require the construction of relevant legal guarantees, organizational strategies and other strategies for

enhancement.

Keywords: collaborative governance; historical and cultural cities; heritage conservation; culture; China

#### References

Zhang, L., et al., Strategies of the built-heritage stewardship movement in urban redevelopment in the Internet Age: The case of the Bell-Drum Towers controversy in Beijing, China. *Geoforum*, 2019. 106: p. 97-104.

Deng, Z., et al., Collaborative planning in the new media age: The Dafo Temple controversy, China. *Cities*, 2015. 45: p. 41-50.

Ansell, Chris, and Alison Gash. 2007. Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory* 18:543–571.

Ruiz Pulpón, Á.R. and M.D.C. Cañizares Ruiz, Enhancing the Territorial Heritage of Declining Rural Areas in Spain: Towards Integrating Top-Down and Bottom-Up Approaches. *Land*, 2020. 9(7): p. 216.

单学鹏, 中国语境下的“协同治理”概念有什么不同?——基于概念史的考察. *公共管理评论*, 2021. 3(01): 第5-24页.

84318

## Urban Regeneration in China : Era Characteristics and Experience of Policy System Construction

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China is in the process from rough urbanization to connotative development, and urban regeneration has become an inevitable demand for high-quality and sustainable development of Chinese cities. In the 21st century, many cities still adopt simple and direct approaches in built-up areas, such as demolition, redevelopment and population transfer, which severely damage the original urban fabric, landscape and social network. However, resently the connotations and needs of urban regeneration have been re-examined from national to local levels, and relevant policies and regulations have been formulated according to local conditions, which have promoted organic urban renewal and economic vitality and accumulated rich experiences. Therefore, this paper adopts bibliometric methods to comprehensively identify typical problems and challenges of urban regeneration in China; then systematically compares renewal policy documents and uses Nvivo qualitative analysis to conduct content studies of typical policy documents, clarifying unstructured characteristics and summarizing useful experiences. The study found that: i) since the mid-late 2010s, China has gradually established a three-level urban regeneration policy system of "national-provincial-city"; ii) at the city level, many second- or third-tier cities in the eastern coast have already prepared or are in the process of preparing relevant policies, while some large cities in the central and western regions have already taken actions, and a wide range of smart and organic urban renewal policies has being developed; iii) the relevant policy contents form a certain hierarchy, with clear requirements on principles, priorities, management, public participation, and evaluation of renewal; iv) the absolute coordinating and guiding power of city governments is strengthened in renewal actions, and top-down actions are carried out quickly and efficiently. These findings will provide useful references for cities around the world, especially in developing countries, in making smarter regeneration planning and construction decisions.

Keywords: Urban Regeneration; Policy System; Laws and Regulations; Transformation and Development; Experience and Lessons

### References

- 1.Clark, J., & Wise, N. (Eds.). (2018). *Urban renewal, community and participation: Theory, policy and practice*. Springer.
- 2.Ye, L. (2011). Urban regeneration in China: Policy, development, and issues. *Local Economy*, 26(5), 337-347.
- 3.Yang, Y. R., & Chang, C. H. (2007). An urban regeneration regime in China: A case study of urban redevelopment in Shanghai's Taipingqiao area. *Urban Studies*, 44(9), 1809-1826.
- 4.Yan, R. G., Zhou, S. H., & Yan, X. P. (2011). Studies of urban regeneration. *Progress in Geography*, 30(8), 947-955.
- 5.Pingyu, Z. H. A. N. G. (2004). Urban Regeneration: China Urbanization Trends in 21st Century [J]. *Progress In Geography*, 4.
- 6.Tang, Y., & Yang, D. (2021). Urban Regeneration in China: Institutional Innovation in

Guangzhou, Shenzhen, and Shanghai. Routledge.

7.Liu, G., Wei, L., Gu, J., Zhou, T., & Liu, Y. (2020). Benefit distribution in urban renewal from the perspectives of efficiency and fairness: A game theoretical model and the government's role in China. *Cities*, 96, 102422.

8.Ye, L., Peng, X., Aniche, L. Q., Scholten, P. H., & Ensenado, E. M. (2021). Urban renewal as policy innovation in China: From growth stimulation to sustainable development. *Public Administration and Development*, 41(1), 23-33.

## TRACK 6: METHODS

84693

Guazuvirá Visioning of the future costal settlements in Uruguay; participatory territorial planning methods to advocate nature's rights in Latin America.

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From 2016 to 2021 the Course on Territorial Planning Methods of the Environmental Management Degree from Universidad de la República Uruguay, developed applied participatory research with local costal communities in order to empower them dealing with environmental challenges. In 2021 the Species topics arise particularly from students interests, as well as from children in communities. Therefore we include participatory methods in order to give voice in particular to species in danger of extinction if costal settlements continue expanding without planning with nature. In the case of children, we make participatory workshops facilitated by themselves in which some of them had made research in the more than 70 species of birds in the costal environments, teaching other childrens how to identify, observe and register their behaviour. On the other hand students of the course, with ONG's working on ecological corridors, identified the Mazama Gouazoubira a kind of native deer that lives in costal uruguayan Woods, as one of the most significant testimonial of resistance of local species to urbanization. Following Christopher Alexander methods (2005), as well as Donna Haraway theories (2020), teachers propose students to make visioning scenarios from the point of view of different species. In participatory process biologists, planners and anthropologists contribute with ideas of sustainable territorial developments and discuss with communities the better ways to plan considering their needs. The visioning of Guazuvirá was one of the most effective, as long as is a beloved animal, and very efficient strategy, with a guilty effect on people conscious, understanding they are destroying their natural habitats. These experimental techniques should be further developed in order to change completely the anthropocentric view in territorial planning in favor of a species co-living.

Keywords: participatory planning, Nature's rights, environmental education, environmental management, sustainable communities, planning for real, environmental governance

### References

Christopher Alexander (2004) *The Nature of Order: An Essay on the Art of Building and the Nature of the Universe*, UCLA, Berkeley Press.

Adriana Goni Mazzitelli, (2019) *Desafíos para las transformaciones territoriales en la Región Este del Uruguay* DOI: <https://doi.org/10.36225/tekopora.v1i1.15> - <https://revistatekopora.cure.edu.uy>

Adriana Goni Mazzitelli, (2020) *Bienes Comunes Naturales, contribuciones teóricas a su*

análisis, DOI: <https://doi.org/10.36225/tekopora.v2i1.68> <https://revistatekopora.cure.edu.uy>

Adriana Goni Mazzitelli (2017) Aportes para la rehabilitación de la Laguna del Sauce y el Ordenamiento Territorial de su Cuenca. [http://saras-institute.org/wp-content/uploads/2019/06/Capitulo-5\\_Capitulo-5\\_Ordenamiento-y-planificacin-territorial-en-el-contexto.pdf](http://saras-institute.org/wp-content/uploads/2019/06/Capitulo-5_Capitulo-5_Ordenamiento-y-planificacin-territorial-en-el-contexto.pdf)  
Participación , 2017)

Adriana Goni Mazzitelli (2015) Planificación colaborativa: consolidando territorios emergentes en Uruguay. Anales/Proceedings: Seminario Internacional de Investigación en Urbanismo. UPC Barcelona, URI <http://hdl.handle.net/2117/81117>.

Dona Haraway \_ (2019) Staying with the Trouble: Making Kin in the Chthulucene (Experimental Futures), Duke University Press.

84085

## The Smart City: The Balance of Power Between Local Government Commercial Companies

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We live in an age of information, and information is a central theme in our daily lives. We rely on information to create order and support informed decision-making. Therefore, it is only natural that technological developments in general and information and communication technologies (ICT) in particular will be assimilated into the urban space. The resources invested in smart city developments by private companies and local authorities alike are enormous. As such, the global market is estimated to reach \$4.2 trillion by 2030.

The integration of these technologies, which are usually developed by the private sector, in the ongoing management and decision-making in the urban space is what gave the 'Smart City' its name. The field is based on technologies that can collect and analyze spatial data and assist policymakers with their decisions.

In this lecture, I will present two parts of my PhD research. The research starts with analyzing the relations between the local authorities and the private sector from the public's point of view. It then presents the local authorities' point of view on this issue. These two parts of the research include reviewing more than 100 newspaper articles from 4 different newspapers in Israel, with the subject of 'Smart City' between 2014-2019. In addition, I interviewed smart city managers in local governments to obtain a full picture.

Applying Atlas.ti, statistics and discourse analysis, I've tracked the main subjects of the articles and the interviews and categorized them into groups, including issues as security & safety, economic considerations and public interest. This analysis explains how the public's needs and wills are reflected in the daily press and exposes the local governments' hidden agendas for implementing smart city technologies.

Keywords: Smart City, ICT, Discourse analysis, Atlas.ti

### References

- Allam, Z., Dhunny, Z.A. (2019). "On big data, artificial intelligence and smart cities". *Cities*, 89, 80-91.
- Holland, R. G. (2008). "Will the real smart city please stand up? Intelligent, progressive or entrepreneurial?" *City*, 12(3), 303-320.
- Kitchin, R. (2014). "The real-time city? Big data and smart urbanism". *GeoJournal*, 79(1), 1-14.
- Luca, M. Mark, D. (2019). "Separating the hype from reality: Key lessons and recommendations" In: *Untangling Smart Cities: From Utopian Dreams to Innovation Systems for a Technology-Enabled Urban Sustainability*. Amsterdam, Netherlands: Elsevier.
- Lynch, C. R. (2020). "Contesting Digital Futures: Urban Politics, Alternative Economies, and the Movement for Technological Sovereignty in Barcelona". *Antipode*, 52(3), 660–680.

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## Bridging qualitative and quantitative methods of futures knowledge creation in strategic spatial planning

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Foresight is an essential tool of strategic spatial planning, in which alternative development paths need to be anticipated decades into the future. The paper aims at bridging quantitative and qualitative approaches in a search for a more robust methodology for creating and utilizing futures knowledge. In a complex world, varying methods of creating futures knowledge are needed, including methods that utilize quantitative data – such as the PMT method – and qualitative information in the form of creative storytelling, as in the Intuitive Logics school of co-creative scenario-making.

Both qualitative and quantitative methods of creating futures knowledge have been criticized. There is little research output on the effectiveness of qualitative scenario planning. Most scenario projects are executed in-house by practice-orientated organizations and not exposed to scientific peer review. Furthermore, there is no academic consensus on scenario methodology, which has led to scenario planning being criticized as unscientific. Quantitative forecasts, on the other hand, are known to be misleading over long time periods, and to contribute to harmful path-dependencies, as witnessed in transport planning.

The paper examines the nature of futures knowledge by using the division between positivist and interpretive knowledge and reviews the state of the art in combining different types of futures knowledge in foresight projects. The case project PERUS-SKENE aims at developing a constant monitoring and foresight process concerning the future of the urban and regional structure of Finland. The project combines statistical data, forecasts, creative scenario-making, and participative assessment in an integrated manner. The project is used to analyze how the combination of quantitative and qualitative knowledge creation methods might strengthen the credibility of foresight work. The data of the case project includes survey results, interviews, and workshop output.

According to the research data, combining quantitative and qualitative futures knowledge enables creative storytelling that is robustly grounded in the data of historical and current development and ongoing trends, increasing the credibility of the produced scenarios. The case project participants favored the proposed foresight model combining the two knowledge creation methods and saw it as a validity-increasing factor. It was also recognized that there is no readily available model for bridging quantitative and qualitative futures knowledge. This theme should be studied further so that the different knowledge creation methods could efficiently feed into the scenario processes.

Keywords: foresight, scenarios, urban and regional structure, Finland

## References

- Amer, M., Daim, T. U. & Jetter, A. (2012). A Review of Scenario Planning, *Futures*, 46, 23–40. doi:10.1016/j.futures.2012.10.003
- Bradfield, R., Wright, G., Burt, G., Cairns, G., & Van Der Heijden, K. (2005). The Origins and Evolution of Scenario Techniques in Long Range Business Planning, *Futures*, 37(8), 795–812. doi:10.1016/j.futures.2005.01.003
- Davoudi, S. (2012). The Legacy of Positivism and the Emergence of Interpretive Tradition in Spatial Planning, *Regional Studies*, 46(4), 429–441. doi:10.1080/00343404.2011.618120
- Granvist, K., Mäntysalo, R., Valli, R., Kanninen, V., Herneoja, A., Kosonen, K.-J., Ronkainen, T., Piippo, T. (2020). Strategisuus ja transskalaarisuus liikennejärjestelmäsunnittelun ja alueidenkäytön suunnittelun yhteensovittamisessa: Alueidenkäytön ja liikennejärjestelmän suunnittelun yhteensovittaminen ilmiölähtöisesti. Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja 2020:35. Helsinki: Prime Minister’s Office.
- Schwartz, P. & Ogilvy, J. A. (1998). Plotting Your Scenarios. In: Fahey, L. & Randall, R. M. (eds.) (1998) (pp. 57–80). *Learning from the Future: Competitive Foresight Scenarios*. New York, USA: John Wiley & Sons, Inc.
- Spaniol, M. & Rowland, N. (2018). The Scenario Planning Paradox, *Futures* 95, 33–43. doi:10.1016/j.futures.2017.09.006
- Wright, G., Bradfield, R., Cairns, G. (2013). Does the Intuitive Logics Method – and its Recent Enhancements – Produce “Effective” Scenarios?, *Technological Forecasting & Social Change* 80(4), 631–642. doi:10.1016/j.techfore.2012.09.003
- Zegras, C., & Rayle, L. (2012). Testing the Rhetoric: An Approach to Assess Scenario Planning's Role as a Catalyst for Urban Policy Integration, *Futures* 44(4), 303–318. doi:10.1016/j.futures.2011.10.013

83962

## Social participation for the planning, design and management of public spaces through Information and communication technologies in Mexico.

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This paper discusses the use of information and Communication Technologies (ICTs) to support social participation in the planning, design and management of public spaces (PDMPS). Traditional top-down approaches fail to involve, collaborate with and take into consideration social actors in the process of PDMPS. Recent research indicates that the use of ICTs supports social participation, creates more comprehensive knowledge, and facilitates the exchange of points of view between different actors and the engagement between experts and non-experts in the process of PDMPS. In the Mexican case, recent research has highlighted an increased awareness and opportunity for including social participation in the PDMPS. There is still unclarity about who the participating actors are, their level of interaction, the achieved degree of decision-making, and the exact role of ICT. This paper addresses these knowledge gaps and examines how social participation has influenced the PDMPS with the use of ICTs, taking the perspective of practitioners in the field. We used a case study approach, informed by semi-structured interviews of government practitioners, local NGOs, academics, and the private sector. We adopted the Democracy Cube framework to understand – from the interviewees’ perspective - the achieved level of participation and communication, I.e., how the decision-making processes for the PDMPS consider inputs of civil society. We found that the participation of many actors did not result in significant decision-making power. Overall, there is a positive perception of ICTs to promote social participation. ICTs are seen as an opportunity but still present a series of challenges, mostly due to technical capacity and expertise among government practitioners and the cost of implementation.

Keywords: social participation, public space, technology, Mexico

### References

- 1.- McCall, M. K., & Dunn, C. E. (2012). Geo-information tools for participatory spatial planning: Fulfilling the criteria for “good” governance? *Geoforum*, 43(1), 81–94. <https://doi.org/10.1016/j.geoforum.2011.07.007>.
- 2.- Pablo, Z., Ona, S., Roxas, R. E., Cheng, C., Borra, A., & Oco, N. (2013). The democracy cube as a framework for guiding participatory planning for community-based it initiatives. *Proceedings - Pacific Asia Conference on Information Systems, PACIS 2013*.
- 3.- Portal, M. A. (2016). Espacios públicos diferenciados en la Ciudad de México: una mirada desde el lugar. *Ponto Urbe*, 18. <https://doi.org/10.4000/pontourbe.3092>.
- 4.- Shin, Y., & Shin, D. H. (2012). Community Informatics and the New Urbanism: Incorporating Information and Communication Technologies into Planning Integrated Urban

Communities. *Journal of Urban Technology*, 19(1), 23–42.  
<https://doi.org/10.1080/10630732.2012.626698>.

5.- Fung, A. (2006). Varieties of Participation in Complex Governance Author ( s ): Archon Fung Source : *Public Administration Review* , Vol . 66 , Special Issue : Collaborative Public Published by : Wiley on behalf of the American Society for Public Administration Stable URL. 66, 66–75.

6.- Christmann, G., Singh, A., Stollmann, J., & Bernhardt, C. (2020). Visual communication in urban design and planning: The impact of mediatisation(s) on the construction of urban futures. *Urban Planning*, 5(2), 1–9. <https://doi.org/10.17645/UP.V5I2.3279>

7.- Bratuškis, U., Zaleckis, K., Treija, S., Koroļova, A., & Kamičaitytė, J. (2020). Digital information tools for urban regeneration: Capital's approach in theory and practice. *Sustainability (Switzerland)*, 12(19), 1–16. <https://doi.org/10.3390/su12198082>.

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## Tempo-spatial analysis of pedestrian movement using Bluetooth sensor technology

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Over the years, the urban planning literature has focused substantial attention on walkability research, aiming to enhance physical activity and healthy communities in the city through urban planning and design. However, while motorized traffic research seems to gain momentum in combining innovative technologies for traffic monitoring in recent years, pedestrian research seems to be left behind; the common tools used to collect pedestrian data are limited in time and scale. The increasing availability of quantitative data on the built environment holds great potential for a new generation of walkability studies, based on direct evidence of pedestrians' flow around the city. This study aims at scrutinizing the added value of bigdata and automated pedestrian count (PC) technologies to pedestrian and walkability research while experimenting with a new emerging technology of Bluetooth sensors. We used a dataset of over 53 million pedestrian records, monitored in 83 street-segments in Tel-Aviv, Israel, to analyze tempo-spatial dynamics of pedestrians at the street-level. The data was collected 24/7 for five months, including the time of COVID-19's first lockdown. The results show the dynamics in pedestrian traffic and walking patterns across temporal changes. We found that even when the destinations for walking change, people choose to walk through the same street segments, potentially indicating that pedestrians' choice of where to walk is affected mainly by attributes of the built environment, rather than by their destination. Moreover, while commercial land-uses constitute points of interest for pedestrians in the city, the results show that much of the walking activity is at residential street-segments that connect these locations and are proximate to green open spaces. The impact of COVID-19 policies on PC and walking patterns is evident in the results, as pedestrian walking behavior changed dramatically, compared with 'regular' times. Finally, the study shows that Automated PC and bigdata technologies can provide municipalities with insights on pedestrians' behavior and preferences in real-time and at street-level. This enables to spatially locate pedestrian infrastructure investments more efficiently around the city and can be used to support and enhance policy decisions aiming to encourage walking activity.

Keywords: Walkability, Pedestrian movement, Walking patterns, Bluetooth sensor network, Crowdsourced big data

### References

Zuniga-Teran, A. A., Orr, B. J., Gimblett, R. H., Chalfoun, N. V., Marsh, S. E., Guertin, D. P., & Going, S. B. (2017). Designing healthy communities: Testing the walkability model. *Frontiers of Architectural Research*, 6(1), 63–73. <https://doi.org/10.1016/j.foar.2016.11.005>

Yencha, C. (2019). Valuing walkability: New evidence from computer vision methods. *Transportation Research Part A: Policy and Practice*, 130(September), 689–709. <https://doi.org/10.1016/j.tra.2019.09.053>

Shashank, A., & Schuurman, N. (2018). Unpacking walkability indices and their inherent assumptions. *Health and Place*, 55(June 2018), 145–154. <https://doi.org/10.1016/j.healthplace.2018.12.005>

Salazar Miranda, A., Fan, Z., Duarte, F., & Ratti, C. (2020). Desirable streets: Using deviations in pedestrian trajectories to measure the value of the built environment. *Computers, Environment and Urban Systems*, March, 101563. <https://doi.org/10.1016/j.compenvurbsys.2020.101563>

Lesani, A., Nateghinia, E., & Miranda-Moreno, L. F. (2020). Development and evaluation of a real-time pedestrian counting system for high-volume conditions based on 2D LiDAR. *Transportation Research Part C: Emerging Technologies*, 114(January 2019), 20–35. <https://doi.org/10.1016/j.trc.2020.01.018>

Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., & Saelens, B. E. (2005). Linking objectively measured physical activity with objectively measured urban form. *American Journal of Preventive Medicine*, 28(2), 117–125. <https://doi.org/10.1016/j.amepre.2004.11.001>

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## Unknown knowns: Knowledge mining for sustainable transformation research and practice

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The development of urban areas in emerging and developing countries has faced challenges in recent years that stem from growing dynamism, complexity, and pressure to act. Areas such as decreasing living and environmental conditions, low resilience, or poor controllability by decision-makers and institutions have re-iterated themselves as problematic. These circumstances put civil and public actors in the necessity of offering intelligent, feasible strategies for improving local conditions, opening economic perspectives, and fitting cities and regions with sustainable processes and systems. The comprehensive and adequate decision-making is often hardened by the multitude of information generated by research projects, findings, approaches, solutions, strategies, and policies in various fields aiming for sustainable urban transformation.

The German Federal Ministry for Education and Research (BMBF) funding priority »Sustainable Development of Urban Regions«(SURE) is application-oriented research. The SURE funding priority supports ten collaborative research projects focused on urban sustainability and one accompanying facilitation and synthesis research project. The ten collaborative projects aim to develop practical solutions for more sustainable and resilient cities and regions in Southeast Asia and China. The SURE Facilitation and Synthesis Project has one of the main aims to research and employ state-of-the-art technologies and develop digital tools that help to uncover dormant knowledge ("Unknown Knowns"), identify open questions and problems ("Known Unknowns"), and outline solutions and trends for future research on sustainable urban development. It will do so by researching the ten collaborative research projects and their scientific context and synthesizing relevant new knowledge from this kind of meta-research. The investigation follows a three-step methodology: (1) Knowledge mapping – exploratory data collection and outline of the status quo of knowledge in the projects; (2) Research Intelligence – analysis and diagnostics of projects' content and development through novel tools for knowledge management, including AI-based document analysis, (3) Future insights – the anticipation of general future trends and developments to inform research policies, project development and local implementation. – From these (meta-)research activities, replicable technical instruments and scientific insights are expected to inform sustainable transformation research, education, and practice in the mid-term future.

Keywords: Sustainable Urban Regions, Knowledge Mining, Integrated Development, Southeast Asia, Transformation Research

### References

Fayyad, U., Piatetsky-Shapiro, G., & Smyth, P. (1996). From Data Mining to Knowledge Discovery in Databases. *AI Magazine*, 17(3), 37. <https://doi.org/10.1609/aimag.v17i3.1230>

Offenhuber, D., & Ratti, C. (2014). *Decoding the City: Urbanism in the Age of Big Data*. Walter de Gruyter GmbH.

Bibri, Simon. (2018). *Data Science for Urban Sustainability: Data Mining and Data-Analytic Thinking in the Next Wave of City Analytics*. 10.1007/978-3-319-73981-6\_4.

David, Kirsten: *Transdisciplinarity: The Basis for the Increase of Urban Knowledge?* In: Koch et. al.: *Perspectives in Metropolitan Research, New Urban Professions - A Journey through Practice and Theory*, Berlin: Jovis, 2018

Gibbons, Michael et al.: *The New Production of Knowledge. The Dynamics of Science and Research in Contemporary Societies*, Los Angeles, London, New Delhi, Singapore, Washington DC: SAGE Publications, 1994.

85278

## Time-related mapping of urbanisation in metropolitan regions

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World regions have experienced an unprecedented trend of urbanisation, but patterns and extents of urbanisation vary regionally (Shlomo 2012; Shlomo et al. 2012). Moreover, different perspectives understand urbanisation differently. For instance, a macro-level perspective builds on quantitative aspects and broader structural trends, such as population density, but a micro-level perspective builds on qualitative dimensions and everyday aspects, such as inclusion. Furthermore, approaches dealing with urbanisation tend to be either top-down, model-driven or bottom-up, data-driven. This makes dealing with urbanisation rather difficult, as different definitions of what an urban region is and measurements methods of their extent exist (Berger et al. 2017). The paper, therefore, proposes a mix-method approach for a better understanding of urbanisation processes and their ecological implications as well as the interplay between different spatial scales. Two metropolitan regions are analysed: the Ruhr Agglomeration in Germany and the La Paz metropolitan area in Bolivia. On the one hand, on-site photographic documentation and informal conversations describe how urbanisation processes unfold. On the other hand, 40-years' worth of satellite imagery analysis describes how the built and natural environment evolved. The latter is done using cloud computing platforms for remote sensing big data applications for analysis of changes in built-up areas (Pesaresi et al. 2016), vegetation (NDVI) (Didan 2015), and surface temperature (SUHI) (Chakraborty, Lee 2019) over time. Traditionally, mapping urbanisation required tremendous personal, economic, and bureaucratic efforts and data availability was restricted to administrative boundaries. In particular, only certain periods of time could be analysed and comparison between regions was challenging. But, nowadays, with advances in open-source technologies, an increasing amount of publicly available geospatial datasets, and volunteered geographic information platforms, it is a task that can be performed with fewer resources and over greater periods of time for manifold applications. The paper, thus, concludes that time-related mapping of urbanisation will play a key role in future decision-making on where, when, and how to allocate political and financial resources when dealing with local and global urbanisation.

Keywords: urbanisation, top-down, bottom-up, time-related, remote sensing

### References

- Berger, Alan; Kotkin, Joel ; Balderas Guzmán, Celina (2017): Infinite suburbia. New York: Princeton Arcitectural Press
- Chakraborty, T.; Lee, X. (2019): A simplified urban-extent algorithm to characterize surface urban heat islands on a global scale and examine vegetation control on their spatiotemporal variability. In: International Journal of Applied Earth Observation and Geoinformation, Bd. 74, S. 269-280
- Didan, K.. (2015) MOD13Q1 MODIS/Terra Vegetation Indices 16-Day L3 Global 250m SIN Grid V006. Distributed by NASA EOSDIS Land Processes DAAC,

<https://doi.org/10.5067/MODIS/MOD13Q1.006>. Accessed 2022-02-01.

Pesaresi, Martino; Melchiorri, Michele; Siragusa, Alice; Kemper, Thomas (2016): Atlas of the Human Planet 2016: Mapping Human Presence on Earth with the Global Human Settlement Layer. Luxembourg: European Commission - DG Joint Research Centre

Shlomo, Angel (2012): Planet of Cities. Cambridge MA: Lincoln Institute of Land Policy

Shlomo, Angel; Parent, Jason; Civco, Danniell L.; Blei, Alejandro M. (2012): Atlas of Urban Expansion. Cambridge MA: Lincoln Institute of Land Policy

84927

## Material intensity of inward development - resource assessment and localization of urban development potentials

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Within the paper we present a method to develop a reliable digital model of “material intensity” (amount of primary material), which helps with the assessment of inward development potentials using an interactive visualization offering different views for target group users (e.g. real-estate developer, city-planning authorities). In combination with the database of our previous project, M-DAB (Bindreiter et al., 2022), this method offers unprecedented insights into (1.) attainable saving potentials in primary resource use and landfill volumes, (2.) the ability to compare development scenarios within the built environment and contrast these to greenfield development and (3.) to assess the city-wide potential and impacts of a chosen best-practice method with regards to resource utilization for selected use cases.

Building on the extended data basis of buildings in Vienna (Bindreiter et al., 2022, Lederer et al., 2021, Kleemann et al. 2016) this method elaborates on potential profiles of different building and location types according to several parameters (e.g. building period, usage, construction class). In a next step, development pathways for each of these potential profiles are assessed with special regards for minimal resource utilization (land and material resources). In a final step, digital methods (e.g. box counting method – Lorenz 2009, and machine learning for classification – Shafizadeh-Mohadam et al. 2019 and Mustafa et al. 2018) are used to identify similar potential/development patterns within the urban fabric. The selection of digital methods for similarity determination, such as statistical classification, is also subject of the research. Elaboration of criteria in the above sense and verification using GIS-based automated context analysis will allow for a comparison between different development scenarios (e.g. demolition and new construction, annex construction or retrofitting) under consideration of the urban context in which this development happens. It will furthermore allow for a more systematic approach to location planning using different views.

Keywords: Material resources; urban development; sustainability assessment of structures and sites; planning support; automation;

### References

Bindreiter, S., Forster, J., Fellner, J., Gassner, A., Lederer, J., Lorenz, W., Wurzer, G., Mitteregger, M., Pöllauer, P. (2022): Materialressourcen der Stadt digitalisieren, analysieren und nachhaltig bewirtschaften (M-DAB). Projektendbericht. Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie (BMK). Wien. Deutsch, 124 Seiten.

<https://nachhaltigwirtschaften.at/de/sdz/publikationen/schriftenreihe-2022-1-m-dab.php>  
Kleemann, F., Lederer, J., Rechberger, H., Fellner, J. (2016): GIS-based Analysis of Vienna's Material Stock in Buildings. *Journal of Industrial Ecology*, 20 (2016), S. 1 - 13.  
Lederer J., Fellner J., Gassner A., Gruhler K., Schiller G. (2021): Determining the material intensities of buildings selected by random sampling: a case study from Vienna. In: Lifset R. (Hrsg.): *Journal of Industrial Ecology*. 1–16. Wiley-Blackwell, 2021.  
<https://doi.org/10.1111/jiec.13100>  
Lorenz, W. (2009): Fractal Geometry of Architecture: Implementation of the Box-Counting Method in a CAD-Software. in: *Proceedings eCAADe 2009 - Computation: The new realm of architectural design*, Istanbul, S. 697 - 704.  
Mustafa A., Heppenstall A., Omrani H., Saadi I., Cools M., Teller J., (2018): Modelling built-up expansion and densification with multinomial logistic regression, cellular automata and genetic algorithm, *Computers, Environment and Urban Systems*, Volume 67, 2018, Pages 147-156, ISSN 0198-9715, <https://doi.org/10.1016/j.compenvurbsys.2017.09.009>.  
Shafizadeh-Moghadam, H., Asghari, A., Tayyebi, A. and Taleai, M. (2019): Coupling machine learning, tree-based and statistical models with cellular automata to simulate urban growth. *Computers, Environment and Urban Systems* 64, 297-308

84701

## Benefits of geodesign in strategic spatial planning

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The paper aims at showing the benefits of applying geodesign methods and tools (Steinitz, 2012) in strategic planning. Geodesign can be defined as a set of techniques and enabling technologies for planning built and natural environments in an integrated process, including project conceptualization, analysis, design specification, stakeholder participation and collaboration, design creation, simulation, and evaluation (among other stages). While not necessary so, current geodesign practice is extensively supported by digital planning and design support tools, even more so since the COVID19 pandemic started, forcing to move planning and design processes online.

Two successfully real-world case studies of geodesign workshop (Rivero et Al, 2015; Campagna et Al, 2016; Nyerges et Al, 2016, Pettit et Al, 2019) supporting strategic planning undertaken in 2019 (live) and 2021 (online) in Sardinia (Italy) are used to demonstrate how geodesign application may contribute to achieve in short time consensus on spatially explicit development scenarios among a wide number of decision-makers and stake-holders through negotiation while fostering collaboration, inclusiveness, mutual-learning, informed-decision-making and transparency of the process and its outcomes. These outcomes may be considered particularly useful in strategic planning especially in the current season of European green transition, where collaboration and consensus are needed to react effectively to unprecedented and urgent sustainable development challenges.

The two processes are comparatively described in detail in terms of participating actors and their relationships, workflows and task, technology support tools, and design outcomes. The contribution is complemented by an overview on the opportunities offered by the geodesign approach in planning research and education as well as in strategic planning.

Keywords: geodesign, strategic planning, co-design

### References

- CAMPAGNA, M.; STEINITZ, C.; DI CESARE, E.A.; COCCO, C.; HRISHIKESH, B.; TESS, C. (2016) Collaboration in planning: The Geodesign approach. *Rozwój Regionalny i Polityka Regionalna*, 35, 55–72.
- Campagna, M.; Di Cesare, EA.; Cocco, C. (2020), 'Integrating Green-Infrastructures Design in Strategic Spatial Planning with Geodesign', *Sustainability*, vol. 12, no. 5, p. 1820
- NYERGES, T., BALLAL, H., STEINITZ, C., CANFIELD, T., RODERICK, M., RITZMAN, J., & THANATEMANEERAT, W. (2016). Geodesign dynamics for sustainable urban watershed development. *Sustainable Cities and Society*, 25, 13-24
- PETTIT, C.; HAWKEN, S.; ZARPELON, S.; TICZON, C.; AFROOZ, A.; STEINITZ, C.; BALLAL, H.; CANFIELD, T.; LIESKE, S. (2019) Breaking Down the Silos Through Geodesign—Envisioning Sydney's Urban future. *Environ. Plan. B Urban Anal. City Sci.* 46 (8), 1387-1404.

RIVERO, R., SMITH, A., BALLAL, H., & STEINITZ, C. (2015). Promoting Collaborative Geodesign in a Multidisciplinary and Multiscale Environment: Coastal Georgia 2050, USA. *Digital Landscape Architecture*, 1, 42–58

STEINITZ, C. (2012). *A framework for geodesign: Changing geography by design*. ESRI Press, Redlands, CA.

84601

## Assessing the quality of the urban landscape - An exploratory evaluation model

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The urban landscape shapes the quality of life of the city's inhabitants. Assessing its quality pivotal to better steer urban planning and management. This research aims to explore an evaluation model that makes the assessment of urban landscape quality operational for local authorities.

Attending the multidimensional concept of urban landscape, as based on the concept of “landscape” defined by the European Landscape Convention (2000) [2], it proposes the identification of the criteria for assessing the quality of the urban landscape - Human Dimension, Functional Diversity, Natural Elements, Identity and Maintenance - using the Delphi method [6] and attending to a panel of 24 experts, and present a multicriteria evaluation model, using the SMART method (Single Multi Attribute Rating Technique) [3] [4]. [5] [7].

As far as known, the determination of the weighting coefficients of the criteria, by applying the Swing Weighting method to a set of decision makers, in which the premise that there would be no consensus among the experts of the decision conference, was an innovation, and it has proven to be an effective method, leading to mathematically valid results.

The social distancing, imposed by the pandemic, implied a conference decision “online” for obtaining the quantification of the weighting coefficients of the five evaluation criteria to be obtained using the Swing Weighting method (adapted), applied to a panel of 10 experts [8].

The proposed model makes it possible to determine the numerical value of the quality of the urban landscape as applied in four selected neighbourhoods in Lisbon and resulting in the following ranking: Parque das Nações, Alvalade and Baixa and, Benfica.

The validation of the model was carried out by comparison with the results of the evaluation of another study, with another panel of experts, of 22 members [1]. Although the methodologies are different, the rankings obtained from the Lisbon neighbourhoods support the evaluation model.

With the proposed model local authorities can use a operational scanning tool for evaluating urban landscapes to support urban planning decisions that enhance the quality urban landscape both for residents and visitors.

Keywords: Urban landscape; European Landscape Convention; Delphi method; Swing weight method ; multi-criteria evaluation model.

### References

- [1] Campos, A., & Oliveira, R. C. (2016), Cluster Analysis applied to the evaluation of urban landscape quality. *The Sustainable City XI*, 1(Sc), 93–103. <https://doi.org/10.2495/sc160091>
- [2] CoE (2000), European Landscape Convention. <https://rm.coe.int/1680080621>
- [3].Costa, C.A. B., Beinat, E. (2005), Model-structuring in public decision-aiding. The London School of Economics and Political Science, Working Paper LESOR 05.79
- [4] Ferreira, J.A.; Ramos, I.L.; Silva, J.B.; Spínola, R.R. (2016) O que fazer quando tudo parece

estar perdido? Procurando soluções alternativas utilizando metodologias multicritério de apoio à decisão. In: Antunes, C. et al (coord.), A Investigação Operacional em Portugal – novos desafios, novas ideias. Lisboa: IST Press, pp.179-204, ISBN: 9789898481498.

[5].Keeney, R.L. (1992), Value - Focused Thinking - A path to creative decisionmaking, Massachusetts, USA; Harvard University Press

[6] Landeta, J., (2006), Current validity of the Delphi method in social sciences. Technological Forecasting and Social Change, 73(5), 467–482. <https://doi.org/10.1016/j.techfore.2005.09.002>

[7].Mateus, R., Ferreira, J. A., & Carreira, J. (2008), Multicriteria decision analysis (MCDA): Central Porto high-speed railway station. European Journal of Operational Research, 187(1),1–18. <https://doi.org/10.1016/j.ejor.2007.04.006>

[8].Vieira, A. C. L., Oliveira, M. D., & Bana e Costa, C. A. (2019), Enhancing knowledge construction processes within multicriteria decision analysis: The Collaborative Value Modelling framework. Omega (United Kingdom) <https://doi.org/10.1016/j.omega.2019.03.005>

84960

## Green, digital, inclusive: New directions in urban and regional planning.

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In this paper we want to discuss the potentials of digital twins for enhanced planning of green space, its connectivity, biodiversity, and opportunities for action against climate change and green strategies against rising temperatures in cities, such as Urban Heat Islands. Our focus is not only on the development in European cities like Vienna and Tallinn, but also in the regions and the transferability and scalability of strategies, methods and tools to smaller and medium-sized cities. This is especially true because about 72% of the EU population lives in urban areas, and a majority of them in smaller and medium-sized cities and within their regions (Nabiliek et al., 2016). The local level and integration of diverse stakeholders at the local level (such as citizens, decision-makers, NGOs, the scientific community and the economy, to name but a few) is essential in order to meet the targets for reducing climate change and its impacts as well as the United Nations Sustainable Development Goals (Kern et al., 2021).

There is a great need for digital modelling and simulation in order to keep up with current and upcoming crises — anthropogenic climate change, pandemic health crises, energy crises, increasing user demands and conflicts in public space (ibid). Demographic change is also a challenge.

An ever-widening gap is emerging between the planning world and the everyday world, due to the lack of flexibility and adaptation of planning instruments and tools that have remained unchanged for decades. In addition, those responsible and decision-makers at the municipal level, especially in municipalities and small and medium-sized towns, are underfunded.

Using current case studies from Estonia, Finland, Germany and Austria, we want to present the potential for future developments of a more dynamic and reactive planning for urban and rural green spaces with the help of digital methods and tools. The focus will also be on visualisation and participatory processes that integrate different stakeholders such as decision makers, planners and researchers, but also citizens as experts for situational local knowledge (Voigt, 2015 and Deckert et al., 2020). Furthermore, non-human environmental actors are included as co-inhabitants of shared cities. In this context, 5-helix socio-environmentally inclusive collaboration models (Carayannis et al., 2012) are discussed with the aim to empower and provide required capacities for social and environmental resilience for cities and regions.

Keywords: digital twins, digital modelling, simulation, global and local challenges, participatory processes, environmental resilience

References

Carayannis, E. G., Barth, T. D., Campbell, D. F. (2012): The Quintuple Helix innovation model: global warming as a challenge and driver for innovation. In: Journal of Innovation and Entrepreneurship 2012, 1:2, Springer, 2012, p. 1

Deckert, A., Dembski, F., Ulmer, F., Ruddat, M., Wössner, U. (2020): Digital tools in stakeholder participation for the German Energy Transition. Can digital tools improve participation and its outcome?, Chapter 9, In: Renn, O., Ulmer, F., Deckert, A. (Eds.) (2020); "The Role of Public Participation in Energy Transitions.", Academic Press, Cambridge, Massachusetts, pp. 165-168

Nabiliek, K., Hamers, D., Evers, D. (2016): Cities in Europe. Facts and Figures on Cities and Urban Areas. Netherlands Environmental Assessment Agency, PBL Publishers, The Hague, p. 12

Kern, L., Dembski, F., Wössner, U. (2021): Digital Twins for Cities and Regions: Global Challenges, Regional Initiatives, European Approaches. In: EU Conference on modelling for policy support / Abstracts. 22 - 26 November 2021, The European Commission's science and knowledge service, Joint Research Centre, Brussels. pp. 51-54

Voigt, A. (2015): Nachhaltige Stadt- und Raumentwicklung. In: Fritz, J., Tomaschek, N. (Eds.): Die Stadt der Zukunft. Aktuelle Trends und zukünftige Herausforderungen. Waxmann, Münster, New York, pp. 49-59

85296

## Local Projects – Regional Impacts

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Spatial planning for larger residential areas, or for integrative projects (mixes of residential-, leisure-, work features) at the municipal level is not an easy task: Beyond a certain size and complexity, projects can unfold spatial effects that have a more or less strong impact also outside the planning municipality.

The project region "Römerland Carnuntum" has 30 municipalities, is located in midst between Vienna and Bratislava, is one of the most dynamically growing regions in Austria and has an unusually long, successful, and intensive tradition of inter-municipal cooperation.

The Austrian "standard" planning policy instruments (zoning and development plan, local development concept) allow a very large scope for design, which in practice sometimes allows, but not always secures "smart, integrated" projects. Additional planning guidelines exist, but their application is neither binding nor self-evident.

Within the framework of a transdisciplinary regional development project, a participation process to create a "regional planning and advisory board" was created. Its main outcome was a unanimous consensus among all mayors to define what regional relevance means, the main output was a toolbox, exercised and evaluated on a test project. The toolbox helps to make the rather elusive "regional relevance" more comprehensible and measurable, and if its recommendations are realized, the projects can be clearly improved.

Our contribution shows the genesis of this toolbox, its construction, the weighting possibilities during the input between the local and the regional level, and the quantitative and qualitative results of a test run. Furthermore, we discuss how "regional relevance" can be parameterised and whether a quantitative measurement is needed at all for "smart" projects.

Keywords: Regional Planning, Decision Support Tools, Intermunicipal Governance, Reducing Complexity

### References

Bundeskanzleramt Österreich, Abteilung II/4 (2017): Baukulturelle Leitlinien des Bundes. Vienna, Online:

[https://www.parlament.gv.at/PAKT/VHG/XXVI/III/III\\_00126\\_U1/imfname\\_703694.pdf](https://www.parlament.gv.at/PAKT/VHG/XXVI/III/III_00126_U1/imfname_703694.pdf)

Dentoni, D. & Bitzer, V. (2015): The role(s) of universities in dealing with global wicked problems through multi-stakeholder initiatives, *Journal of Cleaner Production* 106, 68–78, <https://doi.org/10.1016/j.jclepro.2014.09.050>

Dillinger, Thomas, Granzer, Isaak & Uruči, Edip (2019): LENAs Werkzeugkiste. Der Baukasten für regionale Planungs- und Baukultur, befüllt von 109 Menschen aus dem Römerland Carnuntum. Bruck an der Leitha: TU Wien.

Institut für Systemisches Konsensieren – ISYKONSENS International OG Die Methode Systemisches Konsensieren (n.d.): SK-Prinzip. Online: <https://www.sk->

prinzip.eu/methode/#close.

Zukunftsrat Römerland Carnuntum (2022): RLC 2040. Online: <https://rlc2040.at/>

84270

## E-Participation in Slum Upgrading The value of already existing solutions in Smart Cities: How e-participation facilitates the establishment of a locally rooted Liveable Life Index to guide slum upgrading.

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Slum upgrading is a complex process requiring multidisciplinary technical support and public approval. With the rapid development of Smart Cities and their strong focus on information and communication technology (ICT), e-participation broadens the scope of opportunities on citizen engagement. In the context of a digitally developed Liveable Life Index (LLI), e-participation potentially represents more efficiently and effectively the interests of local slum citizens to guide sustainable slum upgrading. Still, the development of local tools requires time, data and stakeholder contributions from various sources, so that new technologies guarantee success in any scenario. First research on e-participation potentials of the OECD citizen participation classifications (information, consultation, active participation/ cooperation) allowed a review on how results may be adaptable in a LLI approach. It is of critical importance to understand how the general components of the LLI can benefit from ICT in urban planning processes. This study focusses on the development of a digital approach for the analogue LLI model to evaluate its impact in slum upgrading processes. The results show that the intention to improve participation in slum upgrading processes using the digital LLI can be successful as long certain pre-conditions within the frame of socio-demographic variables are fulfilled. The research findings provide relevant information about e-participation and its influences on citizen communication and engagement with the goal to improve slum upgrading.

Keywords: Slum Upgrading, Liveable Life Index, E-Participation, Communication, ICT, Smart Cities.

### References

- Aichholzer, G.; Kubicek, H.; Torres, L. (2016): *Evaluating e-Participation: Frameworks, Practice, Evidence*, Springer International Publishing, Switzerland, p. 109.
- ET Government (2021): *Smart City Mission: India sets big goals, gears up for 4,000 cities expansion in 2 years*, retrieved from <https://government.economictimes.indiatimes.com/news/smart-infra/smart-city-mission-india-sets-big-goals-gears-up-for-4000-cities-expansion-in-2-years/83831631> (03.12.2021)
- Gishti, M. (2017): *Citizen participation in urban and landscape planning*, International Master of Landscape Architecture, Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen, p. 14.
- GSM Association (2017): *Triggering mobile internet use among men and women in South Asia*, retrieved from [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/11/GSMA-Triggering-Mobile-Internet-Use\\_Web.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/11/GSMA-Triggering-Mobile-Internet-Use_Web.pdf) (24.01.2020).
- Keelery, S. (2021): *Digital population across India as of February 2021*, retrieved from

<https://www.statista.com/statistics/309866/india-digital-population/> (09.10.2021).

Keelery, S. (2021): Internet usage in India - statistics & facts, retrived from <https://www.statista.com/topics/2157/internet-usage-in-india/> (09.10.2021).

Wagner, F. (2018): *Livable Cities from a Global Perspective*, Taylor & Francis, London, p. 69.

Zheng, Y. (2017): Explaining Citizens' Usage: Functionality of E-Participation Applications, in: *Administration and Society*, Vol. 49, No. 3, p. 423–442.

84206

## Providing large-area high-resolution intervisibility data to support the planning for wind energy on a supra-local level

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Accelerating wind energy expansion is crucial to meet EU CO<sub>2</sub> reduction targets (European Commission 2020). Hence, the German government stated in its coalition treaty from 2021 to designate 2% of the land area to wind energy (BÜNDNIS 90/DIE GRÜNEN o.J.: 57). This raises the question how to compare the consequences of potential wind energy sites on the visual landscape before their designation. Our aim is to support the planning process at higher levels (federal state and/or planning region) for selecting and designating sites with minimized visual landscape conflicts.

We introduce the concept of high-resolution raster-based intervisibility analysis for wind turbines by inverting the ArcMap viewshed tool. Changing the analysed point dataset from wind turbine location to potential observers allows an area-wide calculation of intervisibility of potential wind turbines. The intervisibility index corresponds to the number of fictive observer points who are able to see the turbine tip, assuming that a potential wind turbine is erected on each raster cell of a high-resolution digital elevation model (DEM). The analysis is suitable for large areas and provides high-resolution raster data as a result. It performs well with a parallel calculating computer network, which we tested for the German federal states of Thuringia (Fischer & Roth 2020) and Brandenburg.

The index acts as a proxy to compare areas and sites with regard to resulting visual impacts of wind turbines in terms of visibility. Implications on visual sensitivity can be deduced. Our results show that intervisibility indices depend to a large degree on terrain configuration and the occurrence and distribution of landscape structures. This can lead to stronger perceived visual impacts if observers see the potential wind turbines from a larger share of the area. Therefore, from a mere visual landscape and visibility perspective we advise to designate areas with lower intervisibility as wind energy sites. Thus, based on the datasets elaborated an additional input for planning support systems is provided. Fischer & Roth (2021) included the distance decay effect into the analysis. Hence, the analysis is applicable in other contexts e.g. impact assessment and compensation.

Keywords: planning support system, geographic information system, visual impact analysis, renewable energy, landscape analysis

### References

BÜNDNIS 90/DIE GRÜNEN (o.J.): Mehr Fortschritt wagen. Bündnis für Freiheit, Gerechtigkeit und Nachhaltigkeit. Available online at: <https://cms.gruene.de/uploads/documents/Koalitionsvertrag-SPD-GRUENE-FDP-2021-2025.pdf> (last checked 2022-01-14).

European Commission (2020): Commission notice. Guidance document on wind energy developments and EU nature legislation. Available online at: [https://ec.europa.eu/environment/nature/natura2000/management/docs/wind\\_farms\\_en.pdf](https://ec.europa.eu/environment/nature/natura2000/management/docs/wind_farms_en.pdf) (last checked 2022-01-14).

Fischer, C. & Roth, M. (2020): Empfindlichkeit des Landschaftsbildes. Bewertung durch großräumige Einsehbarkeitsanalysen. In *Naturschutz und Landschaftsplanung* 52 (6): S. 280-287.

Fischer, C. & Roth, M. (2021): Assessing Visual Landscape Sensitivity towards Wind Turbines with a Distance Decay Effect: An Exploration of Different GIS Approaches. In: *Journal of Digital Landscape Architecture* 6-2021: S. 148-162. Available online at: <https://doi.org/10.14627/537705012>.

80876

## Implementation of Statutory Planning versus Urban Dynamics in a Complex City

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BIU

We are experiencing unprecedented social, economic and climate changes that require adaptation responses to be delivered expediently. Given our democratic context, we need to engage all stakeholders and develop a consensus around actions even while experiencing increased polarization within the populations. Alarming, the current planning systems have been found inadequate to deal with the existing complex, multi-systemic, multi-scalar issues. Successful consensus development means enabling mediation to resolve conflicting views or priorities. Traditionally, these have involved face-to-face negotiations; however, digital geospatial negotiation tools over land uses now play a key role in this process. This study uses Geodesignhub, a prototype for PSS and examines the role of digital negotiation in narrowing the gap between urban planning and its implementation. The study compares three pairs of neighbourhoods, inner-city and satellite neighbourhoods for the general, ultra-Orthodox and Arab populations, and examines the challenges and opportunities inherent in the public's deep involvement in digital planning processes.

Keywords: Geodesign, implementation, planning

### References

- Mazmanian, Daniel A. and Sabatier, Paul A., *Implementation and Public Policy: A Framework of Analysis* Policy Studies Journal, 8(4), 1980, pp. 538-560, Scott, Foresman and Company, USA, 1980.
- Moroni S., Rauws W., Cozzolino S., *Forms of Self-Organization: Urban Complexity and Planning Implications*, Urban Analytics and City Science, Vol. 47 (2), 2020, pp. 220-234.
- O'Toole, L.J., *Research on Policy Implementation: Assessment and Prospects*, Journal of Public Administration Research and Theory, 10(2), 2000, pp. 263-288.
- Smith, M. C., *Revisiting implementation theory: An interdisciplinary comparison between urban planning and healthcare implementation research*, Environment and Planning C: Politics and Space, 36(5), 2017, pp. 877-896.
- Steinitz C., *A Framework for Geodesign: Changing Geography by Design*, ESRI, Redlands, California, 2012.

84334

## Landscape and Spatial Planning after the European Landscape Convention: 15 years of findings from the Valencian and the Catalanian regions

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The potential of the landscape to promote integrative and holistic spatial planning has been widely recognized but the principles, methods, and tools to generate stronger linkages between these two concepts still need further investigation. The European Landscape Convention assigned a central and proactive role to the landscape for addressing some of the acutest challenges that our societies and territories are facing and for envisioning more sustainable, inclusive, democratic, and site-based futures. Within this context, the intersection between landscape and spatial planning emerges as a highly integrative, transdisciplinary, participatory, and contextualized approach to link spatial and temporal scales, and to generate synergies between the ecological, the socio-cultural, and the economy. Following the signature of the European Landscape Convention, the Valencian and Catalanian regions (Spain) developed in 2004 and 2005 two ambitious legal frameworks to introduce the landscape as a key element informing land-use and spatial planning. 15 years later, this paper proposes a method to analyze how effective this institutional initiative has been by triangulating three methods to answer the proposed research question. Firstly, by developing a systematic study of the evolution of regional and local plans during the last two decades in order to detect qualitative and quantitative changes with previous plans. Secondly, by gathering the opinion of spatial planners both in the public and private sectors through a questionnaire and semi-structured interviews. Thirdly, by collecting feedback from public administrations, decision-makers, and representatives of the civil and economic sectors through thematic workshops and semi-structured interviews. The results of this investigation will be critically compared with the general objectives of the European Landscape Convention in order to evaluate its actual impact and to identify potential successes and shortcomings. In addition, potential improvements in the existing frameworks will be suggested after considering alternative approaches followed in other European regions and after detecting potential synergies with other planning frameworks such as the ones affecting Sustainable Development or Climate Change Adaptation amongst others.

Keywords: : Landscape planning, Landscape policies, European Landscape Convention, Spatial planning, Land-use planning, Triangulation methods in planning

### References

Council of Europe. (2000) European Landscape Convention. Available from <https://www.coe.int/en/web/landscape/text-of-the-european-landscape-convention> [Accessed 16th January 2022]

Council of Europe. (2008) Recommendation CM/Rec(2008)3 of the Committee of Ministers to member states on the guidelines for the implementation of the European Landscape Convention.

Available from <https://www.coe.int/en/web/landscape/guidelines-for-the-implementation-on-the-european-landscape-convention> [Accessed 16th January 2022]

Galan, J. (2017) Landscape Planning: From Theory to Teaching. *Architectural Research in Finland*. 1(1), 27-37.

Generalitat de Catalunya. (2005) Ley 8/2005, de 8 de junio, de Protección, Gestión y Ordenación del Paisaje. Available from: <https://www.boe.es/buscar/pdf/2005/BOE-A-2005-11753-consolidado.pdf> [Accessed 16th January 2022]

Generalitat Valenciana. (2004). Ley 4/2004, de 30 de junio, de Ordenación del Territorio y Protección del Paisaje, Available from: <https://www.boe.es/buscar/pdf/2004/BOE-A-2004-13470-consolidado.pdf> [Accessed 16th January 2022]

Hersperger, A.M., Bürgi, M., Wende, W., Bacău, S. & Grădinaru, S.R. (2020) Does landscape play a role in strategic spatial planning of European urban regions?. *Landscape and Urban Planning*, 194, 103702

Sala, P., Puigbert, L. & Bretcha, G. (2014). Landscape planning at a local level in Europe. *Olot: Landscape Observatory of Catalonia*

Sarlöv Herlin, I (2004) New challenges in the field of spatial planning: landscapes. *Landscape Research*, 29 (4), 399-411

85005

## Conceptual framework for land use optimization

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Land use is facing irreparable damages, worldwide, triggered by human activities such as urbanization and deforestation processes, and intensive agricultural practices (Gomes et al., 2020; Gutzler et al., 2015; Lambin et al., 2003). This has led to changes in the landscape and corresponds to one of the main environmental threats (Sallustio et al., 2017). To face these threats, land use planning has a critical role in the process of land use optimizing (Pennington et al., 2017). This study proposes a conceptual framework to strengthen land-use planning to avoid or to promote the land-use change from one specific land use to another. Therefore, this conceptual framework is divided into the following four main steps: (i) identification of the study area and the stakeholders involved; (ii) creating narratives for different ‘what-if’ scenarios; (iii) employing spatially explicit dynamic models to explore future land use and land cover changes under the considered ‘what-if’ scenarios; and (iv) formulating policy recommendations based on the achieved results. This conceptual framework can support land managers to better recognize and assess the best land-use options for a specific territory, by indicating more action-oriented territorial development.

Keywords: future land use scenarios; complex spatial models; stakeholders’ involvement; spatial planning

### References

- Gomes, E., Banos, A., Abrantes, P., Rocha, J., Schläpfer, M., 2020. Future land use changes in a peri-urban context: Local stakeholder views. *Sci. Total Environ.* 137381. <https://doi.org/https://doi.org/10.1016/j.scitotenv.2020.137381>
- Gutzler, C., Helming, K., Balla, D., Dannowski, R., Deumlich, D., Glemnitz, M., Knierim, A., Mirschel, W., Nendel, C., Paul, C., Sieber, S., Stachow, U., Starick, A., Wieland, R., Wurbs, A., Zander, P., 2015. Agricultural land use changes – a scenario-based sustainability impact assessment for Brandenburg, Germany. *Ecol. Indic.* 48, 505–517. <https://doi.org/10.1016/j.ecolind.2014.09.004>
- Lambin, E.F., Geist, H.J., Lepers, E., 2003. Dynamics of Land-Use and Land-Cover Change in Tropical Regions. *Annu. Rev. Environ. Resour.* 28, 205–241. <https://doi.org/10.1146/annurev.energy.28.050302.105459>
- Pennington, D.N., Dalzell, B., Nelson, E., Mulla, D., Taff, S., Hawthorne, P., Polasky, S., 2017. Cost-effective Land Use Planning: Optimizing Land Use and Land Management Patterns to Maximize Social Benefits. *Ecol. Econ.* 139, 75–90. <https://doi.org/https://doi.org/10.1016/j.ecolecon.2017.04.024>
- Sallustio, L., De Toni, A., Strollo, A., Di Febbraro, M., Gissi, E., Casella, L., Geneletti, D., Munafò, M., Vizzarri, M., Marchetti, M., 2017. Assessing habitat quality in relation to the spatial distribution of protected areas in Italy. *J. Environ. Manage.* 201, 129–137.

<https://doi.org/https://doi.org/10.1016/j.jenvman.2017.06.031>

84221

## Visualization analysis of future city research based on CiteSpace

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Humans' exploration of future cities has never stopped. The history of the future city is an experimental history in which human beings gradually meet their own needs and dreams through technological tools. With the great progress of technology in recent decades, and the chaos caused by the global COVID-19 pandemic, thinking and answering about the future direction of cities, and what adaptive changes will be adopted in urban planning, is the key challenge that current urban researchers, planners and even all sectors of society are facing. Comprehensively examining the outcomes of existing scientific papers on future city and clarifying its context and evolution are necessary prerequisites for constructing future city theory and helping urban decision makers to formulate future urban development paths.

This study aims to identify the research status quo and development trends of future city using visualization analysis with CiteSpace.

We retrieved published papers (1950–2021) in English from the Web of Science(WoS) core collection with a topic search related to future city. Next, we generated author, institution, and country co-authorship networks to identify the top productive authors, institutions, and countries, respectively, the journal co-citation network to determine the distribution of core journals, the document co-citation network to reveal the main research themes and explore the knowledge structure, the author co-citation network to identify the influential authors, and the keywords co-occurrence network to detect research hotspots and research frontiers.

The results show that: 1) In terms of the number of published articles, the United States ranks first, followed by China. The centrality of the United States is remarkable, and it is a key node in the global research cooperation network. Most of the top productive authors and institutions are from the two countries, and the rest are mainly from the UK and some parts of Europe. 2) The overall research cooperation network has a high density and complexity, and has formed relatively stable and large-scale cooperative groups, with influential authors (Seto KC, Batty M, etc.) and institutions. 3) The most cited journal is Landscape and Urban Planning, but the degree of association between journals is not as strong. 4) The research has obvious multidisciplinary and interdisciplinary characteristics, showing five key word clusters: wisdom and sustainability, ecological environment health, historical and cultural protection, cooperative planning and social media, land use change and simulation prediction. 5) The research hotspots mainly revolve around GIS and computational simulation of regional land use changes, and there are no significant burst terms after 2014.

Although this paper only analyzes the WoS database, it still lays a bibliometrics foundation for understanding the international research situation of the grand "future city".

Keywords: Future City; CiteSpace; WoS; Visualization; Status and trends; Bibliometrics

### References

Chen, Y., Chen, C. and Wang, Z.Y. (2015). The Methodology Function of CiteSpace Mapping Knowledge Domains. *Studies in Science of Science*. 33, 242-253.

- Chen, C. (2006). CiteSpace II: Detecting and visualizing emerging trends and transient patterns in scientific literature. *Journal of the American Society for information Science and Technology*, 57(3), 359-377.
- WU, Z., HAN, J., TENG, Y.W., HUANG, Y.Z., & GAN, W. (2018). Qingdao Sino-German Future City: Absorption of Innovative Concepts in Line with Laws and Devotion to Homeland Contribution. *Eco-City and Green Building*, 2, 27-33.
- Chen, X., & Liu, Y. (2020). Visualization analysis of high-speed railway research based on CiteSpace. *Transport Policy*, 85, 1-17.
- Wu, Y.Z., YANG J.C., CHEN Q.H. (2020). Research Progress and Key Dimension Exploration of Healthy Community Construction: Based on the Analysis of International Knowledge Map. *Urban Planning International*, 35(05), 80-90.

84344

## Measuring social network influence on power relations in collaborative planning in Beijing city, China

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Social networking sites are used by the government as a smart tool to support e-participation, but they are also used by grassroots participants and professionals to organize collective actions. However, there is little research on to which extent social media can support more inclusive and collaborative planning. The study fills the gap by exploring the impact of social media on reframing power relations in a collaborative planning practice- the regeneration of the Bell and Drum in Beijing city, China. It develops a mixed-methods approach that combines social network analysis (SNA) and qualitative methods. First, based on digital data collected from China's leading social media platform (Weibo), this study applied SNA to model the information flows and interactions between various actors in the case study. Second, interviews and discourse analysis are used to reveal how online social networks and associated power influence the offline planning process. This study contributes to bridging network science and network power theory, by proposing a quantitative framework for examining power relations. The framework is helpful to understand how the use of social media affects the differences in power relations between various actors in collaborative planning processes in terms of strength, symmetry and structure. It is applied to examine the information flows and power of actors in the network created in the case study. The results show that experts edged out the general citizens in establishing information nodes and controlling the flow of information during collaborative planning debates. This suggests that social media relatively led to an inequality of power between professionals and ordinary citizens in the online environment. Nevertheless, it helped professionals to reframe power relations with local government, and to some extent, empowered citizens, who were unable to participate in planning practice via traditional participation methods. This then affected the offline power structures and the decision making of the planning practice. In this sense, one can argue that social media promote more inclusive and collaborative forms of urban planning in the Chinese context. However, attention should also be given to potential issues of social media participation such as bias, polarization and new forms of inequality.

Keywords: Social Media, Digital Data, Social Network Analysis, Collaborative Planning, Power Relations, Networked Power

### References

- Barabási, A.-L., & Albert, R. (1999). Emergence of scaling in random networks. *science*, 286(5439), 509-512. Retrieved from <https://science.sciencemag.org/content/286/5439/509.long>
- Booher, D. E., & Innes, J. E. (2002). Network power in collaborative planning. *Journal of planning education and research*, 21(3), 221-236.
- Castells, M. (2011). *The rise of the network society* (Vol. 12): John wiley & sons.
- Cheng, Y. (2013). Collaborative planning in the network: Consensus seeking in urban planning issues on the Internet—the case of China. *Planning theory*, 12(4), 351-368.

doi:10.1177/1473095213499655

Deng, Z., Lin, Y., Zhao, M., & Wang, S. (2015). Collaborative planning in the new media age: The Dafo Temple controversy, China. *Cities*, 45, 41-50.

Healey, P. (2003). Collaborative planning in perspective. *Planning theory*, 2(2), 101-123.

Zhao, M., Lin, Y., & Derudder, B. (2017). Demonstration of public participation and communication through social media in the network society within Shanghai. *Environment and Planning B: Urban Analytics and City Science*, 45(3), 529-547. doi:10.1177/2399808317690154

Zhang, L., Hooimeijer, P., Lin, Y., & Geertman, S. (2019). Strategies of the built-heritage stewardship movement in urban redevelopment in the internet age: The case of the Bell-Drum towers controversy in Beijing, China. *Geoforum*, 106, 97-104.

83877

## THE IMPORTANCE OF THE INTEGRATED APPROACH TO AFFORESTATION: EXPERIENCES FROM THE SERBIAN GEODESIGN EXPERIMENTAL STUDIO

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During the 2020/2021 academic year at the Faculty of Geography in Belgrade, an experimental Geodesign studio was conducted by following the International Geodesign Collaboration (IGC) framework and using Geodesignhub as a new digital technology. The IGC framework implied elaboration of six spatial development scenarios: Early adopter 2021, 2035, 2050, Late adopter 2035, 2050 and Non adopter 2050, following the Steinitz's framework (2012), and their contribution to the sustainable development goals (SDGs) and the Trillion Trees initiative. The initiative aims at afforestation and conservation of forests and includes calculations of the number of trees and CO<sub>2</sub> sequestration by afforested areas. The studio resulted in the project for the Municipality of Ivanjica situated in the Western Serbia. The established practice of spatial planning in Serbia and its traditional approach to environmental and sustainability challenges, which too often disregard value of ecosystem services and benefits for local communities, was elaborated in Non adopter 2050 scenario. The contribution of this scenario to both SDGs and Trillion Trees Initiative confirmed the need for a paradigm shift from the traditional to comprehensive and progressive approach to the environmental and sustainability challenges. Apart from proposing the design innovations related to other activities (e.g. industry, tourism, agriculture, rural housing etc.), in Early and Late adopter scenarios we explored the impacts of a progressive approach to afforestation and conservation as a part of a wider transition to green economy. For these purposes we proposed that the increase in afforested areas follows the implementation of the pan-European initiative Rewilding Europe, which promotes wildlife comeback as beneficial for local people and socio-economic development. The proposal aims at increasing the long term sustainability of afforestation. The use of Geodesignhub, a digital technology conceived to apply Steinitz's Geodesign framework for iterative and collaborative scenario making process, was crucial in visualisation of scenarios and concomitant evaluation, understanding and experimenting with innovations, especially with applying new integrated approach to afforestation.

Keywords: Geodesign, Scenarios, Afforestation, Sustainability, Rewilding Europe

### References

Steinitz, C. (2012) A Framework for Geodesign: Changing Geography by Design. Redlands: Esri Press.

International Geodesign Collaboration - <https://www.igc-geodesign.org/> (accessed November 20th 2021)

Trillion Trees - <https://trilliontrees.org/> (accessed November 16th 2021)

Rewilding Europe - <https://rewildingeurope.com/> (accessed November 16th 2021)

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## Digitalisation for Climate Smart Planning – Converging Methods from Anthropology, Urban Design and Computational Science

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Given the ubiquity of digital technology, smart city narratives have emerged around embedding hardware and software in the physical city and the impact of computation on cities' physicality (Batty, 2020). Yet planners and urban designers remain reluctant towards digitisation (Stojanovski, et al., 2020) the way historical cities resist smart technologies. Whilst the goal of reducing global carbon emissions requires possibilities to walk, cycle or use public transport, the physical design of cities often hinders access to these things (Southworth, 2005). This fact positions smart cities and the digitisation of planning at the heart of the climate transition process. Smart sustainability emerges as a transformative approach focusing on development of smart, sustainable neighbourhoods, the digitisation of urban infrastructure, and collaborative experimentation with low-carbon and digital technologies (Martin et al., 2019). This paper presents a multidisciplinary approach to sustainable planning, converging social anthropology, urban design diagrammatics, and software specifications from computational science in the development of a new City Information Modelling (CIM) software tool called URCHIM. URCHIM is for use by Swedish planners and urban designers, allowing users to see, in real time, how changes to the built environment is likely to affect carbon emissions and electricity usage from personal transports. Ethnographic methods are used to qualitatively document the development of URCHIM, the process of turning urban design conceptualisations and diagrams into software specification and codes, and to approach digitalisation from a holistic perspective. The aim is to understand how URCHIM could best be adapted to suit the needs of its intended users, and to increase understanding of how multidisciplinary cooperation can assist successful digitalisation of sustainable city planning practices. Ethnography's aims to describe people's lives "with an accuracy and sensitivity honed by detailed observation and prolonged first-hand experience" (Ingold 2008:69) is achieved by the integral method of in-depth interviews (Fägerborg 2011), with URCHIM's intended users, to capture their views on this digitalisation. Participant observation in planning offices is conducted to understand how URCHIM would fit into existing practices. This situates the use of it in social and physical environments, assisting the understanding of people's interaction with the tool (cf. Suchman 1987).

Keywords: digital technologies, ethnography, sustainable, urban design, digitalisation, multidisciplinary

### References

Batty, M. (2020). Defining smart cities: High and low frequency cities, big data and urban theory. In *The Routledge companion to smart cities* (pp. 51-60), London: Routledge.

Fägerborg, Eva. (2011). Intervjuer. In *Etnologiskt fältarbete*, Lars Kaijser & Magnus Öhlander

(eds). Lund: Studentlitteratur.

Ingold, Tim. (2008). Anthropology is not ethnography. In PROCEEDINGS of the British Academy 154(11), 69-92.

Martin, C., Evans, J., Karvonen, A., Paskaleva, K., Yang, D., & Linjordet, T. (2019). Smart-sustainability: A new urban fix?. Sustainable cities and society, 45, 640-648.

Southworth, M. (2005). Designing the walkable city. Journal of urban planning and development, 131(4), 246-257.

Stojanovski, T. Partanen J., Samuels I., Sanders, P. & Peters C. (2020). City Information Modelling (CIM) and Digitizing Urban Design Practices. Built Environment 46(4), 637-646.

Suchman, Lucy. (1987). Plans and situated actions : The Problem of Human-Machine Communication. New York: Cambridge University Press.

85468

## Trigger WAVES: Activating public engagement for planning Urban Blue Spaces with Living Labs

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WAVE (Water Areas Vision for Europe) is a 2-year teaching project based on a partnership of European universities and institutions. This methodological framework develops a study course focusing on sustainable development of water areas and floodplains in urban contexts in Europe. These activities are enabled by so-called Living Labs, accompanied by intensive study programmes and online seminars. It incorporates the spatial framing of the learning process by the floodplain, sharing knowledge dimensions for a holistic understanding of water landscape dynamics and involves public and local stakeholders in the knowledge creation and visioning process through Living Labs.

For most European citizens in urban areas, water areas are essential elements of their living environment, as for centuries, settlement has been concentrating along the urban land interfaces. This is where the majority of us live today and the tendency is increasing, while the connected challenges are increasing as well. Thus, climate change and increased urbanisation are the two major drivers of rising flood risk and therefore sustainable development of floodplain areas is crucial for avoiding flood related damage.

Since high quality water areas effect multiple benefits for our physical and mental health, the protection and restoration of floodplains is encouraged by policy instruments. Furthermore, shifting the focus towards natural retention measures and ecosystem-based management is incorporated into flood risk management plans. If we ask, why this development of floodplains is still not achieving its full potential, although the relevant policies and measures are in place, one needs to address the lack of creating a general public audience as agents of transformative change.

The WAVE Living Lab tackles the challenges by synthesizing knowledge and linking universities with their local communities in joint learning and research settings based on trans-disciplinary pedagogies. Together with NGOs, schools and other stakeholders the participatory action research triggers local communities to address water and floodplain challenges specific to their local context. It furthermore uncovers landscape-based strategies related to social sustainability, being assessed regularly for its impacts on communities and actors involved.

Keywords: Floodplains, Urban Water Bodies, Living Labs, Interdisciplinary Teaching, Stakeholder Involvement

### References

Bell, S., Fleming, L. E., Grellier, J., Kuhlmann, F., Nieuwenhuijsen, M.J., White M.P. (2021) Urban Blue Spaces. Planning and Design for Water, Health and Well-Being, Routledge

Marvin, S., Bulkeley, H., Mai, L., McCormick, K., & Palgan, Y.V. (2018) Urban Living Labs: Experimenting with City Futures, Routledge

Prominski, M., Stokman, A., Stimberg, D., Voermanek, H., Zeller, S. (2012)  
River.Space.Design: Planning Strategies, Methods and Projects for Urban Rivers, Birkhäuser

Wood, L. (2019) Participatory Action Learning and Action Research. Theory, Practice and Process, Routledge

85348

## Reading territories: ecosystem services as a decision support tool in climate adaptation

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The academy has widely recognized that the impacts of climate change have become a priority on EU agendas. One of the main proofs of this urgency is the increase in the magnitude and frequency of these events.

One of the main pieces of evidence is led by the floods that severely affected Germany in the summer of 2021 - whose impact is scalable to the Second World War economic effects on urban areas. From this perspective, it appears obvious the need to implement adequate adaptation strategies. The gap which emerges from a deep reading of existing planning tools is that ordinary territorial government approaches have to be retrofitted to enhance vulnerabilities reduction. This seems mandatory to operatively and substantially achieve local resilience objectives. Furthermore, existing boundaries rethinking seems necessary to pursue climate risk reduction as the administrative fragmentation is leading to significant amplification of local disasters.

This article is based on a Ph.D. investigation financed by Friuli Venezia Giulia Region and is characterized by the combination of academic research and the retrofit of a regional spatial planning tool. The cores of the research are: recognizing the value of natural assets in mitigating climate impacts, the administration's goals in prioritizing the issues of green infrastructure at the local level, and redefining the role of ecosystem services in land use planning and management.

In this sense, the research aims to understand which is the more effective approach to identify and spatialize ecosystem services. Moreover, it tries to understand how the production of this new knowledge may guide planning decisions. The methodology is based on a comparison of national and European best practices to capitalize on the strengths of using ecosystem services in local climate adaptation.

What is expected is to take advantage of the transboundary reality of the Friuli Venezia Giulia case study to analyze the complexity that characterizes territorial systems and to observe transversally the multiple and heterogeneous dynamics of a physical-morphological, socio-economic, cultural, and public health nature.

Keywords: climate change, new technologies, ecosystem services, mapping, adaptation strategies, planning support systems

### References

- Goldstein, J. H., Caldarone, G., Duarte, T. K., Ennaanay, D., Hannahs, N., Mendoza, G., Polasky, S., Wolny, S., & Daily, G. C. (2012). Integrating ecosystem-service tradeoffs into land-

use decisions. *Proceedings of the National Academy of Sciences of the United States of America*, 109(19), 7565–7570.

- IPCC, 2021: Summary for Policymakers. In: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press.
- Maragno, D., Pozzer, G., & Musco, F. (2021). Multi-Risk Climate Mapping for the Adaptation of the Venice Metropolitan Area. *Sustainability*, 13(3), p. 1334.
- Seddon, A. W. R., Macias-Fauria, M., Long, P. R., Benz, D., & Willis, K. J. (2016). Sensitivity of global terrestrial ecosystems to climate variability. *Nature*, 531(7593), 229–232.
- Voskamp, I. M., & van de Ven, F. H. M. (2015). Planning support system for climate adaptation: Composing effective sets of blue-green measures to reduce urban vulnerability to extreme weather events. *Building and Environment*, 83, 159–167.

83234

## Analysis of Urban Space Vitality Based on Weibo Check-in Data A Case Study of Suzhou

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With the development of the information technology, there are all kinds of data in our daily lives. Among them, social media data represented by Weibo check-in data provides the possibility for planners to explore the dynamic relationship between social activities and the urban environment. This study uses Suzhou's Weibo check-in data as a carrier to explore the application of emerging big data in interpreting spatial structure and vitality. This study also explores the understanding of the interaction between urban residents' social activities and urban space. The results show that the land use and organization of urban space determine the degree and duration of urban residents' activities. This research provides new ideas for understanding the relationship between urban structure and social activities, and provides reference for future related research and planning practices.

Keywords: Urban spatial structure, Weibo check-in, Social media data, Vitality, Suzhou

### References

- [1] Lyu, Feinan, and Li Zhang. "Using multi-source big data to understand the factors affecting urban park use in Wuhan." *Urban Forestry & Urban Greening*, 43 (2019): 126367.
- [2] Zhang, Sai, and Weiqi Zhou. "Recreational visits to urban parks and factors affecting park visits: Evidence from geotagged social media data." *Landscape and urban planning* 180 (2018): 27-35.
- [3] Ying Long, Yin Zhou. *Pictorial Urbanism: A New Approach For Human Scale Urban Morphology Study*[J]. *Planners*, 2017(2): 54-60.
- [4] Zheng Quanyi, Zhao Xiaolong, Jin Mengxiao, Liu Xiaobing. *A Study on Diversity of Physical Activities in Urban Parks Based on POI Mixed-use: A Case Study of Futian District, Shenzhen* [J]. *Planners*, 2020, 36(13): 78-86.

85251

## Decision support systems in spatial planning: possibilities and limitations in an international comparative context

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With the role of digitization rising in all societal spheres, the amount of data and current challenges to be considered in spatial planning is increasing in a similar mode, thus enhancing complexity and uncertainty in spatial planning.

Today, planning processes are confronted with a myriad of aspects to be incorporated and deliberated (among others: environment, economic, social equity, design, place, climate, health aspects). In this context, decisions to be made, e.g. by planning experts, can no longer rely on expertise and acquired knowledge alone. In order to make sustainable, viable planning decisions in view of these demands, technical systems might offer reliable and transparent solutions, allowing for combining different concerns, visualizing long-term developments, and taking local conditions into account.

One possible tool to meet these challenges are decision support systems (DSS). While technical applications such as GIS systems have been in use for a long time, DSS have been used less frequently thus far.

This paper presents comparative research on international best practices for DSS in the realm of spatial planning and decision making. Several best practices were identified and compiled using specifically designed profiles and criteria to enable cross-national comparisons. The objective was to highlight possible fields of application, and to discuss the opportunities and limitations in the practice of applying DSS. On this basis, in the ongoing research, two case studies are selected which will be further investigated using qualitative methods of analysis.

The research to be presented here is part of the collaborative project ‘Ageing Smart – designing spaces intelligently’, which intends to support spatial decision-making processes in select cities for an ageing society.

**Keywords:** planning support systems, digital (big) data, smart technologies for the (built) environment, comparative studies, spatial management, decision making

### References

- Campagna, Michele. 2016. Metaplanning: About designing the Geodesign process. *Landscape and Urban Planning* 156 (Dezember): 118–128. doi:10.1016/j.landurbplan.2015.08.019, .
- Dahm, Johanna. 2021. *Die Entscheidungs-Matrix: besser fühlen – klar denken – erfolgreich entscheiden*. Ratgeber. Berlin [Heidelberg]: Springer. doi:10.1007/978-3-662-62375-6, .
- Kouziokas, Georgios N. und Konstantinos Perakis. 2017. DECISION SUPPORT SYSTEM BASED ON ARTIFICIAL INTELLIGENCE, GIS AND REMOTE SENSING FOR SUSTAINABLE PUBLIC AND JUDICIAL MANAGEMENT. *European Journal of Sustainable Development* 6, Nr. 3 (1. September). doi:10.14207/ejsd.2017.v6n3p397, <https://ecsdev.org/ojs/index.php/ejsd/article/view/530/527> (zugegriffen: 1. Februar 2022).
- Rittenbruch, Markus, Marcus Foth, Peta Mitchell, Rajjan Chitrakar, Bryce Christensen und

- Christopher Pettit. 2021. Co-Designing Planning Support Systems in Urban Science: The Questions They Answer and the Questions They Raise. *Journal of Urban Technology* (21. Oktober): 1–26. doi:10.1080/10630732.2021.1980319, .
- Royal Town Planning Institute und Connected Places Catapult. 2019. A Digital Planning Manifesto. 23. September. <https://www.rtpi.org.uk/policy/2019/september/a-digital-planning-manifesto/>.
- Thomas, Michael R. 2002. A GIS-based decision support system for brownfield redevelopment. *Landscape and Urban Planning* 58, Nr. 1 (Januar): 7–23. doi:10.1016/S0169-2046(01)00229-8, .
- Timmermans, H. J. P., Hrsg. 1997. *Decision support systems in urban planning*. 1st ed. London: E. & F.N. Spon.

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## Usefulness of New Communicative Planning Support System for Greener Cities, Case GreenTwins in Helsinki-Tallinn

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The value of green environment for liveability and sustainability of future cities have been identified in city planning. The GreenTwins project aims to contribute to greener cities by providing new tools for communicative planning of green environments. These tools include a 3D tool for co-planning, a virtual reality tool for visualizing urban green, and a digital plant library to be used in these applications. The ensemble is called Communicative Planning Support System (CPSS).

The usefulness of Planning Support Systems is well studied and argued to depend largely on the fit between features of the tools and the planning tasks at hand. (e.g. Geertman, 2017; Pelzer, 2015) Apart from that, the legitimacy of the tools are found to be dependent on the societal context and planning culture (Zhang, Geertman, Hooimeijer, Lin, 2019).

In this research, the usefulness of CPSS was studied empirically by engaging the prospective users of the new tools in the starting phase of the GreenTwins project (2020). Users' needs and expectations were studied in online workshops and with questionnaires. This research opens a view to the usefulness of the CPSS for both planners and citizens in two different planning contexts, Tallinn, Estonia and Helsinki, Finland.

The results reveal that active citizens are motivated to participate in planning if they have a real possibility to influence on planning. Active citizens are willing to participate in knowledge building, co-creation and assessing the impact of the plans. Planners, on the other hand, emphasize the efficiency and inclusiveness of participatory planning processes, and knowledge-based argumentation, supported by smart impact analysis tools.

Above all, a CPSS that enables local citizens to develop their own planning proposals can only succeed if citizens' self-organizing activities are recognized, considered and integrated in city-led planning processes. A major cultural change would be needed in the planning cultures of Helsinki and Tallinn to meet this requirement.

As a conclusion, we argue that studying end-users' perspectives in CPSS development is important not only to identify the functional requirements for the tools, but also to reveal the cultural aspects that may hinder or support the adoption of the new tools.

Keywords: Usefulness, User research, Planning Support Systems, Communicative Urban Planning, Green area planning

## References

Geertman, S. (2017). PSS: Beyond the implementation gap. *Transportation Research Part A* 104, pp. 70–76. <http://dx.doi.org/10.1016/j.tra.2016.10.016>

Pelzer, P. (2015). Usefulness of Planning Support Systems. Conceptual perspectives and practitioner's experiences. Doctoral dissertation. PhD Series InPlanning.

Zhang, L., Geertman, S., Hooimeijer, P. & Lin, Y. (2019). The usefulness of a Web-based Participatory Planning Support System in Wuhan, China. *Computers, Environment and Urban Systems* 74, pp. 208-217.

84988

## Understanding urban creativity with social media analyses

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The paper focuses on the spatial dimension of creative city and defining the attributes of urban spaces influencing the creative sector development. Such city offers attractive, inclusive, and functional spaces. Researchers refer to the works of urban planning classics emphasizing the urban complexity (Alexander, 1966), diversity (Jacobs, 1970) and walkability (Gehl, 2010). Florida (2005) indicates that the creative class influences the city by changing the way places function, and indirectly the functionality of the entire urban organism. In particular, the knowledge-based creative industries are seen as strategic instruments for the implementation of new technologies or new tools enhancing innovative services (Kourtit & Nijkamp 2013). The paper proposes quantitative assessment of the creativity of small towns of the Pomeranian Region by observing activity of their residents in social media. The main aim is to introduce machine learning model which on the bases of social media data, allows the recognition of the factors of urban space stimulating the development of the creative sector. This goal is fulfilled with the specific objectives: (1) defining urban metrics on the basis of literature relevant to the concept of a creative city; (2) GIS analyses enabling the assessment of urban space; (3) measurement of the built environment with the use of GIS tools; (4) evaluating geolocated data from social media - Instagram & Twitter describing users creativity; (5) machine learning model introduction enabling the assessment of dependencies and prediction of the potential of the development of the creative sector on the basis of indicators of urban space.

The research is divided into 5 phases, which are based on the methodology: (1) Desk research with SLR: to define measures of the built environment based on the concept of a creative city proposing indicators describing quantitatively urban space, eg. De Nadai et al., (2016); Huang, Obracht-Prondzyska, et al. (2021); Sung et. al. (2015), (2,3) Small data - data processing with GIS tools and estimation of indicators describing urban space, (4) Social media big data processing - Instagram and Twitter, (5) data modeling with xgboost machine learning model which includes measures of the urbanized environment as independent variables and the activity index describing the creativity of social media users as the dependent variable. Spatial OLS regression is used to recognise the spatial relationships and to assess the spatial distribution of the results.

Based on recognised significance of the urban environment in stimulating the development of the creative sectors, as well as on the basis of spatial distribution and cartographic visualization, the paper defines planning recommendations.

Keywords: creative city, urban big data, social media analyses, machine learning

### References

De Nadai, M., Staiano, J., Larcher, R., Sebe, N., Quercia, D., & Lepri, B. (2016). The Death and Life of Great Italian Cities : A Mobile Phone Data Perspective The Death and Life of Great

Italian Cities : A Mobile Phone Data Perspective, (April).

<https://doi.org/10.1145/2872427.2883084>

Florida, R. (2014). The Creative Class and Economic Development. *Economic Development Quarterly*, 28(3), 196–205. <https://doi.org/10.1177/0891242414541693>

Huang, J., Obracht-Prondzyska, H., Kamrowska-Zaluska, D., Sun, Y., & Li, L. (2021). The image of the City on social media: A comparative study using “Big Data” and “Small Data” methods in the Tri-City Region in Poland. *Landscape and Urban Planning*, 206, 103977.

<https://doi.org/https://doi.org/10.1016/j.landurbplan.2020.103977>

Kourtit, K., & Nijkamp, P. (2013). IN SEARCH OF CREATIVE CHAMPIONS IN HIGH-TECH

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## Greencoin – digital currency for smart cities mitigating climate changes

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The smart city concept comprises above all aspects integrated data collection, sensing, networking and the impact of new social media, economic interactions, decision support as urban intelligence and participatory governance. So far many demonstrators anticipating the paradigm shifts toward smart city have been introduced worldwide. To ensure the progress of smart city concept implementation we need to deliver tools responding to current challenges of cities while strengthening urban dwellers participation.

The most crucial one is the need to shape the ability to create well-being of urban communities, what becomes urgent because of the compound effect generated by climate change – distinguished between direct impacts, indirect effects, and pre-existing vulnerability. To mitigate climate changes, cities today need to find a way to encourage residents to be actively involved in the process of shaping urban resilience. Therefore, there is an urgent need to define ways to enhance eco living choices. In the age of digitalization, smart cities should benefit from IoT and tools allowing the response to the negative consequences of climate changes.

One of the possible solutions is the Greencoin app designed as a part of digital twin approach. By designing the app, we introduce a new digital currency which aims to engage citizens to act and to empower their eco activities by shaping climate awareness.

The paper was structured to introduce the process of defining the functionality of Greencoin application as a supportive solution for shaping urban resilience. The interdisciplinary team designed a framework for the application to approach the need of planning for adaptable cities and mitigating climate changes. The work brought studies on existing currencies, urban solutions and data-driven initiatives enhancing active citizens. The process became a starting point for designing and testing the applicability and defining technical challenges to introduce such a solution. The aims of the paper are therefore as follows:

- Defined solutions which should be included in the green currency design to help to mitigate climate changes.
- Established base for digital currency design and defined functionality of the Greencoin app to stimulate eco living choices.
- Codesigned functionality of digital currency to respond the current climate related urban challenges.
- Introduced framework for the technical solutions to empower the successful implementation of the process.

To conceptualize the Greencoin app the research is based on a methodological approach including case study review. More importantly, the functionality has been defined in a participatory process including academia, city representatives, NGOs, business partners and residents. We therefore used design thinking, product design and moonshot thinking

methodology. The paper introduces the concept for the functionality of the application shaping urban eco lifestyles.

Keywords: Greencoin, smart city, digital currency, climate change, environmental behaviors

#### References

- Bolt, W., & Van Oordt, M. R. C. (2020). On the Value of Virtual Currencies. *Journal of Money, Credit and Banking*, 52(4), 835–862. <https://doi.org/10.1111/jmcb.12619>
- Kahneman, D. (2003). Maps of Bounded Rationality: Psychology for Behavioral Economics. *The American Economic Review*, 93(5), 1449–1475. Retrieved from <http://www.jstor.org/stable/3132137>
- Li, W., Zhu, W., & Zheng, J. (2021). Research on Resilience Urban under the Background of New Generation Information and Communication Technology. In 2021 IEEE 11th International Conference on Electronics Information and Emergency Communication (ICEIEC)2021 IEEE 11th International Conference on Electronics Information and Emergency Communication (ICEIEC) (pp. 1–5). <https://doi.org/10.1109/ICEIEC51955.2021.9463811>
- Mavrodieva, A. V, Rachman, O. K., Harahap, V. B., & Shaw, R. (2019). Role of Social Media as a Soft Power Tool in Raising Public Awareness and Engagement in Addressing Climate Change. *Climate* . <https://doi.org/10.3390/cli7100122>
- Sauer, B. (2016). Virtual Currencies, the Money Market, and Monetary Policy. *International Advances in Economic Research*, 22(2), 117–130. Retrieved from [https://econpapers.repec.org/RePEc:kap:iaecre:v:22:y:2016:i:2:d:10.1007\\_s11294-016-9576-x](https://econpapers.repec.org/RePEc:kap:iaecre:v:22:y:2016:i:2:d:10.1007_s11294-016-9576-x)
- Wang, X., Wang, Y., Tao, F., & Liu, A. (2021). New Paradigm of Data-Driven Smart Customisation through Digital Twin. *Journal of Manufacturing Systems*, 58, 270–280. <https://doi.org/https://doi.org/10.1016/j.jmsy.2020.07.023>

84307

## Comparison of the Participation Models of Multiple Subjects in Urban Regeneration in China:A Case Study of Urban Villages in Shenzhen

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Urban regeneration is distinguished by the fact that it is an activity that includes the public, private and community sectors. It's clear that in the process of urban regeneration, various subjects form a game relationship due to their differentiated interest needs. Urban regeneration involves the conversion of use rights between existing and new stakeholders, and the consequent distribution of value-added benefits. With the development and advancement of urban regeneration in China, the degree of participation of various parties has increased significantly, and the diversified interests and demands have gradually become apparent.

As a contradictory product of the rapid urbanization with the background of China's market economy and the urban-rural dual structure left over from the planned economy, urban villages are closely related to the development history of Shenzhen and have distinct spatial, social and economic characteristics, which represent a typical type of urban regeneration.

This paper takes Shenzhen's urban villages as examples, starting from their own characteristics and regeneration history, followed by a comparative study of three typical urban villages - Dachong Village, Guichangwei Village and Shuiwei Village, analyzing different modes of participation and their advantages and disadvantages, exploring the evolutionary trend of urban village regeneration. The conclusion is that the evolution can be divided into three stages, from a government-coordinated and market-led demolition and redevelopment model, to a combination of top-down and bottom-up comprehensive regeneration model, and finally reach a composite regeneration model with the collaborative participation of multiple subjects, which gradually reflects the consideration of various aspects such as the implementation of public interests, the satisfaction of the interests of more multiple parties, and the socio-economic benefits of a larger area and its sustainability.

Keywords: Participation Model;Multiple Subjects;Urban Regeneration; Urban Village

### References

[1]Zhou, Zhihua. "Towards collaborative approach? Investigating the regeneration of urban village in Guangzhou, China." *Habitat International* 44 (2014): 297-305.

[2] Li, L. H. , et al. "Redevelopment of urban village in China – A step towards an effective urban policy? A case study of Liede village in Guangzhou." *Habitat International* 43(2014):299-308.

[3] Jiang, Y. , et al. "Whose village? Stakeholder interests in the urban renewal of Hubei old village in Shenzhen." *Land Use Policy* 91(2020).

[4] Wong, Siu Wai , Bologin Tang, and J. Liu . "Village Redevelopment and Desegregation as a

Strategy for Metropolitan Development: Some Lessons from Guangzhou City." *International Journal of Urban and Regional Research* 42.6(2018).

[5] Shen-Jing, H. E. , J. X. Qian , and W. U. Min-Hua . "Studentification in urban village: A case study of Xiadu Village,Guangzhou." *Geographical Research* 30.8(2011):1508-1519.

85042

## The same urban green for everyone? // Evaluation of social justice of urban green as a contribution to spatial justice based on two case studies in the Ruhr region of Germany

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Urban green is an essential component of the quality of life in our cities (BMUB 2017). Multiple processes, such as climate change and increasing socio-spatial disparities, have led to a further increase in the importance of urban green structures. As a result of the COVID-19 pandemic, urban green has become more prominent among the urban population as places for social gathering and for preventive healthcare (Baum 2021). Especially in densely populated areas, urban green's diverse social, economic, and environmental functions are of great importance. Various analyses by different experts and institutes, including the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), have concluded that urban green is unevenly distributed in German cities, and both densely populated and socially disadvantaged districts are often inadequately supplied with urban green (BMUB 2015). In the course of the ongoing reurbanisation and the resulting increased conflict of usages, open space is becoming a scarce resource. Sustainable and long-term planning is necessary to preserve and develop city-wide urban green. The main objective for planners is to guarantee a socially equitable supply of urban green (BBSR 2017). Therefore, planning authorities need reliable information on the quantity and distribution of urban green.

This contribution focuses on the methodological approach to evaluate social justice of urban green. First, approaches to define urban green and social justice are discussed. Based on a geodata evaluation system and statistical analysis, the assumption of a socially unjust distribution of urban green in the Ruhr region in Germany is verified. The cities of Essen and Dortmund serve as case studies. In two analysis steps, the distribution and the typological variation of urban green in relation to the socio-spatial structure are examined. The results show that urban green is not distributed according to the population's needs. Although there is only a slight statistical correlation between the availability of urban green and the socio-spatial structure, urban green per inhabitant tends to be least available in socially disadvantaged districts. These districts often have an increased need for urban green due to the high density of settlements and their social structure, with a high proportion of children and elderly people, as well as a higher vulnerability towards climate change and the COVID-19 pandemic. This presentation concludes with an outlook on innovative measures to create urban green in densely populated and socially disadvantaged neighborhoods as a contribution to spatial justice.

Keywords: Socio-spatial justice, geodata evaluation system, urban green, socio-spatial structure

References

Baum, P. (2021) Öffentliches Grün in Zeiten der Pandemie, 27 April. Available at: <https://www.bdla.de/nachrichten/pressemitteilungen/1366-oeffentliches-gruen-inzeiten-der-pandemie> (Accessed: 24 January 2022).

Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) (2017) Handlungsziele für Stadtgrün und deren empirische Evidenz: Indikatoren, Kenn- und Orientierungswerte: ein Projekt des Forschungsprogramms "Experimenteller Wohnungs- und Städtebau (ExWoSt) des Bundesministeriums für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB), betreut vom Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR). Bonn.

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB) (2015) Grün in der Stadt - Für eine lebenswerte Zukunft: Grünbuch Stadtgrün. Berlin.

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB) (2017) Weißbuch Stadtgrün: Grün in der Stadt - Für eine lebenswerte Zukunft. Berlin.

84314

## Research on the identification of urban vitality center and its spatial relationship based on multi-source big data——Taking Jinan as an example

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With the acceleration of urbanization in China, the scale of urban space continues to expand, and new urban centers have emerged in urban development areas, making the urban spatial structure change from a single center to a multi-center; at the same time, the quality of urban centers has also been continuously improved. The transformation of the traditional urban commercial center to the CBD (Central Business District), CAZ (Central Activity Zone) and other development models, the functions of the urban center are gradually compounded. In this context, the thesis chooses to study the urban center and its spatial relationship as the research object. Through a review of relevant research literature, the paper combines the physical space and behavioral space of the city center, and proposes the concept of an urban vitality center. Taking Jinan as an example, the POI data of the AutoNavi map representing the city's functions and the Baidu map heat map data representing the spatial agglomeration of the city's population were selected, and 19 urban vitality centers in Jinan were identified with the help of ArcGIS, UCINET, SPSS and other analysis software. Afterwards, the spatial relationship of 19 urban vitality centers is studied from the two dimensions of scale level and spatial connection. The main conclusions are drawn: First, the overall spatial relationship of Jinan's urban vitality centers presents an obvious "level + network" feature; Second, the scales of different vitality centers in Jinan are significantly different, showing a decreasing circle and core in space. ; Third, the Jinan urban vitality center network has initially formed, but the spatial connection of urban vitality centers is quite different; fourth, compared with the scale level of vitality centers, the hierarchical relationship of vitality centers in the network has changed and the difference is larger.

Keywords: city vitality center, spatial relationship, identify, Jinan

### References

- [1] Shi Beixiang. Polarization And Flattening Of City Center System: The Evolution With The Effect Of Agglomeration-diffusion Convection[J]. *Planners*,2018(03):85-90.
- [2] ZHANG Xiaoyun, TAN Xingye, YIN Jian Li Yuexuan. An Empirical Study On Urban Polycentric System Based On Forms And Flows: The Case Of Central Area In Shenyang[J]. *City Planning Review*,2018(03):85-90.
- [3] ZHEN Feng, WANG Bo, CHEN Yingxue. China's City Network Characteristics Based on Social Network Space:An Empirical Analysis of Sina Micro-blog[J]. *Acta Geographica Sinica*, 2012, 67(8): 1031-1043.
- [4] ZHONG Weijing, WANG De, XIE Dongcan, YAN Longxu. Dynamic characteristics of Shanghai's population distribution using cell phone signaling data[J]. *Geographical Research*, 2017( 05): 972- 984.

[5] Liu L, Biderman A, Ratti C. Urban Mobility Landscape: Real Time Monitoring of Urban Mobility Patterns [C] // 11th International Conference on Computers in Urban Planning and Urban Management, 2009: 16-18.

[6] Anon. Centrality and urban transformations: An exploration of the process of live centrality in water related Cities in Southern Chile [DB/OL], 2017.

84312

## Analyzing Causal Loop Diagrams through the graph theory framework to identify key leverage points for sustainability in urban-rural systems

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Complex problems are often challenging to solve. System science methods help to unwrap these complexities and provide enough clarity to identify the processes, logic, and dynamics of the complex systems. These methods are specifically well-suited for sustainability-related topics (Ford 1999) in urban (Zellner et al. 2008) and rural (Jamshed et al. 2020) environments. Food-energy-water (FEW) nexus is a good example. It is a part of a global sustainable agenda that means that the three domains – food security, energy security, and water security – are indissolubly linked.

Community engagement and expert participation are essential to collect a broad view of problem complexity from different perspectives. Therefore, we created Causal Loop Diagrams (CLD) to visually represent FEW interrelations based on the results of the participatory modeling process based on workshops with external experts where the focus was made on the urban-rural connections. After that, the main aim of our research was to determine leverage points of the FEW system by quantifying the importance of the elements in our CLD. Since the structure of CLD is naturally similar to a graph, we then represented it as a directed unweighted graph.

The topology of a graph regulates an influence structure between vertices and, as a result, the entire system's behavior. We used known measures from graph theory (Özesmi and Özesmi 2004; Freeman 1978) to identify and provide information on vertex importance in the system. These common measures are network density, average path length, modularity, degree, closeness, betweenness, eigenvector, and PageRank. All the above measures focus on each vertex within the graph with relation to their neighbors, however, they do not take into account the loop-based structure of the system, which we found to be very important to describe the system. To address this issue, we developed a tool that can conduct this analysis and compare results with other conventional measures.

As a result, we identified the most critical variables in the FEW system, which are strongly related to the climate activism in local areas, commodity and non-commodity food production, legislature support for climate change policies, and political will on both local and regional levels.

Keywords: causal loop diagrams, complex systems, graph theory, sustainability, climate change mitigation

References

1. Ford, F.A., 1999. Modeling the environment: an introduction to system dynamics models of environmental systems. Island Press, Washington, DC.
2. Freeman, L. C. (1978). Centrality in social networks conceptual clarification. *Social Networks*, 1(3), 215-239.
3. Jamshed, A., Birkmann, J., Feldmeyer, D., & Rana, I. A. (2020). A conceptual framework to understand the dynamics of Rural–Urban linkages for rural flood vulnerability. *Sustainability*, 12(7), 2894.
4. Özesmi, U., & Özesmi, S. L. (2004). Ecological models based on people’s knowledge: A multi-step fuzzy cognitive mapping approach. *Ecological Modelling*, 176(1-2), 43-64.
5. Zellner, M. L., Theis, T. L., Karunanithi, A. T., Garmestani, A. S., & Cabezas, H. (2008). A new framework for urban sustainability assessments: Linking complexity, information and policy. *Computers, Environment and Urban Systems*, 32(6), 474-488.

80299

## INCORPORATING SMART TECHNOLOGIES FOR ENERGY SUFFICIENCY IN BUILT ENVIRONMENT OF DEVELOPING COUNTRIES: AN ARCHITECT'S PERSPECTIVE

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In the field of Smart Buildings, Building Management Systems encompasses an enormous variety of technologies, suitable for different buildings, including energy management systems and building controls. The function of Building Management Systems is central to 'Smart Buildings' concepts; its purpose is to control, monitor and optimize building services, e.g., lighting; heating; security systems; access control; audio-visual and entertainment systems; ventilation, filtration and climate control, etc.; even time & attendance control and reporting (notably staff movement and availability). It has been experienced that Smart buildings can effectively use energy conservation methods and maintain the optimum energy usage level all the time. The energy production cost is higher in developing countries. Reduction in energy consumption derives from strategies, in the form of intelligence, for manipulating the HVAC and electrical systems. These strategies are complex, because energy optimization schemes have an impact on many different functional aspects simultaneously; consequently, they can be effectively followed by smart system only. It has been already experienced that using smart software that reacts to the electrical grid demand approaching a new monthly peak value can reduce electrical power costs, and then recommends shedding, of certain building electrical loads in accordance with a priority schedule. They can even change the inside environment as per changes of likings of occupants by voice actuation system (already in use in developed countries). Studies reveal that around 18% of total energy consumption is in housing sector, where energy is used wastefully. Moreover, though people are aware of energy shortages as they are reminded by load shedding and power cuts time-to-time; still they have not yet developed a psychology to conserve energy whatever and whenever they can. As per UNCHS, approximately 60% of reduction in energy consumption is possible through employment of energy conscious design principles and it is the responsibility of architects/ designers to encourage such measures. The energy consumed by a building unit depends upon the structure's energy needs and the efficiency with which those needs are satisfied. Energy conservation aims at both reducing basic demand by cutting a building unit's appetite and improving the efficiency of energy supply system by eliminating wastage. Many of the buildings are being designed to aggressive standards for illumination levels, which leads to over-illumination. Smart buildings can use dynamic area illumination techniques to effectively control and maintain optimum illumination. It is significantly noted that Architects/Building Designers have a vast role to play in ensuring energy sufficiency and designing Net-Zero buildings. This research will explore architectural manifestations of energy conservation along with use of smart technologies in upcoming buildings of developing countries.

Keywords: energy efficiency, smart technologies, architectural measures, building intelligence.

## References

- [1] Sanyal D. (1997). Development of Self Sufficient Housing using intelligent buildings in Indian context. New methods and technologies in Planning and construction of Intelligent Buildings II. Proceedings of IB/IC Intelligent Buildings Congress. Tel Aviv. pp96.
- [2] UNCHS (Habitat) (1991a). Energy efficiency in housing construction and domestic use in Developing countries. Nairobi. (HS/218/91/E) pp8.
- [3] UNCHS (Habitat) (1991b). Energy for buildings. Nairobi. (HS/250/91/E) pp88.
- [4] Sanyal D. (2000). Exploration of architectural design aspects for intelligent self sufficient housing: a study. Proceedings of World Conference on Green Design, World Congress on Environmental Design for the New Millennium, Seoul. pp377.

84466

## Using participatory mapping of subjective heat perception for tailor-made, heat-adapted urban development

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As climate change progresses and surface temperatures rise, the IPCC estimates that the frequency and intensity of heatwaves are very likely to increase worldwide (IPCC, 2014). Germany has seen a significant increase in heatwaves and temperature records, too. In July 2019, a heatwave occurred exceeding 40 °C for three consecutive days (Bissolli et al., 2019) and several heatwaves set in August 2020 made it the second warmest August since 1901 (DWD, 2020).

In order to adapt cities to these challenges, planners have a broad technical knowledge of the climatic situation through various climate analyses. However, urban climate modeling represents heat regardless of whether people are in a specific place at a given time. Heat stress of city users differs during the day and at night according to their activities and locations, which in turn varies due e.g. age or occupation (Kunz-Plapp et al., 2016). While at night heat can become a high burden, activities are usually reduced and concentrated at home. During the day, however, people are usually not bound to their home in their daily lives but move through the city in individual patterns.

Within the framework of the research project "ZURES II - Application and continuation of future-oriented climate and vulnerability scenarios in selected instruments and planning processes", participatory mapping is used to record subjective perceptions of and behavior during heat stress in order to identify heat hotspots in the central urban functions such as business, mobility, and care work. With the help of innovative WebGIS-based survey tools, citizens can easily visualize perceived heat stress themselves. Vulnerability is taken into account through a supplementary query of socio-demographic data.

Especially in the case of spatial discrepancies between the results of urban climate modeling and the perceptions of those affected, the latter represents an essential addition to the previous technical analyses. Based on the comprehensive

Keywords: heat stress, participatory mapping, citizen science, public participation, gis

### References

Bissolli, P., Deutschländer, T., Imbery, F., Haeseler, S., Lefebvre, C., Blahak, J., Fleckenstein, R., Breyer, J., Rocek, M., Kreienkamp, F., Rösner, S. & Schreiber, K.-J. (2019). Hitzewelle Juli 2019 in Westeuropa - neuer Nationaler Rekord in Deutschland.

[https://www.dwd.de/DE/leistungen/besondereereignisse/temperatur/20190801\\_hitzerekord\\_juli2019.pdf?\\_\\_blob=publicationFile&v=2](https://www.dwd.de/DE/leistungen/besondereereignisse/temperatur/20190801_hitzerekord_juli2019.pdf?__blob=publicationFile&v=2)

DWD - Deutscher Wetterdienst. (2020). Monats- und Jahreszeitenbericht Deutschland: August 2020.  
[https://www.dwd.de/DE/leistungen/klimakartendeutschland/klimakartendeutschland\\_monatsbericht.html?nn=16102](https://www.dwd.de/DE/leistungen/klimakartendeutschland/klimakartendeutschland_monatsbericht.html?nn=16102)

IPCC - Intergovernmental Panel on Climate Change (Hg.). (2014). Climate Change 2014: Synthesis report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K Pachauri and L.A Meyer (eds.)]. Intergovernmental Panel on Climate Change.

Kunz-Plapp, T., Hackenbruch, J. & Schipper, J. W. (2016). Factors of subjective heat stress of urban citizens in contexts of everyday life. *Natural Hazards and Earth System Sciences*, 16(4), 977–994. <https://doi.org/10.5194/nhess-16-977-2016>

84697

## The digital dimension of inclusive planning. The readiness of European cities.

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The growing adoption of digital tools in the last decades opened up new opportunities for interaction between inhabitants and urban authorities and enabled the experimentation of methods and digital tools to support the engagement of societal actors in public decision making and planning. From Participatory planning GIS to Support Systems for Collaborative Decisions, from Deliberative Platforms to Voting Platforms, from collaborative mapping platforms to digital twins (Afzalan and Muller, 2018; Staffan et al., 2020; Revyakin, 2019), the range of opportunities offered by digital innovation is extensive and still very promising. However, the hybridization and digitization of the interactions between inhabitants and urban authorities does not seem to have yet addressed properly the lack of transparency and democracy (Toots, 2019), and it seems to have limited impact on public sector's organizational processes and approaches (Teli et al., 2017). Moreover, the experiments of online engagement don't seem to have yet incorporated methods and tools capable to strengthen the inclusion of the fragile and unskilled subjects of local societies (Spada et al., 2016).

To what extent is this only a technological issue? Do cities have the necessary availability to organizational and procedural transformations required or implied by the technological innovation of services? Are local authorities actually ready and capable of exploiting the innovative potential of the technology offer that they are constantly pushed to adopt?

Partial responses to these questions are offered by the analysis of data collected from more than 230 cities within the ESPON project DIGISER (DIGISER, 2021) that aims at mapping the digital maturity of urban public services across European cities. From data analysis, two crucial observations emerge that are relevant to our discussion. Firstly, due to a variety of existing administrative and financial constraints, most cities are still missing basic technological building blocks that should work as enablers of more advanced experiments of digital engagement. Secondly, most cities do not pursue the organizational transformations necessary to effectively exploit current technological potentials. The two observations are discussed in the paper through DIGISER data analytics with particular attention to the digital dimension of societal engagement and the related readiness of local authorities.

Keywords: Societal engagement, Digital innovation, Public services, DIGISER, ESPON

### References

Afzalan N., Muller B. (2018) Online Participatory Technologies: Opportunities and Challenges for Enriching Participatory Planning, *Journal of the American Planning Association*, 84:2, 162-

DIGISER (2020) Inception report [<https://www.espon.eu/DIGISER>].

Revyakin, S. A. (2019). Functionality of e-participation platforms: Why social networks? *Public Administration Issues*, 2019(3), 88–106. <https://vgmu.hse.ru/en/2019--3/308937098.html>

Spada, P, Mellon J, Peixoto T, and Sjoberg F.M. (2015) “Effects of the Internet on Participation: Study of a Public Policy Referendum in Brazil.” *World Bank Policy Research Working Paper*, no. 7204. [http://papers.ssrn.com/sol3/Papers.cfm?abstract\\_id=2571083](http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2571083).

Staffan A, Kahila-Tani M., Kytta M. (2020) Participatory urban planning in the digital era. In Stan Geertman and John Stillwell (Eds) *Handbook of Planning Support Science*, Online Elgar Publishing, 307-322.

Teli, M., C. Bassetti, P. Antoniadis, S. De Paoli, I. Apostol, M. Secchi, and G. Allegretti. “Participatory Design, Beyond the Local.” In *Proceedings of the 8th International Conference on Communities and Technologies*, 325–28. C&T ’17. New York, NY, USA: ACM, 2017. <https://doi.org/10.1145/3083671.3083715>.

Toots, M. (2019). Why E-participation systems fail: The case of Estonia’s Osale.ee. *Government Information Quarterly*, 36(3), 546–559. <https://doi.org/10.1016/j.giq.2019.02.002>

84255

## Mapping the Walk: A Scalable Computer Vision Approach for Generating Sidewalk Network Datasets from Aerial Imagery

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While cities around the world are increasingly promoting streets and public spaces that prioritize pedestrians over vehicles, significant data gaps have challenged pedestrian mapping, analysis and modeling. Most cities, even in data-rich industrialized economies, still lack information about the location, connectivity and quality of their sidewalks, making it difficult to implement research on pedestrian infrastructure and holding back the development of accurate, location-based Apps for pedestrians, wheelchair-users, street vendors and other sidewalk users. In this paper we examine current practices for collecting data on pedestrian facilities and present a state-of-the-art computer vision approach for generating such data. Using a machine learning technique for mapping sidewalk networks from sub-meter-resolution satellite images, we introduce a low cost, scalable and easy to implement data collection methodology for systematically assembling sidewalk network datasets, where orthorectified aerial imagery is available. We test the accuracy of the results compared to publicly available sidewalk networks in select cities and discuss the challenges and future directions for delivering topologically connected pedestrian network datasets globally. The work contributes to over-due efforts in creating equal data opportunities for non-motorized street users, particularly in cities which lack resources necessary to collect such data using more conventional methods.

**Keywords:** Sidewalk networks; pedestrian mapping; semantic segmentation; orthorectified imagery; open-source.

### References

Chin, G. K., Van Niel, K. P., Giles-Corti, B., & Knuiiman, M. (2008). Accessibility and connectivity in physical activity studies: The impact of missing pedestrian data. *Preventive medicine*, 46(1), 41-45.

Ellis, G., Hunter, R., Tully, M. A., Donnelly, M., Kelleher, L., & Kee, F. (2016). Connectivity and physical activity: using footpath networks to measure the walkability of built environments. *Environment and Planning B: Planning and Design*, 43(1), 130-151.

Hou, Q., & Ai, C. (2020). A network-level sidewalk inventory method using mobile LiDAR and

deep learning. *Transportation Research Part C: Emerging Technologies*, 119, 102772.  
<https://doi.org/https://doi.org/10.1016/j.trc.2020.102772>

Sun, C., Su, J., Ren, W., & Guan, Y. (2019). Wide-view sidewalk dataset based pedestrian tool for collecting sidewalk accessibility data at scale. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*.

84128

## Spatial parameters for urban renewal scenarios for Middle-Class Mass housing renewal and residential environments quality

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In this paper we present the preliminary development of a methodology for evaluating the quality of the environment of residential sites. We examine multiple indicators of the residential environment such as: walkability, security, energy consumption, open green spaces, surface runoff area and more, and provide a multi-index analysis of the quality of the residential area. The main goal of the indicators analysis is to compare between different urban renewal processes of middle-class mass housing.

Urban renewal is one of the main challenges of modern cities. Middle-class mass housing sites were usually built after the Second World War (around 50-70 years ago) and in many areas are the main building stock acquired for renewal. Middle-class mass housing sites are homogeneous, well defined in the urban spatial context, repetitive and in many cases include public amenities and public transportation.

One of the challenges of these renewal processes is to maintain and improve the residential environment qualities such as: walkability, open green spaces, public transportation, sun rights, and more. Along the existing qualities, the renewal process is an opportunity for improvement of the urban residential environment qualities. Upgrading the quality of the environment also relates to sustainable energy that can be obtained by improving energy consumption and implementing modern infrastructures.

In this paper we identified an existing middle-class mass housing site, in one neighborhood in the city of Hatzor HaGlilit, Israel, using morphometrics and a building-pattern-recognition tool, and analyzed the quality of the environment through three different urban scenarios. We provided a parameter-based analysis to compare the three urban scenarios, and provided a quantitative methodology to select the appropriate scenario that will maximize the residential environment quality of the urban renewal processes. The analysis results will indicate the level of performance for each aspect as indices for environmental quality.

Keywords: Middle-Class Mass housing, Building Pattern Recognition, Urban Renewal Process

### References

Carmona, M. (2019). Place value: Place quality and its impact on health, social, economic and environmental outcomes. *Journal of Urban Design*, 24(1), 1–48.

Jeffry, P., & Pounder, J. (2016). Chapter 5: Physical and environmental aspects. In P. Roberts, H. Sykes, & R. Granger (Eds.), *Urban regeneration* (pp. 87-98). SAGE.

Porat, I., & Shach-Pinsly, D. (2019). Building morphometric analysis as a tool for urban renewal:

Identifying post-Second World War mass public housing development potential. *Environment and Planning B: Urban Analytics and City Science*, 48(2), 248–264.  
<https://doi.org/10.1177/2399808319861977>

Shach-Pinsly, D., Bindreiter, S., Porat, I., Sussman, S., Forster, J., & Rinnerthaler, M., Multi parametric scenario analysis for urban renewal decision making processes, *Urban Planning*, 6(4), 172-188, 2021.

Shach-Pinsly, D., Digital urban regeneration and its impact on urban renewal processes and development, *Urban Planning*, 6(4), 135-138, 2021.

85168

## Are urban planners late to the game? A Literature Review on BIM, GIS, and Semantic Web Integration

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In times of growing urban complexities and increasing demand for urban sustainability solutions, planning studies, architecture, engineering and construction (AEC) as well as data and computer sciences more broadly have pinned hopes on information communication technology, big data, and artificial intelligence to allow for more credible, timely, and diversified evidence to support sustainable urban planning processes. Geographic Information Systems (GIS) have long been used to support urban planning. Since the emergence of Building Information Modelling (BIM) softwares and City Information Modelling (CIM) software, much research and technology development has been undertaken to integrate BIM and GIS systems. Much of the literature emerged in the field of Architecture, Engineering and Construction, with a delayed start of research on the opportunities of BIM for urban planning. Further, AEC study courses started early to integrate BIM in the syllabus while planning courses remain reluctant. More recently, semantic web technology has been employed by engineers and modellers to develop city digital twins. Are planners reluctant to fully adopt these technologies due to the dominant techno-centric mindset, or does the prevalence of poor interoperability and collaboration issue present a key challenge? We conducted a systematic literature review to first summarise the existing academic discourse on the integration of BIM-GIS applications for urban planning purposes. Second, the review expands on the ongoing discussion with a new perspective on the Semantic Web's capabilities for BIM-GIS integration. The review accentuates that most of the literature is based on theoretical proposals and frameworks with limited practical applications. They acknowledge the opportunities of BIM-GIS integration as a data and information source at multiple spatial scales for comprehensive building geometry and material information, and visualisation-based analysis to address city-scale problems and improve the efficiency and performance of infrastructure and construction projects. The Semantic Web is sparsely discussed despite its potential to overcome the interoperability issues in existing planning systems. Based on this in-depth review of more than 43 articles, and screening of more than 150 articles, the paper concludes with a call on planners to be more proactive in these discussions to improve the functionality of these new technologies for planning purposes.

Keywords: BIM-GIS integration, Semantic Web, ontology, digital twins, smart city, City Information Modelling

References

- Karimi, S., & Iordanova, I. (2021). Integration of BIM and GIS for construction automation, a systematic literature review (SLR) combining bibliometric and qualitative analysis. *Archives of Computational Methods in Engineering*, 1-22.
- Pauwels, P., Zhang, S., & Lee, Y. C. (2017). Semantic web technologies in AEC industry: A literature overview. *Automation in Construction*, 73, 145-165.
- Potts, R. (2020). Is a New 'Planning 3.0' Paradigm Emerging? Exploring the Relationship between Digital Technologies and Planning Theory and Practice. *Planning Theory & Practice*, 21(2), 272-289.
- Souza, L., & Bueno, C. (2022). City Information Modelling as a support decision tool for planning and management of cities: A systematic literature review and bibliometric analysis. *Building and Environment*, 108403.
- Stojanovski, T., Partanen, J., Samuels, I., Sanders, P., & Peters, C. (2020). City information modelling (cim) and digitizing urban design practices. *Built Environment*, 46(4), 637–646.
- von Richthofen, A., Herthogs, P., Kraft, M., & Cairns, S. (2022). Semantic City Planning Systems (SCPS): A Literature Review. *Journal of Planning Literature*.
- W3C. (2009). W3c semantic web frequently asked questions. Retrieved from <https://www.w3.org/RDF/FAQ>

85262

## From information to collaboration: Open Data as a Basis for Smart Governance?

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In the last decade, Korea is well known for technical innovations and the rapid implementation of the Vision of Smart City. Korea is a significant example of how smart city policy has evolved over time, demonstrating that smart city policy is changing dynamically. Most of the early stages of developing smart cities in Korea focused on the top-down oriented adoption of technologies to solve the urban challenges and improve the urban infrastructures and services. Beyond the technological dimension, it has also shown that the autonomous participation and collaboration of civil actors foster more sustainability and resilience in urban planning in the long run. Subsequently promoting Smart governance has become one of the significant strategies for many cities and planning authorities.

Since 2013, with announcing ‘government 3.0’ associated with the use of ICT, the Korean government has promoted public open data by enacting an open data policy (Act-On Promotion Of The Provision And Use Of Public Data). This policy aimed at “open government” to generate more transparency in administration and economic value creation through the private use of public open data, as well as strengthening collaboration with various civil society actors, technology providers, businesses, and local governments.

This paper provides a better understanding of how public open data is envisioned in policy and planning in the Korean context, particularly in response to different phases of evolving smart city policies. Furthermore, it shows which goals, values, and assumptions are communicated from the public administration perspective regarding open data platforms to enhance innovation and participation of the various social actors. In order to analyze the open data cases, a discourse analysis was conducted based on prominent public websites and websites related to open data, as well as official public documents, forums, and social media. These cases highlight the unique character of Korean open data platforms such as “Seoul open data plaza” and the national “open data portal”. In addition, based on the three periods distinguished in the Korean smart city policy, it demonstrates how the distinctive definition of “openness” of Korean open data has changed over time. The results show that the Korean open data platform has made remarkable progress in a short period of time and has become a clear foothold over the past few years as a fundamental infrastructure that encourages citizen and private participation. However, the use cases of open data reveal that there is a discrepancy between actual utilization of open data by citizens and the private sector and the values expectations pursued by open data and smart governance policies. Consequently, this work addresses the limitations and obstacles to the current use of open data in Korea and the potential for future development.

Keywords: Smart City, Smart Governance, Public Open Data, Open Government, Information and Communication Technology, Citizen Participation

#### References

KRIHS (2018), A Study on Strategic Response to Smart City Types, Korean Research Institute for Human Settlements.

Kwak, Y. H. & Lee, J. (2020). Evolution of Korean Smart City Programs: Challenges and Opportunities. In 2020 IEEE Technology & Engineering Management Conference (TEMSCON) (S. 1–5). IEEE.

Lee, J. and J. Chang (2019), The Evolution of Smart City Policy in Korea.

OECD. (2018). Smart Cities and Inclusive Growth, OECD Publishing.

Meijer, A. & Bolívar, M. P. R. (2016). Governing the smart city: a review of the literature on smart urban governance. *International Review of Administrative Sciences*, 82(2), 392–408.

<https://doi.org/10.1177/0020852314564308>

84520

## Opportunities for inclusive planning with digital innovations during and after the pandemic: The case of a revitalization project in Dortmund, Germany

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The Covid-19 pandemic has brought about undesirable changes to society but, at the same time, it has given opportunities for urban scholars and practitioners to rethink the way cities are planned. The purpose of the research is to analyze a participation process during the pandemic and to highlight room for improvement of participation with a special focus on digital methods, tools and formats. A scientific literature analysis on (digital) participation in planning and its models (Arnstein 1996, Bauer 2014, Selle 1996, Hasler, Chenal & Soutter 2017) and a document analysis of material referring to the case study serve as a basis for this research. Furthermore, multiple sources of data and research methods (i.e., stakeholder analysis, , survey, expert interview and problem-centric interview) are used in order to answer to the research questions: 1) How does the existing participation concept look like; 2) How is the public participation concept and process affected by the pandemic and; 3) How can the existing participation concept be improved and inclusivity fostered with the help of innovative and digital methods? A redevelopment project on a former urban industrial area in Dortmund, Germany, called Smart Rhino, is selected as a case study. The planned public participation was hit by the pandemic and the existing participation concept has proven to be inappropriate. The findings suggest that the pandemic has had a significant impact both on the participation and planning process as a whole. Based on the results, the research discusses opportunities of the participation for the chosen case and in general with a particular focus on digitalization and inclusivity.

Keywords: Participation, digitalization, inclusion, revitalization, pandemic

### References

Arnstein, S. R. (1969). A Ladder Of Citizen Participation. *Journal of the American Institute of Planners*, 35(4), 216–224.

Bauer, H. (2014). Die Beteiligungspyramide als Instrument des Bürgerengagements. *Ökologisches Wirtschaften - Fachzeitschrift*, 29(1), 28.

Hasler, S., Chenal, J., & Soutter, M. (2017). Digital Tools as a Means to Foster Inclusive, Data-informed Urban Planning. *Civil Engineering and Architecture*, 5(6), 230–239.

Selle, K. (Ed.). (1996). *Planung und Kommunikation: Gestaltung von Planungsprozessen in Quartier, Stadt und Landschaft; Grundlagen, Methoden, Praxiserfahrungen*. Bauverl.

84575

## Conceptualizing digital/technological and data sovereignty of local governments within the European context

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Digitalization in local governments or put differently “smart cities” are nothing new. Simultaneously with their emergence, strands of critical scientific literature on smart cities and their perils evolved such as neoliberalism, injustices, problems with data ethics and privacy, commodification and social control evolved (Hollands 2008, Coletta et al., 2018). In contrast to this dystopian outlook for digital futures, the trend of local governments striving for digital sovereignty originated in Barcelona and entered the scientific discourse on digital futures of local governments. The emerging research field on digital/technological or data sovereignty outlines non-normative pathways or opportunities towards a more inclusive, bottom-up oriented and democratic digital urban future, where technological infrastructure and data use is implemented, managed and controlled by citizens, thus focusing on their needs and aspirations opposing the neoliberal smart city (Lynch 2020, Calzada 2021). Thus, this contribution aims to conceptualize the trend of digital/technological or data sovereignty and what it means in a European context, beyond the example of Barcelona and unfold its different dimensions, by illuminating it from a policy-, governance- and research perspective, focused on but not limited to the local government level.

Guiding research questions are:

How can digital/technological and data sovereignty be conceptualized? What are the implications of digital sovereignty on different dimensions of digital urban futures such as policy, design of technology and civil society? An extensive scientific literature review builds a foundation for the conceptualization of the phenomenon. Based on these results, various experts on the topic will be interviewed with the help of the Delphi method (Häder 2014).

Keywords: digital sovereignty, data sovereignty, Delphi-analysis

### References

Calzada, I. (2021). Data Co-Operatives through Data Sovereignty. *Smart Cities*, 4(3), 1158–1172.

Coletta, C., Evans, L., Heaphy, L., & Kitchin, R. (2018). *Creating Smart Cities*. Routledge.

Häder, M. (2014). *Delphi-Befragungen: Ein Arbeitsbuch* (3. Aufl. 2014). Springer eBook Collection. Springer VS.

Hollands, R. G. (2008). Will the real smart city please stand up? *City*, 12(3), 303–320.

Lynch, C. R. (2020). Contesting Digital Futures: Urban Politics, Alternative Economies, and the Movement for Technological Sovereignty in Barcelona. *Antipode*, 52(3), 660–680.

84291

## Study on Spatial Differentiation of Tourism Efficiency of Urban Heritage Trail and The Influencing Factors – A Case Study of the Daming Lake Trail in Jinan, China

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Heritage trails are the tourist routes originating from a series of heritages with specific themes in historical areas, which can balance between heritage protection and tourism development within a certain area of heritage. At present, the planning and route selection of heritage trails are the major concerns of the most existing studies, while the feedback of tourism efficiency are largely ignored after the completion of heritage trail construction. The planned resource allocation of heritage trails will objectively affect its use efficiency, which will result in certain spatial differentiation. Analysis of spatial differences in the efficiency of heritage trails will be helpful to support decision-making for rational investment of heritage trails.

The trail around the Daming Lake in Jinan connects many natural spring landscapes and historical sites, forming a most dynamic and open tourist space in the city. The trail is about 5 kilometers long. It is found with investigation that different sections of the trail show different efficiencies due to the various surrounding land status, heritage types, heritage densities and heritage values. Therefore, it is of great significance to explore the reasons for its spatial differentiation in order to improve the overall efficiency of heritage trail. In this paper, the trail around the Daming Lake is taken as the case for study, DEA (Data Envelopment Analysis) model is used to analyze the tourism efficiency of historical heritages along the trail, and ArcGIS spatial analysis method is also adopted to explore the spatial differentiation of allocation efficiency of different heritage resources, and to summarize the way to maximize the transforming efficiency from heritage resources into tourist resources. This study is about two issues: (1) Spatial differentiation of tourism efficiency of the trail around the Daming Lake in Jinan. (2) Major influencing factors for spatial differentiation.

It is indicated that the tourism efficiency of the trail around the Daming Lake is rather low at the overall level, where the areas with high tourism efficiency are located in the northern area of the Lake, and the low value area is the concentrated area of the Citizen Square in the south. Generally speaking, the scale investment of heritages plays a supporting role in improving the comprehensive tourism efficiency; The contribution from the historical value of heritages is mostly less than that from scale investment. In addition, the contributions from the historical value of certain heritages are relatively low, which indicates that even these heritages are developed with quite investment, such investment has not been effectively transformed into tourism output. The historical value of heritages has become a limiting factor hindering the comprehensive tourism efficiency, resulting in the spatial differentiation pattern of tourism efficiency among heritages around the Daming Lake.

Keywords: heritage trail; DEA; tourism efficiency; influencing factors; spatial differentiation

#### References

Boyd, Stephen W. (2017): Editorial: heritage trails and tourism. In *Journal of Heritage Tourism* 12 (5), pp. 417–422. DOI: 10.1080/1743873X.2016.1265972.

Al-hagla, Khalid S. (2010): Sustainable urban development in historical areas using the tourist trail approach: A case study of the Cultural Heritage and Urban Development (CHUD) project in Saida, Lebanon. In *Cities* 27 (4), pp. 234–248. DOI: 10.1016/j.cities.2010.02.001.

Martín, Juan Carlos; Mendoza, Cira; Román, Concepción (2017): A DEA Travel–Tourism Competitiveness Index. In *Soc Indic Res* 130 (3), pp. 937–957. DOI: 10.1007/s11205-015-1211-3.

Cook, Wade D.; Seiford, Larry M. (2009): Data envelopment analysis (DEA) – Thirty years on. In *European Journal of Operational Research* 192 (1), pp. 1–17. DOI: 10.1016/j.ejor.2008.01.032.

Emrouznejad, Ali; Yang, Guo-liang (2018): A survey and analysis of the first 40 years of scholarly literature in DEA: 1978–2016. In *Socio-Economic Planning Sciences* 61, pp. 4–8. DOI: 10.1016/j.seps.2017.01.008.

Liu, Jia; Zhang, Junfei; Fu, Zhengben (2017): Tourism eco-efficiency of Chinese coastal cities – Analysis based on the DEA-Tobit model. In *Ocean & Coastal Management* 148, pp. 164–170. DOI: 10.1016/j.ocecoaman.2017.08.003.

## TRACK 7: MOBILITIES

83957

### The Geography of diffusion and emerging travel behaviour impacts of digital platform/app-based mobility solutions in Africa

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Over the last few years, digital platform or app-based mobility service providers have expanded into several African countries with unfolding disruptive consequences. This paper explores the geography of the diffusion of these new and emerging mobility services in Africa and their implications for sustainable transport and mobility. The paper presents an inventory of and maps known app-based mobility services in Africa, to reveal, for the first time, the distribution of these ICT-mediated mobility solutions across the continent, and their key drivers. Drawing on a large sample survey, the paper provides empirical insights into the emerging travel behaviour and societal impacts by addressing the following key questions: a) who are the users (and non-users) of app-based ride-hailing and the reasons for doing so? (b) what are the associated travel behaviour impacts, in terms of mode substitution and ride-hailing trip characteristics? (c) What are the safety and security impacts from the perspective of passengers? Finally, the paper reflects on the implications of digital platform/app-based mobility services for creating sustainable transport and mobility futures in urban Africa.

Keywords: app-based mobility; digital platforms; travel behaviour; urban mobility; mobility futures; Africa

#### References

Acheampong, R. A. (2021). Societal impacts of smart, digital platform mobility services—an empirical study and policy implications of passenger safety and security in ride-hailing. *Case Studies on Transport Policy*, 9(1), 302-314.

Acheampong, R. A., Siiba, A., Okyere, D. K., & Tuffour, J. P. (2020). Mobility-on-demand: An empirical study of internet-based ride-hailing adoption factors, travel characteristics and mode substitution effects. *Transportation Research Part C: Emerging Technologies*, 115, 102638.

Palm, M., Farber, S., Shalaby, A., & Young, M. (2021). Equity Analysis and New Mobility Technologies: Toward Meaningful Interventions. *Journal of Planning Literature*, 36(1), 31-45.

Lucas, K. (2019). A new evolution for transport-related social exclusion research?. *Journal of transport geography*, 81, 102529.

Sietchiping, R., Permezel, M. J., & Ngomsi, C. (2012). Transport and mobility in sub-Saharan

African cities: An overview of practices, lessons and options for improvements. *Cities*, 29(3), 183-189.

85337

## Justice of cycling infrastructure provision in Egypt

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Egypt has seen in the last decade, like many countries around the world, a rise in the number of projects that serve cycling. The projects are conducted by different actors, and motivated by environmental, economic, social, or mobility grounds. However, most of these infrastructure projects have made a very little observed impact on bringing better conditions for cycling in the city.

The research shows how these projects have failed to meet the needs of many current and potential bicycle users, due to aspects of injustice in the project processes and outcomes. It uses a framework of distributional, recognition, participation and capability justice, to analyze project reports, expert and user interviews, as well as bicycle counts and observations.

The research outcomes show how the distribution of projects have favored wealthy low-density neighborhoods. Implementation of projects included compromises on the safety of bicycle users for providing space for car users. Projects also targeted specific segments of bike users for choice, much of whom cycle for leisure. Participation is also limited to organized cycling groups, which marginalizes much of bicycle users for utility. Moreover, much of the projects are designed without taking into consideration the needs of users for a connected network, or suitable density and landuse mix, not delivering the accessibility that is essential for the social good outcomes of cycling infrastructure. To measure the effect of projects, bike counts were conducted in project locations, as well as similar locations for comparison, highlighting the connection between the injustice aspects and bike use.

Keywords: Cycling, capability, justice, recognition

### References

Martens, K., Piatkowski, D., Krizek, K.J. & Luckey, K. 2016, "Advancing discussions of cycling interventions based on social justice" in *Bicycle Justice and Urban Transformation* Routledge, , pp. 86-99.

Low, S. & Iveson, K. 2016, "Propositions for more just urban public spaces", *City*, vol. 20, no. 1, pp. 10-31.

Golub, A., Hoffmann, M.L., Lugo, A.E. & Sandoval, G.F. 2016, "Introduction: creating an inclusionary bicycle justice movement" in *Bicycle Justice and Urban Transformation* Routledge, , pp. 1-19.

Bhat, C., Handy, S., Kockelman, K., Mahmassani, H., Chen, Q., Weston, L., & University of Texas at Austin. Center for Transportation Research. (2000, May 1). *Development of an Urban Accessibility Index: Literature Review* (Report No. TX-01/7-4938-1). University of Texas at

Austin. Center for Transportation Research. <https://rosap.ntl.bts.gov/view/dot/14882>

83873

## Challenges and Opportunities of Off-Site Vehicle Miles Traveled Mitigation in California

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Historically, the State of California assessed the environmental impacts of proposed developments based on how it was projected to affect an area's level of service (LOS). However, as LOS focused on traffic delays, many agencies simply widened roads, which was an ineffective way to reduce greenhouse gas emissions (GHGs). With the passage of Senate Bill (SB)743 in 2013, LOS was replaced by Vehicle Miles Traveled (VMT) as a more appropriate metric by which to gauge the environmental impacts of proposed development. Additionally, SB 743 presented an opportunity for off-site VMT mitigation strategies through banking and exchanges—allowing multiple development projects to fund a variety of strategies to reduce VMT elsewhere in the city or region. While the shift from LOS to VMT has generally been lauded, concerns remain about how to apply SB 743 effectively and equitably. This study aimed to: 1) understand how local governments are addressing this shift toward VMT while ensuring equity, including its approaches to off-site VMT mitigation; and 2) evaluate the various built environment factors that impact VMT, which should be considered by local governments, using both qualitative and quantitative research designs. The study posited that both micro and macro level aspects of the built environment needed to be considered when evaluating the impacts of proposed development on VMT, not only to ensure higher accuracy VMT models, but also because of the potential equity implications of off-site mitigation measures. Using multiple linear regression, the study shows that macroscale built environment features such as land use, density, housing, and employment access have a statistically significant impact on reducing VMT (35%), along with transit access (15%), microscale features such as sidewalks, benches, and trees (13%), and income (6%). More notably, a four-way interaction was detected, indicating that VMT is dependent on the combination of macro and micro level built environment features, public transit access, and income. Additionally, qualitative interviews indicate that transportation practitioners deal with three types of challenges in the transition to VMT impact mitigation: the lack of reliable, standardized VMT measure and evaluation tools; the lack of a strong legal foundation for VMT as a component of the California Environmental Quality Act (CEQA); and the challenge of distributing off-site VMT mitigation equitably. Overall, findings support a nuanced, multi-factor understanding of the context in which new developments are being proposed, both in terms of modeling VMT, but also when considering whether offsite mitigation would be appropriate. The results of this study can help California ensure equitable VMT mitigation that better aligns with the state's climate goals.

Keywords: Greenhouse gas emissions, microscale built environment, equity, vehicle miles traveled, California Environmental Quality Act, VMT impact of development

## References

Ameli, S. Hassan, Shima Hamidi, Andrea Garfinkel-Castro, and Reid Ewing. "Do better urban design qualities lead to more walking in Salt Lake City, Utah?" *Journal of Urban Design* 20, no. 3 (2015): 393-410.

Barbour, Elisa, Daniel Chatman, Sarah Doggett, Stella Yip, and Manuel Santana. "SB 743 Implementation: Challenges and opportunities." UC Berkeley: Institute of Transportation Studies at UC Berkeley. June 1, 2019. <https://escholarship.org/uc/item/4gj3n2n3>

Elkind, Ethan, Ted Lamm, and Eric Prather. "Implementing SB 743: An Analysis of Vehicle Miles Traveled Banking and Exchange Frameworks." University of California Center for Economic Competitiveness in Transportation. June 2019. doi:10.7922/G2S180Q7

Ewing, Reid and Shima Hamidi. "Measuring Urban Sprawl and Validation Sprawl Measures," Metropolitan Research Center. January 2010.  
[https://www.researchgate.net/publication/265164422\\_Measuring\\_Urban\\_Sprawl\\_and\\_Validating\\_Sprawl\\_Measures-Draft](https://www.researchgate.net/publication/265164422_Measuring_Urban_Sprawl_and_Validating_Sprawl_Measures-Draft)

Humberto, Mateus, Rodrigo Laboissière, Mariana Giannotti, Cláudio Marte, Daniel Cruz, and Henrique Primon. "Walking and walkability: Do built environment measures correspond with pedestrian activity?" *Ambiente Construído* 19, no. 4 (2019): 23-36.

Koschinsky, Julia, Emily Talen, Mariela Alfonzo, and Sungduck Lee. "How walkable is Walker's paradise?" *Environment and Planning B: Urban Analytics and City Science* 44, no. 2 (2017): 343-363.

85128

## A right or a burden: On the dubious joys of motorized mobility

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This paper explores the concept of mobility as a right and its policy implications, building upon the results of a Horizon 2020 demonstration project conducted in Madrid, Munich, Ruse, Stockholm and Turku from 2016 to 2020. It reviews the historical evolution of this discussion and identifies the main controversies, reviewing three perspectives: mobility as an individual right; mobility as a collective right, and mobility as an enabler to facilitate the practical agency of individual or collective rights. The emergence of new mobility concepts (notably the development of the platform economy and the growing studies on mobility-as-a-service schemes) have resulted in a redefinition of the playing field. The aggressive marketing and quick expansion of these concepts in urban mobility studies have raised new questions in what used to be a mature discussion, raising new questions on the synergies and conflicts of mobility not only with the traditional human rights (to the environment, health, housing...) but also to the wider Levebvrian concept of the right to the city. This discussion can be clarified by reviewing the different sources of the renewed interest in mobility as a right and their contradictions: discussions on distributive justice in transport (i.e. accessibility as a good), modal choice and mobility restrictions (street space reallocation), new economic opportunities and business models associated to ICTs, and the growing pressure to decarbonize the transport sector. As a first approach, the discussion is restricted to relatively affluent, highly mobility societies, as those in European cities.

A review of various claims for mobility rights shows how relevant the various approaches can be to set policy objectives and allocate resources. As the public choice theory states, these are likely to become part of the bargaining among politicians, bureaucrats and economic and social stakeholders to push forward their own agendas. This discussion suggests that the consideration of mobility as a right brings more problems that in can solve to planners and decision makers. Mobility can be better understood as an “enabler” to facilitate the practical deployment of second generation rights, as physical access is certainly a necessary precondition to make use of education, health services or convenient housing and would better be developed in connection with broader strategies for strengthening these rights.

This theoretical discussion is complemented with the review of the results of the ECCENTRIC project. The project implemented innovative mobility solutions in socially-distressed peripheral neighbourhoods in five European cities. The review includes the definition of the project’s objectives and their relationship with second-generation rights and the acceptance and assessment of the results obtained by the various social groups involved in the project (politicians, bureaucracies, professionals, beneficiaries, residents, the general public).

Keywords: Mobility as a right; mobility justice; mobility equity; social exclusion; public participation

References

- Aparicio, Á. (2020). Streamlining the implementation process of urban mobility innovations: Lessons from the ECCENTRIC project in Madrid. *Transport Policy* 98, 160-169.
- Buchanan, J. (2003). "Public Choice: The Origins and Development of a Research Program," Center for Study of Public Choice at George Mason University, Fairfax: Virginia, USA.
- Martens, K. (2016). *Transport Justice: Designing fair transportation systems*. New York and London: Routledge.
- Marsden, G., Reardon, L. (Eds.) (2018). *Governance of the Smart Mobility Transition*. Emerald Publishing.

84899

## Urban design, time perception and walking - can the study of pedestrians' time perception benefit the design of a walkable urban environment?

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Walking in urban public spaces is a multi-sensory and bodily experience. To improve the attractiveness of urban environments and encourage more people to walk, urban design and architecture must be considered for their aesthetic and poetic potential for enhancing the sensory experiences and the creation of meaning in public space. Diverse and aesthetic urban environments have the potential to draw attention, curiosity and create arousal and surprise. In contrast, a monotonous and unstimulating environment can trigger negative emotions and experiences. In both cases, multi-sensory experiences can impact people's emotions, and prospective and retrospective time perception. The topic of time perception is a complex body of research and is addressed within the fields of neuroscience, cognitive studies, psychology, and philosophy. It is known from neuroscience research that time perception is related to the dopaminergic system, more specifically to the release of striatal dopamine (Fung et al., 2021). Dopamine release has been associated with a range of different emotions, such as surprise (Antony et al., 2021) or arousal (Gable and Poole, 2012). Several studies have shown that retrospective time perception depends on environmental factors, their effects on pedestrians' emotions, thus influencing the overall walking experience (Block et al., 2010; Hassan and Elkhateeb, 2021; Isaacs, 2001). Therefore, the study of pedestrians' time perception has the potential to identify relevant factors of the built environment that significantly influence the walking experience. This can further support the urban and architectural design of cities towards creating a stimulating and attractive environment for walking. The purpose of this study is to critically review existing research on pedestrians' perception of time in urban environments. The expected results of the critical review reveal a research gap in the study of time perception and walking, particularly in the application of physiological and neuroscience methods. In addition, it is anticipated that there will be a greater body of research examining time perception in green spaces and nature, distance judgment, and studies examining emotional experiences in urban spaces. The literature review provides the basis for empirical studies of pedestrians' emotions and time perception that aim to combine insights from urban planning and architecture with research and methods from environmental psychology, physiology, and neuroscience.

Keywords: evidence-based design, time perception, walking, emotions, environmental psychology

### References

Antony, J.W., Hartshorne, T.H., Pomeroy, K., Gureckis, T.M., Hasson, U., McDougle, S.D., Norman, K.A., 2021. Behavioral, Physiological, and Neural Signatures of Surprise during Naturalistic Sports Viewing. *Neuron* 109, 377-390.e7.

<https://doi.org/10.1016/j.neuron.2020.10.029>

Block, R.A., Hancock, P.A., Zakay, D., 2010. How cognitive load affects duration judgments: A meta-analytic review. *Acta Psychologica* 134, 330–343.

<https://doi.org/10.1016/j.actpsy.2010.03.006>

Fung, B.J., Sutlief, E., Hussain Shuler, M.G., 2021. Dopamine and the interdependency of time perception and reward. *Neuroscience & Biobehavioral Reviews* 125, 380–391.

<https://doi.org/10.1016/j.neubiorev.2021.02.030>

Gable, P.A., Poole, B.D., 2012. Time flies when you're having approach-motivated fun: effects of motivational intensity on time perception. *Psychol Sci* 23, 879–886.

<https://doi.org/10.1177/0956797611435817>

Hassan, D.K., Elkhateeb, A., 2021. Walking experience: Exploring the trilateral interrelation of walkability, temporal perception, and urban ambiance. *Frontiers of Architectural Research* 10, 516–539. <https://doi.org/10.1016/j.foar.2021.02.004>

Isaacs, R., 2001. The Subjective Duration of Time in the Experience of Urban Places. *Journal of Urban Design* 6, 109–127. <https://doi.org/10.1080/13574800120057809>

84059

## Introducing a serious game in a mobility model as a tool for achieve a behaviour change towards low-carbon sharing modes

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Nowadays, the urban sustainable mobility solutions are ever more required key issues in National and International Programmes due to the increased awareness of climate change. Therefore, an ever more increasing number of cities are testing new urban models, which influence various factors such as the aesthetics, resilience, sustainability of cities and the quality of urban life. However, in the near future, the innovative mobility models introduced by cities are liable to fail, if not properly planned. Initiatives aimed at increasing the awareness of citizens, and promoting their behavioural change are ones of the key factors for the project successful outcome.

Firstly, this paper aims to understand the advantages connected to electric mobility and identifies the tools with which the public administrations can reasonably implement the mobility sharing network.

Secondly, this paper explores the potential of gamification mechanisms to incentivize the use of L-category vehicles (L-Vs) which can lead to a future of mobility that could vary significantly from today's systems since travel time is expected to decrease, fuel consumption reduced and less time needed to find a parking space in the city centre.

Finally, the paper presents a serious game concept, developed within the ELVITEN EU Project, built on a set of location-based quizzes (with multimedia elements). Users will have to explore the city in order to discover the “special” places in a sort of treasure hunt that may help to discover “hidden gems” and beautiful places in the city, by using their electric light vehicles.

The main contribution of the paper is to use in an urban mobility model a serious game as a key factor to reach a sustainable land use, increase the liveability of the citizens, and promote mobility as service for both residents and tourists.

Keywords: Mobility model, Serious Game, behaviour change, low-carbon sharing modes

### References

B. Silvestri, A. Rinaldi, A. Berardi, M. Roccotelli, S. Acquaviva and M. P. Fanti, A Serious Game Approach for the Electro-Mobility Sector, IEEE International Conference on Systems, Man and Cybernetics (SMC), 2019.

A. König, J. Grippenkoven, J. Wegener, A. Pelz, Serious Games: A playful approach to reduce usage barriers of innovative public transport systems, Proceedings of the European Transport Conference At: Barcelona, Spain, 2017.

R. Kazhamiakin, A. Marconi, M. Perillo, M. Pistore, G. Valetto, L. Piras, F. Avesani, N. Perri, Using Gamification to Incentivize Sustainable Urban Mobility, Proceedings of the 1st IEEE International Smart Cities Conference At: Guadalajara, Mexico, 2015.

K. Katsaliaki, N. Mustafee, A Survey Of Serious Games On Sustainable Development, Proceedings of the 2012 Winter Simulation Conference, 2012.

84811

## Understanding daily activity-travel sequences of Londoners

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A daily activity-travel sequence is an individual's activity during a day, illustrating function, purpose, trip mode, and location in each time interval. Understanding the daily time-use profile of travellers can reveal the travel demand of individuals/households, uncover the travel behaviours of different population groups, support activity-based models, and guide transport market segmentation. The focus of this paper is to learn the daily activity-travel patterns of Londoners. We analyse the London Travel Demand Survey data from 2015 to 2019. A fuzzy clustering method and multiple sequence alignment method are applied to group two-channel activity-travel sequences and find representative travel patterns. We identify the association between social-demographic characteristics and daily activity-travel sequences, using descriptive analysis and Dirichlet regression models. We found that 11 typical clusters on weekdays, which are 1) Outer London stay-at-homes, 2) Inner London stay-at-homes, 3) Mixed place 8-18 workers, 4) Outer London afternoon recreation, 5) Outer London students, 6) Mixed place 9-17 workers, 7) Inner London 9-18 workers, 8) Inner London students, 9) Outer London 8-17 workers, 10) Inner London 9-17 workers, and 11) External London mixed activities. Additionally, the early impact of the COVID-19 is analysed. During the early stage of the pandemic (before the lockdown restrictions), the complexity of activities and travel reduced, with less time spent in education, work, recreation, and personal business. More people used private transport and cycling on weekdays. Representative sequences are similar to the pre-COVID clusters but with a smaller uncertain group. The findings can increase the understanding of complex travel-activity patterns, assist emergent pandemic control, and guide policymaking in the case study.

**Keywords:** daily activity-travel sequences, representative activity-travel sequence, pattern clustering, London travel patterns, COVID-19

### References

- Allahviranloo M, Regue R and Recker W (2017) Modeling the activity profiles of a population. *Transportmetrica B-Transport Dynamics* 5(4): 426-449.
- Chen Y and Silva EA (2021) Smart transport: A comparative analysis using the most used indicators in the literature juxtaposed with interventions in English metropolitan areas. *Transportation Research Interdisciplinary Perspectives* 10: 100371.
- Hafezi MH, Liu L and Millward H (2019) A time-use activity-pattern recognition model for activity-based travel demand modeling. *Transportation* 46(4): 1369-1394.
- Song Y, Ren SY, Wolfson J, et al. (2021) Visualizing, clustering, and characterizing activity-trip sequences via weighted sequence alignment and functional data analysis. *Transportation Research Part C-Emerging Technologies* 126.
- Studer M (2018) Divisive property-based and fuzzy clustering for sequence analysis. *Sequence analysis and related approaches*. Springer, Cham, pp.223-239.

85354

## Revisiting transit ridership: Understanding the relationship between different measures of local transit accessibility and the use of transit by different groups of users.

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To address many social concerns and economic goals beyond moving people, cities around the world are trying to find new ways to increase transit ridership by attracting new users while retaining existing ones. Traditionally, researchers used aggregate data from transit agencies to understand the impacts of several build environment, socioeconomic, contextual, and transit service-related factors on total ridership, without distinguishing these factors impacts on different groups of users. Similarly, other researchers investigated the relationship between accessibility to transit measures and aggregate transit ridership levels. Therefore, the aim of this study is to provide an empirical investigation of factors affecting variations in transit ridership of different segments of users, while evaluating the relationship between several measures of local accessibility to transit and the use of transit by different groups of users. The evaluated transit accessibility measures ranged from basic stop count to gravity-based measures that use distance decay functions from a local household survey. Using data extracted from Saskatoon Transit's Farebox system, several segments of users are defined based on their travel patterns such as frequent, infrequent, and one-time users. In addition to using descriptive statistics, several types of models will be tested to control the impacts of local transit accessibility measures on ridership estimates, while considering equity issues. The used models will include ordinary least square models (OLS), spatial lag models (SLM), and spatial error models (SEM). The results from the study will suggest how planners can predict actual public transit ridership more closely by highlighting which local transit accessibility measure represents best a specific group of users' behaviour. In other words, this study offers planners and practitioners a better understanding of the performance of different transit local accessibility measures in relationship to transit ridership of different groups of users, helping cities in achieving their broader sustainability and equity goals.

Keywords: Ridership, Farebox data, Frequent users, Infrequent users, Transit accessibility

### References

Berrebi, S., Joshi, S., & Watkins, K. (2021). On bus ridership and frequency. *Transportation Research Part A: Policy and Practice*, 148, 140-154. doi:<https://doi.org/10.1016/j.tra.2021.03.005>

Chakour, V., & Eluru, N. (2016). Examining the influence of stop level infrastructure and built environment on bus ridership in Montreal. *Journal of Transport Geography*, 51, 205-217. doi:<https://doi.org/10.1016/j.jtrangeo.2016.01.007>

Diab, E., DeWeese, J., Chaloux, N., & El-Geneidy, A. (2021). Adjusting the service?

Understanding the factors affecting bus ridership over time at the route level in Montréal, Canada. *Transportation*, 48(5), 2765-2786. doi:10.1007/s11116-020-10147-3

Diab, E., Kasraian, D., Miller, E., & Shalaby, A. (2020). The rise and fall of transit ridership across Canada: Understanding the determinants. *Transport Policy*, 96, 101-112. doi:<https://doi.org/10.1016/j.tranpol.2020.07.002>

Erhardt, G., Mucci, R., Cooper, D., Sana, B., Chen, M., & Castiglione, J. (2021). Do transportation network companies increase or decrease transit ridership? Empirical evidence from San Francisco. *Transportation*. doi:10.1007/s11116-021-10178-4

85245

## Observations of social (un)learning around e-scooter emergence: Case Helsinki

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The emergence of shared micromobility in recent years has caused enormous changes in the city landscape and people's daily activity-space. E-scooters as an emerging transport mode are being embedded into society by offering a fast and pleasant travel experience, especially for first- and last-mile legs, while being relatively affordable (Fitt & Curl, 2020; Bieliński & Ważna, 2020). Rapidly evolving literature focuses on various topics, such as trip purpose (Buehler, et al., 2021), mode substitution (Guo & Zhang, 2021), safety (Haworth & Schramm, 2019), injuries caused by e-scooters (Mukhtar, et al., 2021), using public shared space (Gibson, et al., 2021). These studies mostly focused on trip data, questionnaires, or surveys with limited information about users' behavior, intention toward using e-scooters. Studies with a deeper conceptualization of everyday mobility and unpacking of social practices are still rare (Fitt & Curl, 2020). In order to conduct a deeper analysis of users' behavior, there is a need to understand different users' profiles (Dibaj, et al., 2021). This research is based on an in-depth observational study in several different locations in Helsinki, Finland, aiming to deepen the understanding of the social learning process of e-scooter usage in different streetscape configurations. The results indicated that the major demography of users are young males, although there are also some other user types. Flock riding (e.g., two or more people riding along with each other in a group) is a common behavior among e-scooter users. Furthermore, there is a considerable proportion of food delivery people using e-scooters who have specific behavioral features related to high competence levels. Multiple users using one e-scooter and not keeping a safe distance from other road users are some examples of conflicting cases, leading to specific situations in the negotiation of shared space. Conclusions provide lessons for basic infrastructural challenges even in a city with heavy investments in cycling infrastructure, as well as specific features of the local mobility culture.

Keywords: e-scooter; shared space; conflicts; user profile; flock riding; social learning

### References

- Bieliński, T. & Ważna, A., 2020. Electric scooter sharing and bike sharing user behaviour and characteristics. *Sustainability*, 12(20), p. 9640.
- Buehler, R. et al., 2021. Changes in Travel Behavior, Attitudes, and Preferences among E-Scooter Riders and Nonriders: First Look at Results from Pre and Post E-Scooter System Launch Surveys at Virginia Tech. *Transportation Research Record*, p. 03611981211002213.
- Dibaj, S., Hosseinzadeh, A., Mladenović, M. N. & Kluger, R., 2021. Where Have Shared E-Scooters Taken Us So Far? A Review of Mobility Patterns, Usage Frequency, and Personas. *Sustainability*, 13(21), p. 11792.

Fitt, H. & Curl, A., 2020. The early days of shared micromobility: A social practices approach. *Journal of Transport Geography*, Volume 86, p. 102779.

Gibson, H., Curl, A. & Thompson, L., 2021. Blurred boundaries: E-scooter riders' and pedestrians' experiences of sharing space. *Mobilities*, pp. 1-16.

Guo, Y. & Zhang, Y., 2021. Understanding factors influencing shared e-scooter usage and its impact on auto mode substitution. *Transportation research part D: transport and environment*, Volume 99, p. 102991.

Haworth, N. L. & Schramm, A., 2019. Illegal and risky riding of electric scooters in Brisbane. *Medical journal of Australia*, 211(9), pp. 412-413.

Mukhtar, M., Ashraf, A., Frank, M. S. & Steenburg, S. D., 2021. Injury incidence and patterns associated with electric scooter accidents in a major metropolitan city. *Clinical imaging*, Issue 74, pp. 163-168.

85247

## Discursive co-construction of e-scooter emergence: Comparative study of media and resident feedback in Helsinki

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Cities worldwide are experiencing a process of emergence of shared micromobility services, most often in the form of electric standing scooters. Such mobility services are already identified to provide positive and negative impacts, such as improved accessibility to public transport stations or an increase in crash frequency (Fitt & Curl, 2020; Bieliński & Ważna, 2020; Mukhtar, et al., 2021; Haworth & Schramm, 2019). Besides these measurable impacts, the emergence of mobility modes, especially in the context of modern democracy, relies on public opinion dynamics (Sareen, et al., 2021). Similarly, in the context of an institutional void where hard policies are missing, public discourse plays an important role in shaping public policy (Pangbourne, et al., 2020). Thus, this study aims to analyze the role of media articles in shaping public policy, with a particular case of restrictions introduced on nighttime e-scooter usage and speed in Helsinki, Finland, during 2021. Media analysis is contrasted with an analysis of qualitative feedback through the well-established communication channels between residents and the City of Helsinki. The sample size of media articles and resident feedbacks were 82 and 311, respectively, spanning from October 8th, 2019, until September 29th, 2021. Comparative coding scheme has focused on identifying key issues and key perceived responsible or affected actors. Results indicate a discrepancy between media discourse, which greatly focuses on drunk riding and injuries, and resident feedback, which focuses more on improper parking behavior and sidewalk riding related to the lack of infrastructure at particular locations. Findings provide lessons for multi-level governance of emerging mobility technologies, where decisions need to be made by cooperation of multiple actors, but without a comprehensive analysis of impacts, as society is changing together with technology.

Keywords: e-scooter; emerging mode; media analysis; resident feedback analysis; transport policy

### References

Bieliński, T. & Ważna, A., 2020. Electric scooter sharing and bike sharing user behaviour and characteristics. *Sustainability*, 12(20), p. 9640.

Fitt, H. & Curl, A., 2020. The early days of shared micromobility: A social practices approach. *Journal of Transport Geography*, Volume 86, p. 102779.

Haworth, N. L. & Schramm, A., 2019. Illegal and risky riding of electric scooters in Brisbane. *Medical journal of Australia*, 211(9), pp. 412-413.

Mukhtar, M., Ashraf, A., Frank, M. S. & Steenburg, S. D., 2021. Injury incidence and patterns

associated with electric scooter accidents in a major metropolitan city. *Clinical imaging*, Issue 74, pp. 163-168.

Pangbourne, K., Mladenović, M. N., Stead, D. & Milakis, D., 2020. Questioning mobility as a service: Unanticipated implications for society and governance. *Transportation research part A: policy and practice*, Volume 131, pp. 35-49.

Sareen, S., Devyn, R. & Haarsta, H., 2021. E-scooter regulation: The micro-politics of market-making for micro-mobility in Bergen. *Environmental Innovation and Societal Transitions*, Volume 40, pp. 461-473.

84488

## The role of Transit Oriented Development (TOD) in multi-scale accessibility. Methodological considerations applied to the periphery of Ile-de-France.

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The climate emergency confronts public authorities with a dilemma: how to regulate daily mobility without hindering access to urban amenities, especially for the poorest? In this context, an ambitious reflection on planning models favouring access to amenities while limiting the need to travel is more necessary than ever, especially in rural urban regions. We propose to investigate the ability of a Transit Oriented Development (TOD)-inspired model (Calthorpe, 1993) to moderate mobility dependency in low density areas(1).

We define mobility dependency as the harm suffered by low mobile people or people who are highly constrained in their daily mobility (Fol and Gallez, 2017). We assume that a TOD-inspired model could contribute to a “multi-scale development model” favouring both access to local amenities and distant amenities. This model could mitigate mobility dependency both for low mobile people, suffering from a lack of access to local amenities and for people highly constrained in their daily mobility, by offering them access to an efficient transport service. Following Hansen (1959), we define accessibility as “the potential of opportunities for interaction”. Consequently, we consider that accessibility does not only depend on the quality of transport network, but also on the spatial concentration of amenities and individual characteristics (Geurs and Van Wee, 2014). This means that accessibility is not only about transport but also about land-use development and housing policies (Fol and Gallez, 2014). Applied to our research topic, this raises the question of how a TOD model coordinates with other local policies.

In this presentation, we will focus on theoretical and methodological issues. First, we will review the place of TOD model in the literature on multi-scale accessibility models. Then we will present a method to assess the changes in accessibility in relation to the evolution of railway network service, housing supply and the provision of local amenities. Lastly, we will present our first results applied to a study case located in the periphery of Ile-de-France region.

Keywords: Mobility dependency, TOD, rural urban areas, multi-scale accessibility, Ile-de-France.

### References

(1) This PhD is part of the Innovative Training Network TOD-IS-RUR which aims to extend TOD model to rural urban region contexts and take better account of social and environmental issues.

Calthorpe P., 1993. *The next American metropolis: ecology, community, and the American dream*, Princeton Architectural Press, Princeton.

Fol S., Gallez C., 2017, Évaluer les inégalités sociales d'accès aux ressources, Intérêt d'une approche fondée sur l'accessibilité., *Riurba*, 2017, n° 4. [En ligne] (Consulté en mai 2021) : <https://halshs.archives-ouvertes.fr/halshs-01683489/document>

Fol S., Gallez C., 2014, Social inequalities in urban access: better ways of assessing transport improvements, In Sclar E., Lönnroth M., Wolmar C. (eds.), *Getting There/Being There: Financing Enhanced Urban Access in the 21st Century City*, New York, Routledge, 46-86.

Geurs, K.T. and Van Wee, B. (2004) Accessibility evaluation of land-use and transport strategies: Review and research directions, *Journal of Transport Geography*, 12, 127-140.

Hansen, W.G. (1959) How accessibility shapes land use, *Journal of American Institute of Planners*, 25(1), 73-76.

85076

## Analysing Walkability with a Multidimensional Approach by Using Mobile Methodologies and Understanding the Relationship Among Walkability Indicators

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Creating more walkable places in cities paves the way for encouraging people to walk more and improves pedestrian mobility. Making analyzes in order to improve walkability in cities requires a multidimensional approach considering both spatial and perceptual dimensions of walkability. Based on this multidimensional approach, this study uses “Mobile Methodologies” to analyse walking experience in situ and within this scope, “Go-Along” walks with participants were organised in the city centres of Beşiktaş from Istanbul, Turkey and Delft from the Netherlands as part of case studies. Based on urban comparable studies approach, spatial and temporal comparisons of the city centres of Beşiktaş and Delft were made by using “replication logic”. Within the scope of the study, walkability studies in the literature were revised and six indicators were specified as security, traffic safety, accessibility, comfort, pleasure and mixed use and these indicators formed a basis for the evaluation of field studies. As a result of the research, it was concluded that walkability should be studied with a multidimensional and a relational perspective and mobile methodologies play an effective role for this purpose. By this means, understanding the relationships among walkability indicators, revealing common patterns and finding crucial pieces of evidence for creating more walkable cities becomes possible.

Keywords: Walkability, Mobile Methodologies, Go-Along, Pedestrian Perception

### References

1. Büscher, M., Urry, J., & Witchger, K. (2011). *Mobile Methods*. Routledge.
2. Kusenbach, M. (2003). Street Phenomenology. *Ethnography*, 4(3), 455–485. <https://doi.org/10.1177/146613810343007>
3. Spinney, J. (2015). Close encounters? Mobile methods, (post)phenomenology and affect. *Cultural Geographies*, 22(2), 231–246. <https://doi.org/10.1177/1474474014558988>
4. Robinson, J. (2011). Cities in a World of Cities: The Comparative Gesture. *International Journal of Urban and Regional Research*, 35(1), 1–23. <https://doi.org/10.1111/j.1468-2427.2010.00982.x>
5. Ewing, R., & Handy, S. (2009). Measuring the unmeasurable: Urban design qualities related to walkability. *Journal of Urban Design*, 14(1), 65–84. <https://doi.org/10.1080/13574800802451155>
6. Krambeck, H. V. (2006). *The Global Walkability Index*. Massachusetts Institute of Technology.
7. Mehta, V. (2008). Walkable streets: Pedestrian behavior, perceptions and attitudes. *Journal of Urbanism*, 1(3), 217–245. <https://doi.org/10.1080/17549170802529480>

8. Yin, R. K. (2018). Case study research and applications: Design and methods. In Case Study Research and Applications. SAGE Publications.

84224

## Rescuing accessibility planning from technocracy: critical insights from children

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Accessibility planning is becoming increasingly dominated by the same technocratic principles that have reduced transport planning to a major source of environmental and social problems. Indeed, there is a growing consensus that accessibility planning constitutes a suitable replacement for conventional transport planning only when it relies on sophisticated planning support tools informed by advanced accessibility metrics – basically, when it surrenders itself to the same transport planning paradigm that it aimed to criticise and transcend in the first place due to its overwhelming shortcomings. Through empirical research conducted with children in Portugal, this research offers insights on how to rescue accessibility planning from technocracy both in substantive and processual terms. Restoring accessibility planning so that it becomes a practice partially informed by children-stakeholders is considered key not only to promote child-friendly cities, but also to open adult-stakeholders and academic researchers to more constructive ways of understanding and acting upon the world.

Keywords: accessibility planning, children, technocracy, alternatives

### References

Barker, J. (2003). Passengers of political actors? Children's participation in transport policy and the micro political geographies of the family. *Space and Polity*, 7(2), 135-151.

Kyttä, M. (2004). The extent of children's independent mobility and the number of actualized affordances as criteria for child-friendly environments. *Journal of Environmental Psychology*, 24, 179-198.

Muller, J. (2018). *The Tyranny of Metrics*. Princeton: Princeton University Press.

Qviström, M. (2015). Putting accessibility in place: A relational reading of accessibility in policies for transit-oriented development. *Geoforum*, 58, 166-173.

Wall, J. (2019). From childhood studies to childism: reconstructing the scholarly and social imaginations. *Children's Geographies*, 1-14.

85132

## Pedestrian profiles in the Netherlands and Europe. Walking, a privilege, a right, or an obligation?

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Walking is increasingly pointed out in both urban and public health research as a simple, accessible and effective way to maintain high levels of well-being (Lee & Buchner, 2008; Dons et al., 2015). Walking helps to limit emissions from polluting means of transport, and thus contributes to sustainability transitions in mobility and environmental sustainability (Wang & de Vries, 2020). At the same time, walking practices tend to represent variations over groups, including differences by income and gender, leaving room for divergence in health expectations (Panter et al., 2010; Zandieh et al., 2016; Gao et al., 2017). This paper makes an assessment of these characteristics for walking practices in the Netherlands, and more generally, the European context.

This paper defines a profile of the regular walker, according to publicly accessible data, with particular interest for the Netherlands. A comparison with other EU countries is made. A detailed analysis of the literature and existing data is presented with particular attention to socioeconomic status and its link to walking discrepancies.

Data on pedestrian mobility in Europe turns out to be fragmented, limited and not harmonized. Furthermore, the paper points to the difficulty of obtaining detailed information on the intra-urban scale. Considering the interest in health implications, and the increasing importance of walking practices in the field of spatial planning, further research is needed on walking inequalities and walking as a right. In general, the paper presents an agenda for the need of further harmonizing data across EU countries, and the limitations of the existing surveys, which currently rarely focus on pedestrian activity at an adequate scale.

Keywords: walking; active travel; inequalities; walking-profiles

### References

Dons, E., Götschi, T., Nieuwenhuijsen, M., De Nazelle, A., Anaya, E., Avila-Palencia, I., ... & Panis, L. I. (2015). Physical Activity through Sustainable Transport Approaches (PASTA): protocol for a multi-centre, longitudinal study. *BMC public health*, 15(1), 1-11.

Gao, J., Helbich, M., Dijst, M., & Kamphuis, C. B. (2017). Socioeconomic and demographic differences in walking and cycling in the Netherlands: How do these translate into differences in health benefits?. *Journal of Transport & Health*, 6, 358-365.

Lee, I. M., & Buchner, D. M. (2008). The importance of walking to public health. *Medicine & Science in Sports & Exercise*, 40(7), S512-S518.

Panter, J. R., Jones, A. P., van Sluijs, E. M., & Griffin, S. J. (2010). Attitudes, social support and

environmental perceptions as predictors of active commuting behaviour in school children. *Journal of Epidemiology & Community Health*, 64(01), 41-48.

Wang, G., Han, Q., & de Vries, B. (2020). A geographic carbon emission estimating framework on the city scale. *Journal of Cleaner Production*, 244, 118793.

Zandieh, R., Martinez, J., Flacke, J., Jones, P., & Van Maarseveen, M. (2016). Older adults' outdoor walking: Inequalities in neighbourhood safety, pedestrian infrastructure and aesthetics. *International journal of environmental research and public health*, 13(12), 1179.

84495

## Are urban vehicle access regulations just? The dos and don'ts of sustainable urban transformation

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Urban vehicle access regulations (UVARs) – or measures to regulate vehicular access to urban infrastructure (European Commission, 2013) – are one of the tools that can help make cities more liveable, healthier and more attractive for all. An UVAR scheme regulates under what conditions certain vehicles are allowed to access certain parts of a city, for example, concerning vehicle emissions levels, time periods, resident status or vehicle size. However, for an UVAR to live up to its full potential, it is crucial for the population to understand the scheme and its aims. In addition, issues of inequitable distributions of benefits and burdens are often raised when implementing UVAR schemes (De Vrij & Vanoutrive, 2022; Henderson, 2020). This presentation highlights these equity issues and focuses on the results from an extensive support process for six pilot cities and a thorough analysis of twelve case study cities done as part of the Civitas-ReVeAL project. Herein, we illustrate the importance of the user needs perspective (the degree to which user needs are met) and the concept of public acceptance (the willingness within a group to use a system or measure). The work on the ReVeAL cities resulted in varying strategies as combinations of UVAR measures extended with complementary measures (e.g., grants towards acceptance, essential exemptions or increased mobility options), phasing and upscaling, and future-readiness assessment. In these sustainable mobility strategies, the diversity of users is important to keep in mind when designing and/or building UVAR schemes (Schack et al., 2021), to make sure that the UVAR does not have unintended consequences for certain sections of society (in addition to the intended consequences of more sustainable mobility). We believe that these insights are necessary for a transition towards incorporating equity considerations in transport planning and infrastructure development, as well as to bridge the gap between environmental and social sustainable urban development.

Keywords: Social equity, urban vehicle access regulations, sustainable urban development, mobility needs

### References

- De Vrij, E., & Vanoutrive, T. (2022). 'No-one visits me anymore': Low Emission Zones and social exclusion via sustainable transport policy. *Journal of Environmental Policy & Planning*, 1-13.
- European Commission (2013). Staff Working Document on Access Regulations "A call for smarter urban vehicle access regulations", SWM
- Henderson, J. (2020). EVs are not the answer: a mobility justice critique of electric vehicle transitions. *Annals of the American Association of Geographers*, 110(6), 1993-2010.
- Schack, J., Solér, P., Sadler, L., Fenton, B., & Graindorge, M. (2021). UVAR Guidance: User Needs and Public Acceptance.

84317

## Research on the optimization of electric bicycle traffic organization in urban public space under the guidance of low-carbon travel

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Under China's 2060 carbon neutral strategy, electric bicycles will become the main transportation mode in the public space of regional city. The purpose of the research is to provide a systematic optimization scheme for alleviating the conflict between electric bicycles and the urban street activities. At present, the related research is lacking. The research takes the urban commercial complex which is the most active public place as an example, and conducts the phenomenon explanation-problem analysis-scheme construction research frame. Firstly, we analyze the spatiotemporal data of electric vehicle driving and parking trajectories in different time and the interview records of different groups of people, then compared with bicycles. The research shows that: (1) Electric vehicles replace bicycles as the highest proportion of low-carbon transportation modes in urban public space; (2) Their travel needs can be divided into four types: “delivery + work + consumption + connection”; (3) Their travel flow fluctuates regularly with time; (4) the distribution of their parking is scattered due to differences in demand. Secondly, we analyze the phenomenon and causes of the conflicts between electric bicycles and urban street space by observing their driving trajectories under different demand orientations. The research shows that: (1) Electric bicycles have the characteristics of both non-motorized vehicles and motor vehicles. The lack of consideration for their travel demand in traditional street design is the main reason for the travel chaos. (2) The whole society needs to quickly construct public rules for electric bicycles travel. Finally, the study following the spatiotemporal characteristics of electric bicycle travel, proposes a system optimization strategy including spatial collaboration of multiple traffic travel modes, scientific calculation way of the configuration scale of parking facilities, and dynamic traffic management. The research suggests that the interference of electric bicycles to the urban traffic microenvironment needs to be paid attention to, and the calculation parameters of the electric bicycle parking scale needs more data support.

Keywords: electric bicycle, urban public space, spatiotemporal features, conflict and causes, system optimization strategy

### References

- 1.He Hongxing. Research on planning & using system of bicycle transportation in Xi'an[J]. Urban Development Studies,2010,17(11):129-134.
- 2.Zhang Xiaofeng, Lu Qi, Dong Jing, Zhang Zhuang, Zhang Yating. Transportation Strategies for Commercial Complex in Large Metropolitans: A Case Study in Tianjin[J]. Urban Transport of China,2015,13(06):53-60. DOI:10.13813/j.cn11-5141/u.2015.0609.
- 3.Tang Tianpei, Zhou Xizhao, Zhu Senlai. Senlai I Supply capacity assessment on nighttime shared parking of commercial complexes[J]. Journal of Shanghai Maritime University,

2020,41(01):80-86. DOI:10.13340/j.jsmu.2020.01.013.

4.Han Yuhe, Li Shaoyan. Analysis on construction strategies of transportation system of the large-scale commercial complex compound[J]. Urban Development Studies,2008(S1):69-72.

5.He Hui, Li Wending, Yu Yanwei. Study on the Intention of Low Carbon Travel Behavior of Residents Considering the Space and Environment of Blocks[J]. Modern Urban Research, 2021(02):121-125. DOI:10.3969/j.issn.1009-6000.2021.02.019.

6.Zhang Xuan, Liu Yong, Hou Quanhua, Wei Yajian, Duan Yaqiong. Characteristics of built environment in low-carbon travel block based on GIS hot spot technology [J]. Journal of Chang'an University(Natural Science Edition),2018,38(01):89-97.DOI:10.19721/j.cnki.1671-8879.2018.01. 012.

84582

## Mobility (in)equalities index as a method to identify areas for intervention

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Neglecting investment in disadvantaged neighbourhoods risks leading to deteriorating social well-being and environmental health. To prevent this, it is important for policy and decision-makers to identify areas in the city that are more prone to inequalities of basic needs such as mobility. The goal of our research is to develop a method to rank areas by the need for intervention based on mobility inequalities. This method is based on a “mobility inequality index” that shows the gap between social groups in terms of mobility at the city and regional scales. The index has been developed by odds ratios between 1) the neediest and most vulnerable social groups and those who are not, 2) usage and availability of different transport modes, 3) commuting time and length, and 4) accessibility to basic needs. While there is the potential for such an index to be applied within different contexts, our main focus and testbed is the city of Munich. Data has been collected from mobility-related surveys and open spatial data platforms. Results are visualized as an “(In)equalities Atlas” to identify mobility gaps at county-level in the Munich Metropolitan Region and neighbourhood level in the city of Munich. Policy-makers and decision-makers now have a method to rank areas for potential interventions to reduce mobility inequalities. Further research requires validating the method with mobility stakeholders, including public participation, and considering procedural justice as part of the index.

Keywords: mobility, inequality, policy, social, exclusion

### References

Pereira, R. H., Banister, D., Schwanen, T., & Wessel, N. (2019). Distributional effects of transport policies on inequalities in access to opportunities in Rio de Janeiro. *Journal of Transport and Land Use*, 12(1), 741-764.

Sen, A. K. (2009). *The idea of justice*. Harvard University Press.

Urban Arenas. (2020). *Drivers of injustice in the context of urban sustainability*, booklet. [https://urban-arena.eu/wp-content/uploads/2020/11/Booklet-of-summaries\\_Arena\\_with-contacts.pdf](https://urban-arena.eu/wp-content/uploads/2020/11/Booklet-of-summaries_Arena_with-contacts.pdf)

Wirtz, J., van Egmond, P., Freitas, A., Reis, V., Santos, F., Carvalho, D., & Marquet, A. (2019). *Mobility solutions and estimation of their potential impacts on inclusive mobility and equity*, Deliverable 3.3. HiReach.

84359

## How do we pave a right? – thinking right to mobility from women’s displacements in Rio de Janeiro

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The discussion on urban mobility has largely grown into an essential subject in the debates pertaining to the right to the city and urban planning. However, this mobility is not the same to all the bodies moving through the urban paths, being indissociable from the markers which cross and constitute these bodies. Who reaches, where they reach and how they reach there are fundamental questions on the distinct arrangement of the fruition of the city, both spatially and subjectively. The inability to see those structural differences, insisting on a so-called neutral urban planning, tend to reinforce spatial inequalities even in projects trying to face them. Also, even when acknowledging this inequality, mobility research methodologies, normally, are not prepared to see beyond the origin/destination matrix and the classical work displacements, leaving invisible fundamental daily mobilities that do not fit into those research categories. The mobility of women, under-considered by the patriarchal urban planning, allows us to perceive other paths and drawings of the city. Moreover, realizing how these women are equally affected by power structures – such as race and class – which carve them as much as shape the frame of the city that will appear on their movements, make visible the fractures and frontiers that design the borough. Therefore, this work is inserted on the proposals of a corporified intersectional feminism aiming to delineate what would be a right to mobility. Using the methodology of “sombreo”, developed by Paola Jiron and Walter Imilan, the ethnographic made with research with a small group of women in Rio de Janeiro, Brazil, crossed with theoretical and quantitative discussions, allowed this work to underline those otherwise invisible paths and ways of displacement, which are essential to think urban planning through a more inclusive lens. In conclusion, the research found that the right to mobility has indispensable axes to be built on: mobility as a place, time management, the selection of travels, and the acknowledgment of mobility levels, continually composing ways of being and passing through the city.

Keywords: Right to mobility, Right to the city, Women’s Mobility, Ethnographic Research, Mobility Research Methodologies, Spatial Justice

### References

- Ascher, F., (2005) “Le sens du mouvement: modernités et mobilités” en Allemand, S., Ascher, F. y J. Levy (comp.) *Le sens du mouvement*. Paris, Éditions Belin. pp. 21-35.
- Crenshaw, K., (1989) “Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics” en *University of Chicago Legal Forum*. Volumen 14, pp. 538–554
- Jirón, P. y D. Zunino, (2017) “Movilidad Urbana y Género: experiencias latinoamericanas” en *Revista Transporte y Territorio*. Número 16. pp. 1-8.
- Jirón, P. y W. Imilan, (2016) “Observando juntos em movimento: possibilidades, desafios o encrucijadas de uma etnografia colectiva” en *Alteridades*. Volumen 26, número 52. pp.51-64.

Levy, C., (2013) “Travel choice reframed: ‘deep distribution’ and gender in urban transport” en Environment and Urbanization. Volumen 25, número 1. pp. 47-63.

Philippopoulos-Mihopoulos, A., (2017) “Quem tem medo do espaço: direito, geografia e justiça espacial” en Revista Direito UFMG. Belo Horizonte. Volumen 70, jan/jun. pp. 635-661.

85377

## Sustainable mobility challenges and gaps for low density suburbia. Assesment of the community consiouness

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The aim of the paper is to provide a critical assessment of the stakeholders' views on the issue of implementing sustainable mobility in suburban neighbourhoods. Our work in CA18137 - European Middle-Class Mass Housing has revealed that the affordability of home provision in suburbia is closely related to the lack of accessibility and sustainable mobility. On the other hand, suburban residential districts cover large parts of contemporary conurbations still being connected with global lifestyle personal goals and expectations. They are always identical to car-oriented mobility schemes and usually perform a limited share in walking, cycling and public transportation movements. A comparison of different suburban typologies (densities, layout, land uses) can reveal the close relationship between typology and travel behaviour which excuses also the difficulty to develop and apply appropriate strategies to reduce unnecessary travel by car. Since urban mobility behaviours are channelised by the limitations of urban densities, land uses and the walkability of the neighbourhood layout. Research on changing behaviours is essential in filling the gap between knowledge and innovative ideas for fostering neighbourhood compactness, micro-mobility, self-sufficiency and accessibility. Stakeholders investigation can shed light on this aspect. The paper presents briefly the attributes of the suburban case study areas in order to follow up and discuss the results of semi-structured interviews from a group of stakeholders' in Cyprus. The stakeholders' selection is based on the extensive work of the recent Local Sustainable Mobility Plan (SUMP) involving practitioners, citizens, community groups, NGOs. The scope of this investigation is to outline the consciousness of the local community to realise the problem and its willingness to adopt mitigation actions. Views and opinions on the roots of the problem and possible remedies are evaluated in the context of the New European Bauhaus values of sustainability, aesthetics and inclusion.

Keywords: sustainable mobility, suburban, neighbourhood, New European Bauhaus

### References

- Department of Public Works, (2018), The Sustainable Urban Mobility Plan (SUMP) for Limassol, Nicosia
- Ioannou, B., (2019), Ageing in Suburban Neighbourhoods: Planning, Densities and Place Assessment. *Urban Planning*, 2019, Volume 4, Issue 2, Pages 18–30.  
<http://dx.doi.org/10.17645/up.v4i2.1863>
- Liao, Y., Yeh, S. & Jeuken, G.S. From individual to collective behaviors: exploring population heterogeneity of human mobility based on social media data. *EPJ Data Sci.* 8, 34 (2019).  
<https://doi.org/10.1140/epjds/s13688-019-0212-x>
- March, A., & Panawannage, T. (2020). Walking as a key factor in the resilient low-carbon city. *8th ICBR Lisbon 2018 Book of Papers*, 27(3), 334 – 340.
- Newton, P., Taylor, M., Newman, P., Stanley, J., Rissel, C., Giles-Corti, B., Zito, R., (2017),

Decarbonising suburban mobility, In Dia, H. (2017), Low Carbon Mobility for Future Cities: Principles and applications, IET

85147

## Towards sustainable and seamless island connections: The case of the Dutch Wadden islands

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In many European countries, the connectivity of islands is an important issue for the liveability of the communities that requires careful planning balancing socio-economic development with interests of nature, preserving heritage, local identity, sustainability. An example of this can be found in Ameland and Schiermonnikoog, the northernmost Dutch Wadden islands, located in the UNESCO World Heritage Site. Conflicting the aims for the area – “a natural and sustainable ecosystem where natural processes proceed in an undisturbed way” – transport to the islands is currently operated by fossil-fuelled ferries that require constant dredging of the channels to be able to navigate between the islands and the mainland (Ministry of Infrastructure and Water Management, 2020). In the long term, this transport system is not only technically unattainable, but also against the sustainability goals on various government levels. However, the upcoming concession period, starting in 2030, presents a window of opportunity for a new and sustainable transport concept for Ameland and Schiermonnikoog.

This research explored what such a sustainable transport concept could look like through an inclusive stakeholder engagement process. The research included an analysis of policy documents, an investigation of current transport volumes and flows, and a series of individual stakeholder interviews. These insights were used to develop four mobility scenarios, varying on degrees of sharing (Shaheen & Chan, 2016) and chain integration (Storme et al., 2021; Jittrapirom, et al., 2017). These scenarios were then tested in a stakeholder workshop to further highlight the perspectives for a future transport concept for the islands in 2030 and beyond.

The findings showed that all four scenarios have elements that are preferred by different stakeholders, but there is no one size fits all. However, key elements such as a seamless transport chain, efficient luggage transport and better dispersion of travellers can only be achieved through close collaboration and taking shared responsibilities among public and private stakeholders. The results provide guidance for a wide range of stakeholders in planning for the next concession period in the Netherlands, but also offer insights for shifting towards sustainable ferry transport in the trilateral Wadden Sea region and beyond.

Keywords: ferry transport, shared mobility, chain integration, multi-actor, collaboration

### References

Jittrapirom, P., Caiati, V., Feneri, A. M., Ebrahimigharehbaghi, S., Alonso González, M. J., & Narayan, J. (2017). Mobility as a service: A critical review of definitions, assessments of schemes, and key challenges.

Ministry of Infrastructure and Water Management. (2020). Agenda voor het Waddengebied 2050. Koersen naar een veilig, vital en veerkrachtig Waddengebied in 2050. December 2020.

Shaheen, S., & Chan, N. (2016). Mobility and the sharing economy: Potential to facilitate the first-and last-mile public transit connections. *Built Environment*, 42(4), 573-588.

Storme, T., Casier, C., Azadi, H., & Witlox, F. (2021). Impact Assessments of New Mobility Services: A Critical Review. *Sustainability*, 13(6), 3074.

85149

## Accelerating hub developments for inclusive mobility: key findings from the case of Groningen and Drenthe in the Netherlands

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In many European countries, cities and regions are increasingly investing in mobility hubs to enable more sustainable, inclusive and healthy mobility in both urban and rural areas. Mobility hubs contribute to the uptake of shared mobility and multimodal trips, which are considered to contribute to lower carbon emissions, reduced congestion and air pollution, better accessibility, and increased quality of life (Conticelli et al., 2021; Storme et al, 2021).

For example, in the Netherlands, mobility hubs have recently become an important part of the national public transport agenda where hubs are considered a crucial link in door-to-door travel (Ministry of Infrastructure and Water Management, 2021). With the increased attention on hubs, all eyes have turned to the transport authorities in the provinces of Groningen and Drenthe that already operate an extensive hub network, linking public transport to shared and demand-responsive transport. There, local and regional policy makers seek to improve inclusive accessibility by providing comfortable multi-modal transfers at hubs (Provinces of Groningen and Drenthe, 2017). This objective was institutionalized in the ‘hub programme of Groningen and Drenthe’ which practices an ad-hoc, organic, bottom-up approach to realize developments at hubs.

Given the innovative nature of the hub programme, the paper aims to analyse its governance structure to derive lessons for future transport policy. The research, carried out in collaboration with the regional transport authorities, consisted of a literature and policy review and interviews with key stakeholders in the hub programme. Additionally, comparative case studies were performed of shared mobility hubs in Bremen, Flanders, and South-East Scotland.

The evidence gathered in this study shows that an ad hoc approach can be beneficial to launch hub developments. However, more comprehensive approach could be needed to set the next step in realizing an inclusive and well-accessible hub network. The findings that support practicing a combined approach with piloting different hub services while also developing a more long-term strategic vision, could help to accelerate hub developments across Europe to contribute towards space efficient and sustainable transport planning.

Keywords: mobility hubs, multimodal travel, inclusive transport, accessibility

### References

Conticelli, E., Gobbi, G., Saavedra Rosas, P. I., & Tondelli, S. (2021). Assessing the Performance of Modal Interchange for Ensuring Seamless and Sustainable Mobility in European Cities. *Sustainability*, 13(2), 1001.

Ministerie van Infrastructuur en Waterstaat. (2021). Ontwikkelagenda Toekomstbeeld OV. Nu instappen naar 2040. Den Haag, January 2021.

Provinces of Groningen and Drenthe. (2017). Hub Groningen en Drenthe. Programmaplan. April 2017.

Storme, T., Casier, C., Azadi, H., & Witlox, F. (2021). Impact Assessments of New Mobility Services: A Critical Review. *Sustainability*, 13(6), 3074.

85283

## The implications of transport decarbonisation for spatial planning

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As an existential crisis, climate change sets various demands for mitigation and adaptation in many sectors of society. The European Union has set ambitious goals to mitigate and adapt to climate change, but one sector is a key challenge: Transport related emissions account for roughly one fourth of greenhouse gas (GHG) emissions in Europe and are lagging behind the overall downward trend observed in other major emitting sectors such as energy and industry. According to Curtis & Low (2012), the path dependencies on physical, institutional and discourse dimensions explain why sustainable transport policy is hard to implement in various settings. Specifically in the EU, Gössling and Cohen (2014) argue that certain issues related to the problem have become political taboos, such as the fact that energy-intensive transport is the least taxed and the most subsidized. Concurrently, Marsden and Reardon (2017) have demonstrated that the study of transport policy often ignores questions of governance, such as context and legitimacy, rendering it hard to utilize in actual policy making. As transport and land-use are parts of the same system and should therefore be governed in concert (Bertolini et al. 2005), studying the implications of transport decarbonisation policies for spatial planning is also a relevant pursuit. Moreover, such an effort could contribute to the diffusion of the taboos and link transport policy contributions closer to the contexts of implementation. Following a critical review of studies on climate change mitigation mechanisms in transport by Schwanen et al. (2011), this paper seeks firstly to examine how the mechanisms studied in this mitigation literature are linked to a policy level – the EU (or federal), national, regional or urban level. Secondly, the explicit or implicit implications of these mechanisms for spatial planning on urban and regional level are identified. Finally, the relevance for spatial planning and knowledge gaps emerging from this critical review are discussed.

Keywords: climate change mitigation, transport decarbonisation, transport policy, spatial planning, European Union

### References

Bertolini, L., le Clercq, F., & Kapoen, L. (2005). Sustainable accessibility: A conceptual framework to integrate transport and land use plan-making. Two test-applications in the Netherlands and a reflection on the way forward. *Transport Policy*, 12(3), 207–220. <https://doi.org/10.1016/j.tranpol.2005.01.006>

Curtis, C., & Low, N. (2012). *Institutional Barriers to Sustainable Transport*. London: Taylor & Francis, <https://doi.org/10.4324/9781315588827>

Gössling, S., & Cohen, S. (2014). Why sustainable transport policies will fail: EU climate policy in the light of transport taboos. *Journal of Transport Geography*, 39, 197–207. <https://doi.org/10.1016/j.jtrangeo.2014.07.010>

Marsden, G., & Reardon, L. (2017). Questions of governance: Rethinking the study of transportation policy. *Transportation Research Part A: Policy and Practice*, 101, 238–251. <https://doi.org/10.1016/j.tra.2017.05.008>

Schwanen, T., Banister, D., & Anable, J. (2011). Scientific research about climate change mitigation in transport: A critical review. *Transportation Research Part A: Policy and Practice*, 45(10), 993–1006. <https://doi.org/10.1016/j.tra.2011.09.005>

84471

## Redevelopment of Transport Infrastructure as driver for accelerating societal transitions. An inclusive perspective on sustainable infrastructure planning

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Recently, the planning and development of infrastructure networks has become increasingly attentive to environmental degradation, climatic impacts and societal trends. However, sustainable infrastructure planning has mainly focused on the gradual improvement and expansion of infrastructure networks and often remains confined to new infrastructure and designs that support less carbon-intensive technology. In practice, infrastructure planners have rarely reflected on the role of infrastructure networks in enabling or constraining broader sustainability transitions. This may be about to change. In many Western countries transport infrastructure networks have been developed in the early to mid-twentieth century and considerable infrastructure approach their 'best before' date and enter the phase of transition and renewal. That much transport infrastructure is physically deteriorating and changing as a result of ageing is clear: in the US a considerable part of the 1 trillion-dollar Infrastructure Plan of the Biden administration will be invested into infrastructure renewal, in Germany plans are afoot to increase investments into the renewal of the railway network of over 50% up to 86 billion euro, and in the Netherlands the Replacement and Renovation Program of Rijkswaterstaat is expected to grow vastly. The significant need of infrastructure refurbishment also presents the opportunity to broaden the infrastructure redevelopment options in order to enable wider sustainability transitions. That is, infrastructure renewal could create conditions favouring, for example, ongoing transitions as the energy transition or the transition towards a circular economy. A growing amount of literature emphasizes that investments in the infrastructure network can be utilized as a driver for accelerating wider transitions. Given the fact that infrastructure investments are often location-specific and project-based, it is important to not only focus on the institutional conditions of the infrastructure system in isolation, but more focus on how infrastructure renewal projects relate to spatial developments instigated on the basis of transitions in other systems. In this contribution, we will discuss the importance of sustainable re-development and explore institutional and spatial conditions to utilize the transition to infrastructure renewal as a driver for accelerating desired societal transitions.

Keywords: sustainable infrastructure planning, redevelopment, sustainability transitions, land-use-transport-integration

### References

- [1] Frantzeskaki, N. & Loorbach, D. (2010). Towards governing infrasystem transitions: Reinforcing lock-in or facilitating change? *Technological Forecasting and Social Change*, 77(8), 1292-1301
- [2] Lenferink, S., Tillema, T. & Arts, J. (2013). Towards sustainable infrastructure development

through integrated contracts: Experiences with inclusiveness in Dutch infrastructure projects. *International journal of project management* 31 (4), 615-627

[3] Arts, J., Leendertse, W., & Busscher, T. (2015). Naar een Planologie van het Bestaande: omgaan met dynamiek in de planning van infrastructuur. (Towards a Planning of the Existing: Dealing with the dynamics of infrastructure planning). In *Colloquium Vervoersplanologisch Speurwerk*, 2015

[4] S.Tongur, S. & Engwall, M. (2017). Exploring windows of opportunity dynamics in infrastructure transformation. *Environmental Innovation and Societal Transitions*, 25, 82-93

[5] Givoni, M. & Perl, A. (2020). Rethinking Transport Infrastructure Planning to Extend. Its Value over Time. *Journal of Planning Education and Research*, 40, 82-91

84581

## Optimization of SpaceSyntax computation for large-scale evaluation of urban railway station environments

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Train stations are known to be one of the key drivers of urban development and other urban dynamics. They influence and define the characteristics of cities, such as the population growth rate, compactness, and density, Railway stations are landmarks with a consequent impact on the perceived image and identity at a psycho-social level. Their effect can be also noted on the pedestrian and traffic flow distribution and levels, in the urban economic attractiveness, and many other layers that define the holistic complexity of urban fabrics.

The age of digitalization has given birth to an unprecedented diversity of transportation modalities and services, with recent trends pointing towards multimodal and multipurpose routes as a result of highly digitalized mobility and consumption behaviors. In addition, the recent COVID pandemic has driven major changes in the way people relate to the urban environment, with a change in the modalities of transport increasing the use of individual modes including private cars.

In contrast, several cities are undergoing major re-design of their transport strategy in order to meet ambitious sustainability agendas. Urban-scale strategies are shifting towards public transportation and active modes. Today, this is a key development priority, aiming at reducing motorized private transport. However, this strategy can only be successful when cities relate it to the 15-minute city theory where services and amenities are distributed justly and at a walkable distance, and urban space is humane, pedestrian-friendly, accessible, and connected.

Against this background of the clash between (1) the public sector long-term decarbonization strategy, (2) the private sector digital dynamic supply, and (3) the individual social and behavioral trends, the role of the keystone of urban dynamics –the railway station– needs to be evaluated. Railway Stations are currently part of most smart-city planning concepts, and should be the key element of cities' transport strategies in order to achieve their sustainability goals.

In order to do so, this contribution calculates various analytics in order to observe the environment that surrounds train stations in Italy. We utilize a novel approach to automate and parallelize the computation of several network metrics in order to achieve an unprecedented calculation volume within the shortest time. As a result, we evaluate the configuration of the urban fabric surrounding the railway station of a large number of cities to perform correlation analysis, and comparative analysis.

By implementing this approach, we aim at evaluating several stations in several cities and establish a methodological indexation able to be upscaled and easily replicated, and allowing comparison between cities of different kinds and sizes: the Integration Railway Station Index. With this information, an assessment of the allocation of resources and potential future intervention strategies can be designed.

Keywords: SpaceSyntax, Railway Station, Train Station, Parallel Computing, GIS

#### References

- Bubelíny, O., Kubina, M., & Varmus, M. (2021). Railway Stations as Part of Mobility in the Smart City Concept. *Transportation Research Procedia*, 53, 274-281.
- Carpio-Pinedo, J., & López-Baeza, J. (2021). La producción de identidad de los nuevos desarrollos urbanos a través del place-based social big data: los crecimientos del área metropolitana de Madrid durante la burbuja inmobiliaria (1990-2012). *EURE (Santiago)*, 47(140), 5-28.
- Davidich, M., Geiss, F., Mayer, H. G., Pfaffinger, A., & Royer, C. (2013). Waiting zones for realistic modelling of pedestrian dynamics: A case study using two major German railway stations as examples. *Transportation Research Part C: Emerging Technologies*, 37, 210-222.
- Hillier, B. & Hanson, J. (1984), *The Social Logic of Space*, Cambridge University Press: Cambridge. pp.108-109
- Maillard, M. (1995). Reinventing the railway station. *Japan Railway & Transport Review*, 5, 14-18.
- Moreno, C., Allam, Z., Chabaud, D., Gall, C., & Pratlong, F. (2021). Introducing the “15-Minute City”: Sustainability, resilience and place identity in future post-pandemic cities. *Smart Cities*, 4(1), 93-111.
- Pels, E., & Rietveld, P. (2007). Railway Station and Urban Dynamics. *Environment and Planning A*, 39(9), 2043-2047.
- Penn, A. & Turner, A. (2001) Space syntax based agent simulation. In: (Proceedings) 1st International Conference on Pedestrian and Evacuation Dynamics. : University of Duisburg, Germany,1-16. pp.7.

85066

## The phase of experimentation in public spaces to promote micromobility: From differentiation to site indication.

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Interventions in public space emphasizing the insertion of infrastructures related to experimentation and adaptation of existing zones are gaining force worldwide. Those measures are based on low-cost materials and can be a feasible alternative, especially in contexts of enlarged cities, to guarantee adequate spatial justice. They are even more significant from the perspective of urban mobility due to their broader impacts on the inhabitants' lives. This paper aims to demonstrate and differentiate the main types of interventions, such as the ones characterized by Lerner (2006) as Urban Acupuncture; Hou (2010) as Guerrilla Urbanism; Iverson (2013) and Finn (2014) as Do-it-Yourself Urbanism; or Lydon and Garcia (2015) as Tactical Urbanism. After that, we object to understanding how these experiments are applied in the context of Southern Europe and Latin America to perceive the benefits, the drawbacks, and the proper way to act. The final goal is to choose a case study in the Metropolitan Area of Lisbon to identify, using open sources tools such as QGIS and Open Street Maps, possible sites based on points of interest to receive interventions to generate better connections and enhance spatial cohesion. Our achievements first demonstrate the differences of the main terms regarding the approach, primary designation, the focus on low-cost materials, the duration, and the integration of the planning system. Furthermore, we found disparities in the perception of interventions by users depending on the context of insertion, especially regarding the boundaries of formal and informal actions. Finally, it was possible to identify zones that are prone to receive measures in the context of Southern Europe, specifically in the South bank of Lisbon. Ultimately, we have clarified and defined some topics that can support good decisions, and we have identified zones capable of implementing the concepts, which enhances spatial justice.

Keywords: Tactical Interventions; Spatial Cohesion; Urban Mobility; Public Space Adaptation.

### References

Finn, D. DIY urbanism: Implications for cities. *J. Urban. Int. Res. Placemaking Urban Sustain.* 2014, 7, 381–398.

Hou, J. (ed.). 2010. *Insurgent Public Space: Guerrilla Urbanism and the Remaking of Contemporary Cities*. London and New York: Routledge.

Iveson, K. (2013). Cities within the City: Do-It-Yourself Urbanism and the Right to the City. *International Journal of Urban and Regional Research*, 37(3), 941–956.  
<https://doi.org/10.1111/1468-2427.12053>

Lerner, J. (2006). Acupuntura Urbana. In *Investigaciones geográficas*.

Lydon, M., & Garcia, A. (2015). *Tactical Urbanism: Short-term Action for Long-term Change*.

84300

## Mixed methods approach to assessing perceived walkability in urban neighbourhoods

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This paper discusses how a mixed methods approach is applied for assessing perceived walkability. The research is drawn upon the EU-funded project WalkUrban which aims for a better understanding of urban walkability in order to allocate more urban space to walking. In many urban neighbourhoods, the private car is still the dominant transport mode, causing well-known problems, such as congestion, traffic accidents, or air and noise pollution. In contrast, walking is a zero-emission transport mode, which is feasible for most people and enhances individual well-being. The influence of built environment characteristics on perceived walkability, such as street connectivity and land use pattern, has been widely discussed in previous research, and the dominant approach to travel behaviour research is based on travel choice modelling from large quantitative surveys. However, the micro-scale and street level assessment is needed to understand how people perceive the built environment and what factors actually stimulate them to walk. An inclusive design for walking is especially important for vulnerable groups with special mobility needs, such as elderly, disabled or children. To probe the perceived walkability of different groups of people, we will improve data collection and analysis methods for examining the interconnection between walking-related attitudes, travel satisfaction, local walking cultures and perceptions. To this end, we use a mixed methods approach by blending quantitative and qualitative data in order to consider multiple viewpoints and validate findings from different methods. In this paper we provide an overview of previous studies on perceived walkability applying mixed methods in their research design, data collection and analysis. The literature review is centred around different ways of integrating quantitative and qualitative methods in order to identify benefits and limitations of mixed approaches in examining perceived walkability. The paper concludes with outlining our WalkUrban approach to integrate quantitative (household survey, walking route assessment) and qualitative methods (walk-alongs and interviews) which will be applied to six selected urban neighbourhoods in three European cities.

Keywords: Perceived walkability, mixed methods, urban neighbourhoods, street-level, local walking culture, walking related attitudes

### References

De Vos, J., Schwanen, T., Van Acker, V., and Witlox, F., (2019). 'Do satisfying walking and cycling trips result in more future trips with active travel modes? An exploratory study'. *International Journal of Sustainable Transportation*, 13(3), 180-196.

Ewing, R., and Cervero, R., (2010) 'Travel and the built environment. A metaanalysis'. *Journal*

of the American Planning Association, 76 (3), 265–294.

Johnson, R. B., Onwuegbuzie, A. J. and Turner, L. A. (2007) ‘Toward a Definition of Mixed Methods Research’, *Journal of Mixed Methods Research*, 1(2), 112–133.

Jones, T., Horton, D., Mullen, C., Pooley, C., Scheldeman, G., Strano, E and Tight, M. (2013) ‘The Role of Street Connectivity and Access to Everyday Facilities in Shaping Everyday Walking and Cycling in English Cities’, In: Gerike, R., Hülsmann, F. and Roller, K. *Strategies for Sustainable Mobilities, Opportunities and Challenges*, Farnham: Ashgate, 15-37.

Lättman, K., Olsson, L.E., Friman, M., Fujii, S., 2019. ‘Perceived Accessibility, Satisfaction with Daily Travel, and Life Satisfaction among the Elderly’, *International Journal of Environmental Research and Public Health*, 16(22), 4498.

Otsuka, N., Wittowsky, D., Damerau, M., and Gerten, C., (2021) ‘Walkability assessment for urban areas around railway stations along the Rhine-Alpine Corridor’, *Journal of Transport Geography* 93, 103081.

Resch, B., Puetz, I., Bluemke, M., Kyriakou, K., and Miksch, J. (2020) ‘An Interdisciplinary Mixed-Methods Approach to Analyzing Urban Spaces: The Case of Urban Walkability and Bikeability’, *International Journal of Environmental Research and Public Health*, 17, 6994.

Van der Vlugt, A.L., Curl, A., and Scheiner, J., (2021) ‘The influence of travel attitudes on perceived walking accessibility and walking behaviour’, *Travel Behaviour and Society*, 27, 47-56.

85119

## Transition experiments with London streets: for whom are they?

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This paper focuses on transition experiments (Nevens et al., 2013; Roorda et al., 2014) in city streets which we define as ‘intentional, temporary changes in street use, regulation and/or form, aimed at exploring systemic change towards a ‘post-car’ city’ (Bertolini, 2020).

Our work seeks to contribute to the literature on street experiments and the complexities of tactical urbanism in England which are not sufficiently well explored in the literature (Webb, 2018). We draw on two pilot case studies in London, where street experiments have recently enjoyed an additional boost due to emergency social distancing measures in public space spurred by the COVID-19 pandemic.

The primary research objective is to understand street experiments in relation to different dimensions of mobility justice, and the research questions are: Who uses street experiments and how? How do people perceive and experience street space changes, and how are these perceptions related to ‘sense of place’ regarding wider the neighbourhood? How do people perceive the experiment process and their ability to participate in it?

In London, survey questionnaires distributed on-street and online via the Commonplace public engagement platform were used to investigate attitudes and behaviour towards two street experiments. Going beyond expert-defined evaluation criteria, the research aimed to explore how Londoners use, perceive and experience street experiments, through a bottom-up mixed methods approach investigating types of use, the experiment process and community engagement/participation. Data identify differences among different user groups, in type (residents, businesses, visitors), mobility (pedestrians, cyclists and car drivers), gender, ethnicity, socio-economic conditions and age.

Findings will inform the debate about how streets experiments affect citizen attitudes about changes to street spaces, including Bertolini’s (2020) hypothesis that experiments may have greater potential to mobilise local communities, relative to other planning processes.

**Keywords:** City streets; transition experiments; tactical urbanism; street space change; sustainable mobility

### References

- Bertolini, L. (2020). From “streets for traffic” to “streets for people”: can street experiments transform urban mobility?. *Transport Reviews*, 40(6), 734-753.
- Nevens, F., Frantzeskaki, N., Gorissen, L., & Loorbach, D. (2013). Urban transition labs: Co-creating transformative action for sustainable cities. *Journal of Cleaner Production*, 50, 111–122
- Roorda, C., Wittmayer, J., Henneman, P., Steenbergen, F., van Frantzeskaki, N., & Loorbach, D. (2014). *Transition management in the urban context: Guidance manual*. Rotterdam: DRIFT, Erasmus University Rotterdam.
- Webb, D. (2018). Tactical urbanism: Delineating a critical praxis. *Planning Theory & Practice*, 19(1), 58-73.



84482

## Bicycling through the Pandemic, in Car-Country, USA

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The COVID-19 pandemic has changed the ways people travel: where, when, and by what mode. The bicycle has demonstrated a unique ability to meet many of the mobility and physical activity needs of this “new normal.” Bicycling has garnered headlines in the US and internationally as urban residents have sought ways to travel and exercise in safe, physically distant ways, during the COVID-19 pandemic (Buehler and Pucher, 2021, Hong, et al., 2020). Rates of bicycling (by several metrics) have significantly increased during the pandemic, and the bicycle business is experiencing unprecedented demand (Ehsani, et al., 2021).

Particularly surprising is the increase in bicycling in notoriously auto-centric places like the United States. This study aims to understand how the pandemic changed bicycling in places that are hostile to riding a bike. We use crowd-sourced data (from the fitness app, “Strava”) for three years before the COVID-19 pandemic and 18 months following the onset of the pandemic to assess changes in bicycling behavior within the COVID-19 restrictions and after relaxing these restrictions; including the type of travel (leisure or commute) and trip volume in the state of Nebraska in the Midwestern-US, a region typified by auto-oriented development and low rates of bicycling (Grimes, et al., 2019).

First, we examine how stay-at-home requirements impacted when, where, and how much bicycling changed at the onset of the pandemic, using machine learning algorithms. Next, we examine changes in cycling patterns after relaxing COVID-19 restrictions and eventually introducing vaccines, providing insights into the long-term effect of the pandemic on cycling. We find an almost 48% increase in cycling after March, 2020. Also, we find increased recreational cycling and less commuting, and more bicycling throughout the day (rather than primarily at peak-hours).

The pandemic has changed how, when, and why people ride, in this paper – we link these trends to practical approaches to ensuring states and cities meet this new demand. The specifics of how bicycling has changed with the onset of the pandemic have immediate implications for planning for pandemic resilience, but also long-term implications for meeting public demand for infrastructure that supports transportation and recreational bicycling.

Keywords: Bicycling, Pandemic, Active Travel, Crowdsourcing, Machine Learning

### References

Buehler, R., & Pucher, J. (2021). COVID-19 Impacts on Cycling, 2019–2020.

Ehsani, J. P., Michael, J. P., Duren, M. L., Mui, Y., & Porter, K. M. P. (2021). Mobility patterns before, during, and anticipated after the CoViD-19 pandemic: an opportunity to nurture bicycling. *American journal of preventive medicine*, 60(6), e277-e279.

Grimes, A., Chrisman, M., & Lightner, J. Barriers and Motivators of Bicycling by Gender Among Older Adult Bicyclists in the Midwest. *Health Education and Behavior*, 47(1), 67-77.

Hong, J., Mearthur, D. P., & Raturi, V. (2020). Did safe cycling infrastructure still matter during a COVID-19 lockdown?. *Sustainability*, 12, 8672.

85080

## Spatial disparities in environmental exposure during walking: a comparison of mobility- and residential-based approach using mobile phone data

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Pedestrians moving in urban space are exposed to multiple environmental conditions, from healthy to harmful. Research evidence on multiple exposures during active travel and respective social and health implications is limited (Poom et al. 2021). While population registry data can help to identify environmental exposure in residential areas and respective socioeconomic disparities, data on realized mobility behaviour of people enable an analysis of dynamic exposure patterns and related spatial disparities in urban areas (Park, Kwan, 2017; Steinle et al. 2013). A combination of those two approaches provides a more nuanced basis for environmental equity analysis on an urban scale.

We aim to understand pedestrians' exposure to multiple environmental conditions in Helsinki, Finland, both in residential neighbourhoods and in the realized travel environments. By combining exposure measures with registry-based socioeconomic characteristics of residents, we evaluate the presence of environmental disparities between socio-spatial groups.

We use mobile phone data in the form of origin-destination matrices and an in-house developed Green Paths routing software (Helle et al., forthcoming) to provide rich exposure measures for pedestrian trips. We analyse co-exposure to street-level greenery, traffic noise, and air pollution at short, up to 2 km routes suitable for walking, and identify areas with high or low cumulative exposure in pedestrian travel environments.

Our results show that 14% of short trips occur and 7% of residents live in areas with the worst cumulative exposure. At the same time, less than 1% of trips depart from and 3% of residents live in areas with the best cumulative exposure. Despite spatial disparities, our results do not reveal clear socioeconomic disparities in environmental exposures during walking.

Acknowledging population-level exposure patterns in urban travel environments supports evidence-based urban and transport planning to advance urban liveability.

Keywords: environmental exposure, pedestrians, greenery, air pollution, noise, mobile phone data, spatial disparity

### References

Helle, J., Poom, A. Willberg, E.S., Toivonen, T. (2021). The Green Paths route planning software for exposure-optimised travel." OSF Preprints, October 24.  
<https://doi.org/10.31219/osf.io/vxcp3>

Park, Y. M., Kwan, M.-P. (2017). Individual exposure estimates may be erroneous when spatiotemporal variability of air pollution and human mobility are ignored. *Health & Place*, 43, 85–94. <https://doi.org/10.1016/j.healthplace.2016.10.002>

Poom A, Willberg E, Toivonen T (2021). Environmental exposure during travel: A research review and suggestions forward. *Health & Place* 70: 102584. <https://doi.org/10.1016/j.healthplace.2021.102584>

Steinle, S., Reis, S., & Sabel, C. E. (2013). Quantifying human exposure to air pollution-Moving from static monitoring to spatio-temporally resolved personal exposure assessment. *Science of the Total Environment*, 443, 184–193. <https://doi.org/10.1016/j.scitotenv.2012.10.098>

84759

## Urban Mobility Lifestyles, Travel behavior, Perceived Health and Life Satisfaction; The Case Of Turku Region

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In the last couple of decades, attention has been drawn to the measurement of lifestyles and several studies have investigated the influence of lifestyles on travel behavior (e.g. Ramezani et al., 2018; Ramezani et al., 2019). It is well established that travel behavior is not simply determined by price, speed, and comfort but is also related to attitudes, status, and preferences (Van Acker et al., 2016). A number of studies have focused on attitudes towards different modes of transport, travel in general, and the environment as indicators of mobility lifestyles (e.g. Ramezani et al., 2018) while others focus on preferences for neighborhood characteristics (e.g. Aditjandra et al., 2009). Studies that mix travel attitudes with neighborhood preferences to cluster the residents (referred to as persona in this study) are rare. On the other hand, studies that investigate the possible differences in perceived physical health and life satisfaction of different personas are missing. This study attempts to fill these gaps. A survey was conducted in the Turku region using a digital map-based survey tool. A sample of 474 respondents was obtained. Factor analysis and cluster analysis were conducted on the travel attitude and neighborhood preference statements to explore different personas. ANOVA test investigated differences in the life satisfaction and health of these groups. Furthermore, structural equation modeling (SEM) was used to investigate the relationships among the sociodemographic characteristics of these personas living in different urban areas, their travel behavior, and their perceived health and life satisfaction. Four personas, namely pro-sustainable urbanites, multimodal price-conscious, time-conscious suburbanites, and auto-oriented were found. The Pro-sustainable urbanities living in intensive transit zones showed the highest perceived physical health while having the lowest life satisfaction. The auto-oriented living in basic transit/car zone showed the lowest perceived physical health, and time-conscious suburbanites living in basic transit or car zone (i.e. suburban areas) showed the highest perceived life satisfaction. When controlling for the influence of sociodemographic factors, as well as the travel behavior in the SEM, it was found that the auto-oriented have the lowest life satisfaction and physical health. Income showed a very positive influence on life satisfaction. The distance traveled by bike and transit positively influenced the life satisfaction of all groups and even more so for the pro-sustainable urbanites and multimodal price-conscious residents. These findings have some implications for policymakers when attempting to increase social inclusion and physical and mental health in cities. The results emphasize the importance of accessibility to active modes of transportation especially for the less wealthy persona and highlight the possible influence of the neighborhood environment on life satisfaction.

Keywords: Mobility lifestyles, perceived health, life satisfaction, travel behavior, neighborhood preferences, travel attitudes

## References

Aditjandra, P. T., Mulley, C. A., & Nelson, J. D. (2009). Neighborhood design impact on travel behavior: A comparison of US and UK experience. *MIT Journal of Planning*, 9, 29–56

Ramezani, S., Pizzo, B., Deakin, E. (2018). An integrated assessment of factors affecting modal choice, towards a better understanding of the causal effects of built environment. *Transportation*, 45, 1351-1387

Ramezani, S., Laatikainen, T., Hasanzadeh, K., Kytta, M. (2019). Shopping trip mode choice of older adults: an application of activity space and hybrid choice models in understanding the effects of built environment and personal goals. *Transportation*. <https://doi.org/10.1007/s11116-019-10065-z>.

Van Acker, V., Goodwin, P., and Witlox, F. (2016). Key research themes on travel behavior, lifestyle, and sustainable urban mobility. *International Journal of Sustainable Transportation*, 10 (1), 25-32

84429

## How last-mile logistics will shape our cities. A stakeholder perspective on city logistics in Western Europe between 2020 and 2035

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Last-mile logistics are rapidly growing and the transportation of goods fundamentally impacts the functioning of cities, today and in the years to come (LaBlanc, 2007). More and more people are comparing and shopping online, and expect faster and more individualized services at low cost. As a consequence, the retail sector needs to shift business models to cater to this demand: shipping smaller quantities in flexible delivery schemes, posing higher requirements to the system (Quak et al., 2018). Private actors innovate by testing new delivery models, setting up collaborative consolidation centres, and updating operation and business models which include environmental impact considerations.

Hence, while city logistics activities are growing in size, city administrations across Europe intensify their efforts to ensure that this growth evolves in a more sustainable way, amongst others with the development of Sustainable Urban Logistics Plans (CIVITAS, 2015). To inform these policies and guidelines as well as urban logistics practices, there is a need to better understand the potential pathways to a zero-emissions future for city logistics. Gaining insight in the future images of stakeholders is key as it informs strategic decision making within the coalition of actors and this, in turn, increases or decreases the potential actors to anticipate a range of potential futures (Van Dorsser, 2018).

We will present six scenarios for last-mile logistics future pathways, using a Disaggregative Policy Delphi method conducted with an expert panel of 34 logistics stakeholders (local authorities, logistics operators, citizens, business representatives, experts) in three European Lighthouse cities, in Groningen (NL), Mechelen (BE) and Bremen (DE). Moreover, we reflect upon the difficulties local policy makers face in dealing with and adapting to the complex and dynamic nature of the last-mile logistics.

Keywords: Urban logistics, stakeholders, sustainability, scenarios, Disaggregative Policy Delphi, complexity

### References

- Civitas (2015) "Policy note: Smart choices for cities - Making urban freight logistics more sustainable".
- Dablanc, L. (2007). Goods transport in large European cities: Difficult to organize, difficult to modernize. *Transportation Research Part A: Policy and Practice*, 41(3), 280-285.
- Rikkonen & Tapio (2009) Future prospects of alternative agro-based bioenergy use in Finland—Constructing scenarios with quantitative and qualitative Delphi data. *Technological Forecasting and Social Change*
- Van Dorsser, 2018, Improving the link between the futures field and policymaking. *Futures* 104,

75-84

Quak, H., Kok, R., & den Boer, E (2018) The Future of City Logistics—Trends and Developments Leading toward a Smart and Zero- Emission System. *City Logistics 1: New Opportunities and Challenges*, 125-146.

85160

## Negotiating the development of a rural mobility hub using game theory

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Many peripheral areas face high car dependency levels (Pucher & Renne, 2005). In turn, public transport operation is obstructed due to limited and dispersed travel demand, leading to a lack of service availability, indirect routing, and travel inconvenience (Velaga et al., 2012), affecting the liveability in rural areas – sometimes coined as transport poverty. To improve service efficiency, alleviate liveability, and consolidate inclusive accessibility, regional policies increasingly introduce mobility hubs that link fixed public transit (e.g. bus rapid transit) to feeder transport (e.g. shared modes or demand-responsive transit). However, the hub concept inevitably implies additional transfers, larger catchment areas per stop, and thus increased travel times and distances to and from the hub. With this, coordination between stakeholders within the trip chain is inevitable to provide the user with an integrated offer. To alleviate mobility hub planning in rural areas this paper aims to analyse the negotiation process between stakeholders in low-dense contexts.

To this end, we apply a game-theoretical experiment to test the stakeholder preferences regarding potential strategies they can pursue within the context of hub development. Using the Fuzzy Delphi Method (FDM) (Cheng, 2004; Zadeh, 1965), we aim to reach a reliable consensus on players' preferences while respecting the vagueness and subjectivity inherent to human responses. Respondents to the survey represent public transport companies, bicycle-sharing providers, carsharing providers, and asset owners involved with hub developments in The Netherlands. Players get assigned a strategy set that improves a hypothetical mobility hub, and for each confrontation with another player's strategy, they indicate their expected utility. Finally, we apply multiple solution concepts to the aggregated outcomes of the game to identify promising strategies in developing a rural hub.

The results provide insights into multi-actor cooperation strategies for mobility hub development in areas with limited and dispersed demand. Spatial policies can benefit from these insights regarding the implementation and prioritisation of policies (dis)incentivising the strategic outcomes discovered in the experiment. Finally, we analyse how non-cooperative game theory can aid the cooperation between key stakeholders in peripheral regions where the potential of a positive return on investment is limited.

Keywords: rural accessibility; mobility hubs; stakeholder collaboration; Fuzzy Delphi

### References

- Cheng, C.-B. (2004). Group opinion aggregation based on a grading process: A method for constructing triangular fuzzy numbers. *Computers & Mathematics with Applications*, 48(10–11), 1619–1632. <https://doi.org/10.1016/j.camwa.2004.03.008>
- Pucher, J., & Renne, J. L. (2005). Rural mobility and mode choice: Evidence from the 2001 National Household Travel Survey. *Transportation*, 32(2), 165–186.

<https://doi.org/10.1007/s11116-004-5508-3>

• Velaga, N., Nelson, J., Wright, S., & Farrington, J. (2012). The Potential Role of Flexible Transport Services in Enhancing Rural Public Transport Provision. *Journal of Public Transportation*, 15(1), 111–131. <https://doi.org/10.5038/2375-0901.15.1.7>

• Zadeh, L. A. (1965). Fuzzy sets. *Information and Control*, 8(3), 338–353.

[https://doi.org/10.1016/S0019-9958\(65\)90241-X](https://doi.org/10.1016/S0019-9958(65)90241-X)

84863

## (No) Drivers For Change – Crises As A Disruption Of Urban Mobility?

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Urban mobility in its current form accounts for a large share of global CO<sub>2</sub> emissions and thus is an important driver of the climate crisis (UNEP, 2017; Martin, Pestiaux, Schobbens, Emmrich, & Hagemann, 2020). But not only is it harmful to the environment as well as to population and individual health, it also is highly unjust. A disproportionate amount of space is dedicated to motorized traffic – a mode of transport that isn't accessible for everyone and that at the same time is particularly damaging, whereby the costs of environmental damage must be borne by all (Frey, Burger, Dziekan, Bunge & Lünenbürger, 2020). Thus, calls for the transformation of urban mobility towards a more just allocation and therefore redistribution of public space as well as towards more environmentally friendly forms of transport have been growing louder. In this context, crises such as the Covid-19 pandemic with the accompanying disruption of the everyday may present an opportunity for the longer-term transformation of human mobility necessary both for just, resilient cities and to address the climate crisis (Marsden & Docherty, 2021; Law, Azzali, & Conejos, 2021). The present study is part of the project “Transformative Mobility Experiments (TrEx)” within the Munich Cluster for the Future of Mobility in Metropolitan Regions and is funded by the German Federal Ministry of Education and Research (BMBF). A total of 3 rounds of focus group interviews with 12 experts each will be carried out in the urban area of Munich, Germany. It will be investigated what opportunities and challenges disruptive interventions like pop-up bike lanes or travel restrictions that have been implemented during the Covid-19 pandemic presented and what impact they had on people's mobility. The spotlight will be on factors such as the (perceived) justness and democratic legitimacy of these interventions, attitudes towards their temporality or permanence, and adaptability beyond the pandemic. The results will provide information about existing expert knowledge on possible disruptions of mobility in the context of a global pandemic. The study will help to understand ways in which crises like a global pandemic can (and cannot) be an agent for systemic change in the mobility sector. (Note: At the time of abstract submission, the work is still ongoing. However, it will be completed before the conference.)

Keywords: Crisis, urban, mobility, disruption, Covid-19

### References

- Frey, K., Burger, A., Dziekan, K., Bunge, C., & Lünenbürger, B. (2020). Verkehrswende für ALLE: So erreichen wir eine sozial gerechtere und umweltverträglichere Mobilität [Changing traffic for ALL: This is how we achieve a more socially just and environmentally compatible mobility]. Retrieved from [https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/2020\\_pp\\_verkehrswende\\_fuer\\_alle\\_bf\\_02.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/2020_pp_verkehrswende_fuer_alle_bf_02.pdf)
- Law, L., Azzali, S., & Conejos, S. (2021). Planning for the temporary: Temporary urbanism and public space in a time of COVID-19. *Town Planning Review*, 92(1), 65-73.

<https://doi.org/10.3828/tpr.2020.48>

Marsden, G., & Docherty, I. (2021). Mega-disruptions and policy change: Lessons from the mobility sector in response to the Covid-19 pandemic in the UK. *Transport Policy*, 110, 86-97.

<https://doi.org/10.1016/j.tranpol.2021.05.015>

Martin, B., Pestiaux, J., Schobbens, Q., Emmrich, J., & Hagemann, M. (2020). A radical transformation of mobility in Europe: Exploring the decarbonisation of the transport sector by 2040: Explorative scenario and related policy packages. Retrieved from

[https://newclimate.org/wp-](https://newclimate.org/wp-content/uploads/2020/09/TransportRoadmap_Report_September2020.pdf)

[content/uploads/2020/09/TransportRoadmap\\_Report\\_September2020.pdf](https://newclimate.org/wp-content/uploads/2020/09/TransportRoadmap_Report_September2020.pdf)

UNEP (2017). Cities and climate change. Retrieved from <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/cities/cities-and-climate-change>

85244

## Transit-Activated Corridors and Zero-Carbon Cities: Learning from the experience of pioneers

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In the context of the need to rapidly decarbonise in order to address the global climate crisis, cities are challenged to embrace and enable new templates of growing and transforming their urban form and its resulting mobility patterns. One of the most frequently cited such templates is the intensification of urban corridors along existing or new medium-capacity public transport infrastructure. These represent both a spatial expansion of earlier concepts of Transit Oriented Development (TOD) that focussed on specific station precincts rather than a network of corridors, and a quest for accelerating the transition by relying more on medium-capacity public transport modes (light rail, bus rapid transit and hybrids of the two) that are cheaper and faster to build than high-capacity heavy rail.

However, planning and implementing such intensification corridors anchored around medium-capacity transit (also referred to as ‘transit-activated corridors’ or ‘tram-based boulevards’) has often been subject to setbacks in practice. These setbacks are associated with several factors. Stakeholders may have different, sometimes competing interpretations concerning the character of the land use-transport package pursued by policy settings. The choice of public transport mode to service the intensification corridors may prioritise lobbying interests, path dependency or political expediency over following a logic of optimising the interplay of urban form and transport infrastructures. Imbalances between visionary and technical elements of the favoured transition may undermine effective policy communication. Controversies over such factors can impact on the success (or not) of urban intensification programs, on the performance and longevity of transport solutions, and have the potential to significantly delay components of the urban transition.

Alongside examples from Finland, Sweden, France and Australia, this paper will attempt to categorise such ‘pitfalls’ in the delivery of less carbon-intensive urban form and movement templates, and highlight how jurisdictions embarking on transformative strategies of urban intensification along tram-based boulevards can learn from such experiences in order to minimise the associated decision-making friction and implementation delays. Emphasising the need for recognition of the inherent synergies between transport and land use settings, we conclude by outlining the importance of decision makers proactively identifying and critically appraising specific opportunities for change, concerning funding, technology, public opinion, stakeholder alliances or market dynamics, and capitalising on them at suitable moments in time.

Keywords: Transit oriented development (TOD), Transit activated corridors (TAC), urban intensification, medium-capacity transit, zero-carbon cities

## References

- Bertolini L (2017) *Planning the Mobile Metropolis. Transport for People, Places and the Planet.* Palgrave Macmillan, London, UK
- Curtis C (2012) Delivering the 'D' in Transit-oriented Development: Examining the Town Planning Challenge. *Journal of Transport and Land Use*, Vol 5, No 3, pp 83-99
- Granqvist K, Sarjamo S, Mäntysalo R (2019) Polycentricity as spatial imaginary: the case of Helsinki City Plan. *European Planning Studies*, Vol 27, No 4, pp 739-758
- Hrelja R, Olsson L, Pettersson-Löfstedt F, Rye T (2020) *Transit-Oriented Development (TOD): A literature review.* K2 Research, Lund, Sweden
- Lavadinho S, Lensel B (2018) L'effet tram est-il possible sans tram? Quelques éclairages à partir de cas d'étude étrangers. In Gardon S (ed) *Quarante ans de tramways en France.* Éditions Libel, Lyon, pp 425-440
- Newman P, Davies-Slate S, Conley D, Hargroves K, Mouritz M (2021) From TOD to TAC: Why and How Transport and Urban Policy Needs to Shift to Regenerating Main Road Corridors with New Transit Systems, *Urban Science*, Vol 5, No 3, Art 52
- Newman P, Kosonen L, Kenworthy J (2016) Theory of urban fabrics: Planning the walking, transit/public transport and automobile/motor car cities for reduced car dependency. *Town Planning Review*, Vol 87, No 4, pp 429-458

84903

## Travel-related neighborhood characteristics and attitudes as a motive for relocation and residential choice

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There is an ongoing debate about whether travel behavior is predominantly determined by the urban structure or by personal attitudes (Mokhtarian and Cao 2008). First of all, an influence of the spatial structure of neighborhoods on the residential location choice could be found in previous studies (Kroesen 2019). If residents already live in a neighborhood with insufficient travel opportunities, they either adapt their travel behavior or relocate to a different neighborhood (Vos et al. 2012; Vos et al. 2018; Guan et al. 2020). We examine the occurrence of relocations motivated by this kind of travel-related dissatisfaction through statistical analysis of a unique dataset of households planning to move.

We conduct a panel survey of residents in several German cities that are looking for a new place to live, questioning them before and after their relocation. Included in the survey are, among others, the satisfaction with the current neighborhood, demands regarding the new neighborhood, mobility-related attitudes, car ownership and characteristics of regular trips. The reason for the relocation that is determined in the survey as well allows deducting whether there are moves specifically caused by the dissatisfaction with the current neighborhood. A broad range of spatial structures and transport options is covered by the selected neighborhoods, as established through accompanying GIS analysis.

The presentation deals with the results of the survey before relocation. A statistical evaluation allows us to determine the influence of mobility-related factors on plans of moving. We compare the fit of travel attitudes and neighborhood characteristics among those that name neighborhood-related reasons for their relocation to those of all other households looking for a new place to live. The findings can give an indication of the influence of neighborhood characteristics and the offered modes of transport on the decision to relocate and therefore shed light on the relationship between the spatial structure of neighborhoods, daily travel behavior and attitudes and residential location choice.

Keywords: travel behavior, residential location choice, travel attitudes, statistical evaluation

### References

Guan, Xiaodong; Wang, Donggen; Jason Cao, Xinyu (2020): The role of residential self-selection in land use-travel research: a review of recent findings. In: *Transport Reviews* 40 (3), pp. 267–287. DOI: 10.1080/01441647.2019.1692965.

Kroesen, Maarten (2019): Residential self-selection and the reverse causation hypothesis: Assessing the endogeneity of stated reasons for residential choice. In: *Travel Behaviour and Society* 16, pp. 108–117. DOI: 10.1016/j.tbs.2019.05.002.

Mokhtarian, Patricia L.; Cao, Xinyu (2008): Examining the impacts of residential self-selection on travel behavior: A focus on methodologies. In: *Transportation Research Part B: Methodological* 42 (3), pp. 204–228. DOI: 10.1016/j.trb.2007.07.006.

Vos, Jonas de; Derudder, Ben; van Acker, Veronique; Witlox, Frank (2012): Reducing car use: changing attitudes or relocating? The influence of residential dissonance on travel behavior. In: *Journal of Transport Geography* 22, pp. 1–9. DOI: 10.1016/j.jtrangeo.2011.11.005.

Vos, Jonas de; Ettema, Dick; Witlox, Frank (2018): Changing travel behaviour and attitudes following a residential relocation. In: *Journal of Transport Geography* 73, pp. 131–147.

84955

## Contributing to more just cities with living labs? - An investigation of decision processes

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So far, the changes in mobility - mainly technological, like e-mobility - have not initiated the transition towards an ecologically and socially sustainable development of city quarters in Munich. The project “Car-reduced quarters for a more livable city” (AQT) is part of the Munich Cluster for the Future of Mobility in Metropolitan Regions and is funded by the German Federal Ministry of Education and Research (BMBF). The aim is to increase acceptance and use of multimodal transport options, to significantly reduce individual car ownership and use. Consequently, to enhance the quality of life in a more just city as well as the improvement of health and well-being.

Living labs create the opportunity to observe the transformation process and serve as a research framework to examine push- and pull- factors.

Providing the maximum of transparency in the decision process of location of living labs supports transferability and scalability. The authors aim to show their approach for this decision-making process to generate comparable and transferable insights. Thus, using quantitative data is crucial within a defined frame of geographical location. Quantitative data includes road space reallocation, travel demand and social milieus stemming from MiD, annual statistical report of Munich and sinus milieus. Qualitative data, such as the political mindset of district boards, will complete the research.

The study contribution invites researchers working with living labs to discuss and share decision making processes in order to create a framework for choosing neighborhoods that can be used by other executors of similar urban living labs.

The authors want to discuss, how this approach facilitates the comparison of the processes of different labs and thereby helps to acknowledge their contribution to a more just and participatory planning process. (Note: At the time of abstract submission, the work is still ongoing. However, it will be completed before the conference.)

Keywords: living lab, decision making, just city, transformation, urban mobility

### References

- Nevens, F., Frantzeskaki, N., Gorissen, L., & Loorbach, D. (2013). Urban Transition Labs: Co-creating transformative action for sustainable cities. *Journal of Cleaner Production*, 50, 111–122. <https://doi.org/10.1016/j.jclepro.2012.12.001>
- infas, DLR, IVT und infas 360 (2020): *Mobilität in Deutschland* (im Auftrag des BMVI)
- Statistisches Amt der Landeshauptstadt München, *Statistische Jahrbuch 2021*
- Schaufler, C., & Staffa, A. (2021). *Consolidation milestones* [WorkingPaper]. Stuttgart : Reallabor für nachhaltige Mobilitätskultur - Future City Lab. <http://elib.uni-stuttgart.de/handle/11682/11776>

84251

## Socio-spatial determinants of mobility inequality: A big-data analysis of 500 U.S. cities.

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Prior studies have found that higher-income households travel more often and to farther destinations than lower-income households in the U.S. These “mobility gaps” have so far been highlighted at the national scale and tied to both transportation budget differentials and location affordability. However, the determinants of mobility gaps between the higher and lower socioeconomic groups are not well-examined. In this study, we extend the literature on socio-economic mobility inequality by exploring whether and how differences in mobility patterns between residents of the most and the least privileged locations vary across individual cities. Using smartphone records of mobility flows from the 500 largest U.S. cities, we categorize Census Block Groups (CBGs) according to a city-specific socio-economic index (SEI) and examine travel frequency and travel distances between the highest and lowest quintile SEI CBGs in each city. In a first step towards explaining these differences, we examine the extent to which inter-city mobility gaps can be explained by the social, spatial, and economic factors that differentiate cities. This study is unique in examining mobility gaps between a large number of U.S. cities and in exploring the role of the built environment in contributing to mobility (in)equality.

Keywords: mobility inequality; big data; US cities; built environment; smartphone location; SafeGraph.

### References

Agrawal, A. W., Blumenberg, E. A., Abel, S., Pierce, G., & Darrah, C. N. (2011). Getting around when you're just getting by: the travel behavior and transportation expenditures of low-income adults (No. CA-MTI-10-2806). Mineta Transportation Institute.

Williams, D. R., & Collins, C. (2016). Racial residential segregation: a fundamental cause of racial disparities in health. *Public health reports*.

Chetty, R., Hendren, N. & Katz, L. F. The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment. *Am. Econ. Rev.* 106, 855–902 (2016).

Lucas, K. (2012). Transport and social exclusion: Where are we now?. *Transport policy*, 20, 105-113.

84460

## Fares were just impossible: Geography and rationale of fare-free public transport in Poland

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Fares are considered a crucial tool to control public transport ridership (McCollom & Pratt, 2004), which is essential, giving the role of public transport on the sustainable development agenda. Fare-free public transport (FFPT) is in that light seen as a controversial policy staying at the periphery of the transport debate. Although minor, the FFPT is gaining momentum globally (Kęłowski, 2019), with Poland being among the leaders giving the scale of FFPT cases (Štraub, 2019). Besides the environmental justification of the FFPT adoption, fare abolition can positively impact disadvantaged social groups by improving their capability to move and increase their social inclusion (Cats et al., 2014). By implementing a mixed-method approach, this study authors identified and examined more than 80 various Polish municipalities which do experiment or have ever been with the fare-free public transport policy. Firstly, an internet search and scan of various media sources were done to identify the FFPT cases. Secondly, this was followed by distributing a survey questionnaire to verify the FFPT existence and obtain additional information about the FFPT. Thirdly, in-depth interviews in selected FFPT cases with public authorities were conducted to get a complex picture of the phenomenon. This study presents the new trend in transport policy in various municipalities across Poland in the last two decades, which is not recognised by the national policies. Classification of cases and identifications of clusters show various municipalities in terms of size and socio-economic development, allowing authors to draw generalisations regarding where and why the fare abolition is taking place. Also, it seeks to unpack the main problems (technical, social, political) encountered along the way and how the benefits of this service for the community are assessed. In locations such as hinterlands of main economic centres, the FFPT is a part of a broader urban development strategy allowing effective integration in the given region. In peripheral localities is the FFPT adoption an act of necessity stemming from the lack of poor (if any) public transport. In those cases, making public transport free of charge makes public transport more attractive and improves the welfare of the residents, but more importantly, it is the only option from the economic standpoint, as the implementation of the fares would make the public transport operation too costly to run and use. A better understanding of FFPT implementation can shed light on a new way of organising urban and rural mobility in the future.

Keywords: fare-free public transport; public transport; transport policy; transport justice; urban mobility, Poland

### References

Cats, O., Reimal, T., & Susilo, Y. (2014). Public transport pricing policy: Empirical evidence from a fare-free scheme in Tallinn, Estonia. *Transportation Research Record: Journal of the Transportation Research Board*, 2415(1), 89–96. <https://doi.org/10.3141/2415-10>

Kębłowski, W. (2019). Why (not) abolish fares? Exploring the global geography of fare-free public transport. *Transportation*, 47. <https://doi.org/10.1007/s11116-019-09986-6>

McCollom, B., & Pratt, R. (2004). Transit Pricing and Fares - Traveler Response to Transportation System Changes. Transportation Research Board. <https://www.worldtransitresearch.info/research/3054/>

Štraub, D. (2019). Riding without a ticket: geography of free fare public transport policy in Poland. *Urban Development Issues*, 64(1), 17–27. <https://doi.org/10.2478/udi-2019-0020>

84880

## A “Bike System for All” in Silicon Valley: A Data-Driven Analysis of the Factors that Lead to Success

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San José, California—the capital of Silicon Valley and one of the most diverse cities in the U.S.—has the potential to be a cyclist’s paradise. However, despite a bike-friendly climate and topography, the average resident wastes 81 hours annually commuting by car, representing a \$2.7B loss in productivity for the region according to the 2019 Silicon Valley Index. In 2020, San José launched the Better Bike Plan 2025 with the goal to become “one of the most bike-friendly communities in North America.” This new plan builds on the City’s first bike plan adopted in 2009, and envisions a 557-mile network of all-ages-and-abilities bikeways that will support a 20% bicycle mode split by 2050. Through advanced mapping and modeling, this research evaluates the factors that contribute to a city-wide bike network that is truly “built for all.” The evaluation approach follows three steps. First, using a granular bike network dataset and residents’ socioeconomic (SES) characteristics in the vicinity of the network, we assess whether and to what extent San José has succeeded in achieving an equitable infrastructure distribution. Second, using resident and cyclists’ SES characteristics, we assess whether the availability of infrastructure alone could attract riders from underserved communities. Finally, we combine datasets on cyclists’ SES attributes, bikeway classes with different street designs, built environment factors e.g. trails and safety features, and other factors to quantify their impact on increasing the share of cyclists from underserved communities and provide empirical evidence for building a system that works for all.

Keywords: Micromobility, Bikeability, Bike,

### References

Dill, J., & Carr, T. (2003). Bicycle commuting and facilities in major US cities: if you build them, commuters will use them. *Transportation research record*, 1828(1), 116-123.

Pucher, J., Dill, J., & Handy, S. (2010). Infrastructure, programs, and policies to increase bicycling: an international review. *Preventive medicine*, 50, S106-S125.

Pierson, H. (2020). *Equity-Driven Outreach for Bicycle Planning and Beyond: Let’s Bike Oakland as a Case Study* (Doctoral dissertation, Columbia University).

City of San Jose (2020). San Jos Better Bike Plan 2025 Map. Retrieved March 19, 2020, from

City of San Jose. (2020a). City of San Jose Vision Zero Action Plan. City of San Jose.

City of San Jose. (2020b). Envision San Jose 2040 General Plan. City of San Jose.

85279

## If, where, and whom: A socio-spatial analysis of transport poverty in the Netherlands

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A growing body of work on understanding transport disadvantaged or those who experience transport poverty exists (Dotter, 2016; Lucas, 2012; Kenyons et al., 2002). However, the existence of transport poverty in the Netherlands is debated and doubted (van der Bijl, 2020; Kerssies, 2019). Testing the concepts of transport-related social exclusion, transport and mobility justice (Verlinghieri and Schwanen, 2020); this paper aims to identify and discuss if and where transport poverty occurs and who is most affected. Transport poverty is identified through anomaly detection analysis of the annual travel survey data from the Netherlands (ODiN). Trips that are disproportionately longer than the average trip chain distance per motive within similar levels of urbanity at point of origin are selected and categorised. These trips are then compared according to the following demographic variables of age, gender, migration background, educational level, social participation and household income levels. The comparison allows for the reconstruction of user-profiles most impacted by transport poverty conditions. Findings indicate that despite the national average trip chain distance being 1 to 2.5 km, there are four identifiable typologies of transport poverty whereby the trip chains are 10 to 16 times longer than that, depending on the motive for the trip taken. Commuters from small rural settlements and average to large highly urban settlements are subjected to extreme trip distances to reach their place of work. As expected, inhabitants of small rural settlements tend to take longer than average trips to access education and personal services. Lastly, inhabitants of very small settlements with low to rural levels of urbanity seem to be most affected and experience these disproportionate distances to reach employment, education and personal services facilities. These last two typologies affect various age groups and socioeconomic statuses. This variety contradicts conventional understandings of transport poverty, only affecting those with lower socioeconomic status. The proposed approach allows for a more nuanced understanding of transport poverty, where it occurs, and who it affects. The findings can aid in more customised and evidence-based policies to address gaps in accessibility.

Keywords: Mobility justice, Mobility user profiles, Netherlands, Transport poverty, Transport justice

### References

- van der Bijl, R.A. J. (2020). "Transport poverty scrutinised by mobility thresholds" in B. Boonstra, Boelens L., Davids P., Staessen A. (eds.), *Opening up the Planning Landscape – 15 years of Actor-relational Approaches to Spatial Planning in Flanders, the Netherlands and Beyond*, InPlanning, Groningen, pp.159-171. Available via: <https://favas.net/wp-content/uploads/2019/05/RVDB-AMRPbook-transportpoverty-final-sept20.pdf> [Last accessed: 1 Mar 2021]
- Dotter, F. (2016) *Transport Poverty*, CIVITAS Thematic Policy Note October 2016, CIVITAS.

Available via: [https://civitas.eu/sites/default/files/civitas\\_policy\\_note\\_transport\\_poverty.pdf](https://civitas.eu/sites/default/files/civitas_policy_note_transport_poverty.pdf)  
[Last accessed: 1 Mar 2021]

Verlinghieri E and Schwanen T (2020) Transport and mobility justice: Evolving discussions. *Journal of Transport Geography* 87: 102798. DOI: 10.1016/j.jtrangeo.2020.102798.

Kenyon, S., Lyons, G. and Rafferty, J. (2002) “Transport and Social Exclusion: Investigating the Possibility of Promoting Inclusion through Virtual Mobility,” *Journal of Transport Geography*, 10(3), pp. 207–219. doi: 10.1016/S0966-6923(02)00012-1.

Kerssies, J. W. (2019). “Vervoersarmoede in achterstandswijken G4” in *OV Magazine*, 1 February 2019, Available via: <https://www.ovmagazine.nl/2019/02/vervoersarmoede-in-g4-is-ontluisterend-1511/> [Last accessed: 1 Mar 2021]

Lucas, K. (2012) “Transport and Social Exclusion: Where Are We Now?,” *Transport Policy*, 20, pp. 105–113. doi: 10.1016/j.tranpol.2012.01.013.

85239

## Evaluating local criteria for implementing Dynamic Road Space Allocation

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Urban space is a disputed space where transport facilities use a considerable amount, including roads, parking, bicycle lanes, and sidewalks. Nonetheless, urban road space is often idling in many times of the day. For example, avenues are usually congested in peak hours but often underutilized in off-peak hours. Similarly, on-street parking in residential areas is very used overnight but underutilized during the day when residents leave to work. In this context, we propose allocating underutilized spaces for different functions over time to promote more efficient and sustainable use of public space. We denominate dynamic road space allocation as an urban design concept that reallocates road space (from facade to facade) according to current and future multi-modal and multi-functional potential uses of the urban road space in pre-established time gaps (e.g., peak hour and non-peak hour). Dynamic road space allocation's primary goal is to contest the car's space (traffic lanes and parking) in hours where it is underutilized. Also, peak hour dynamic reallocation of road space could be executed to promote more sustainable mobility, even if it may lead to higher delays for the automobile. In previous work, we propose a methodology for selecting appropriate zones for implementing dynamic road space allocation. However, the proposed methodology is a macro approach to the territory and does not consider local characteristics, built environment restrictions, and socio-cultural aspects. In this direction, this paper aims to determine and weigh the criteria for choosing the appropriate streets for dynamic road space allocation of the selected zones according to different solutions. We opted to perform a focus group with members of academia, municipality, and public and private transport operators of Lisbon. We chose this method since it helps identify criteria for new policies by generating new ideas and weighting criteria. The focus group was essential to select the criteria for site selection and the local characteristics that could be requirements to implementing dynamic road space allocation.

Keywords: urban design, dynamic road space allocation, focus group, sustainable mobility, access

### References

S. Gössling, "Urban transport justice," *J. Transp. Geogr.*, vol. 54, pp. 1–9, 2016, doi: 10.1016/j.jtrangeo.2016.05.002

S. Gössling, M. Schröder, P. Späth, and T. Freytag, "Urban Space Distribution and Sustainable Transport," *Transp. Rev.*, vol. 36, no. 5, pp. 659–679, 2016, doi: 10.1080/01441647.2016.1147101.

K. C. von Schönfeld and L. Bertolini, "Urban streets: Epitomes of planning challenges and opportunities at the interface of public space and mobility," *Cities*, vol. 68, pp. 48–55, Aug. 2017, doi: 10.1016/j.cities.2017.04.012.

G. Valença, F. Moura, and A. Morais de Sá, "Main challenges and opportunities to dynamic road space allocation: From static to dynamic urban designs," *J. Urban Mobil.*, vol. 1, no. 100008, 2021, doi: 10.1016/j.urbmob.2021.100008.

G. Valença, F. Moura, and A. Morais de Sá, "Using network centrality and land-use indicators to define candidate zones for Dynamic Road Space Allocation," in Poster presented at the 101th Transportation Research Board (TRB), 2022.

84241

## A car as a luxury good or a necessity? Actual and perceived car dependence: a case study in Ghent (Belgium).

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Car dependence of individuals may be composed of two elements: the absolute need for a car, and the perception of reliance on a car. As Farrington et al. (1998) argued, in the case of structural car dependence there is absolutely no reasonable alternative for the car available. In the case of conscious dependence, alternative transport modes are present but are not actively considered (Farrington et al., 1998). Lucas (2009) labelled this distinction as perceived versus actual car dependence. By means of focus group research, we aim to disentangle the thin line between the two. We use the city of Ghent as a case study, as in recent years the city implemented car restrictive measurements and invested strongly in bicycle infrastructure. We discuss how car drivers differentiate between essential and convenient car trips, for which destinations they consider alternative modes feasible, and what arguments they develop to legitimate excessive car use. In our suggestions for mobility and urban planning policy, we pay specific attention to equity concerns. What policy measures are more suited to tackle excessive car use and how can we reduce the number of captive car users?

Keywords: car dependence; excessive car use; captive car use; focus group; Ghent

### References

Farrington, J., Gray, D., Martin, S. and Roberts, D. (1998) Car Dependence in Rural Scotland. Development Department Research Programme Research Findings No. 53. Edinburgh: The Scottish Office.

Lucas, K. (2009), Actual and Perceived Car Dependence: Likely Implications of Enforced Reductions in Car Use for Livelihoods, Lifestyles and Well-being, *Journal of the Transportation Research Board*.

Mattioli, G., Anable, J., & Vrotsou, K. (2016). Car dependent practices: Findings from a sequence pattern mining study of UK time use data. *Transportation Research Part A: Policy and Practice*, 89, 56–72.

von Behren, S., Minster, C., Esch, J., Hunecke, M., Vortisch, P., & Chlond, B. (2018). Assessing car dependence: Development of a comprehensive survey approach based on the concept of a travel skeleton. *Transportation Research Procedia*, 32, 607–616.

Wiersma, J. K. (2020). Commuting patterns and car dependency in urban regions. *Journal of Transport Geography*, 84, 102700.

84795

## COVID-19: Survey of European Transport Providers and their Financial Experience

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The Covid-19 pandemic has taken an enormous financial toll on public transport systems' ridership and financial stability. This paper provides a comparison of transport providers across Europe, identifying how different governance methods facilitate or hinder their resilience during a disruption, and their ability to recover expeditiously. We combine a survey among 17 metropolitan transport agencies, and an additional analysis of financial documents from selected agencies dependent on distinctively different funding methods—fare-based, local funding, regional funding, and national or state-level funding. We find that many agencies did receive emergency national support; however subsidies without structure or direction can deprive transport providers of the ability to plan their recovery—only allowing them to plan their short term survival, and making it difficult to plan for efficient use of resources. This paper develops a typology to structure decision making, based on transit agency management type, and offers solutions that may support financial resilience under each governance type, based on experiences at European transport agencies. We identify policy solutions being tried in different European metro regions, and their outlook for the future. We provide a discussion of what additional research is needed to understand the full impact of the current pandemic, as it comes into focus. Finally, we identify a range of solutions that could feed the conversation on how to optimize the resilience of transit governance systems toward future crises.

Keywords: COVID, Transport, Financial Resilience

### References

Anessi-Pessina, E., Barbera, C., Langella, C., Manes-Rossi, F., Sancino, A., Sicilia, M., & Steccolini, I. (2020). Reconsidering public budgeting after the COVID-19 outbreak: key lessons and future challenges. *Journal of Public Budgeting, Accounting & Financial Management*.

Barbera, C., Jones, M., Korac, S., Saliterer, I., & Steccolini, I. (2017). Governmental financial resilience under austerity in Austria, England and Italy: how do local governments cope with financial shocks?. *Public Administration*, 95(3), 670-697.

Barbera, C., Jones, M., Korac, S., Saliterer, I., & Steccolini, I. (2021). Local government strategies in the face of shocks and crises: the role of anticipatory capacities and financial vulnerability. *International Review of Administrative Sciences*, 87(1), 154-170.

Hörcher, D., Singh, R., & Graham, D. J. (2020). Social Distancing in Public Transport: Mobilising New Technologies for Demand Management under the COVID-19 Crisis. Available at SSRN: <https://ssrn.com/abstract=3713518> or <http://dx.doi.org/10.2139/ssrn.3713518>

Marsden, G., & Docherty, I. (2013). Insights on disruptions as opportunities for transport policy change. *Transportation research part A: policy and practice*, 51, 46-55.

Meyer, A. D. (1982). Adapting to environmental jolts. *Administrative science quarterly*, 515-537.

Shutters, S. T., Kandala, S. S., Wei, F., & Kinzig, A. P. (2021). Resilience of Urban Economic Structures Following the Great Recession. *Sustainability*, 13(4), 2374.

Steccolini, I., Jones, M. D. S., & Saliterer, I. (Eds.). (2017). *Governmental financial resilience: International perspectives on how local governments face austerity*. Emerald Group Publishing.

85053

## Operationalising just sustainability: a comparative analysis of justice discourses around low emission zones in London and Brussels

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The increasing evidence base and public concern on the health effects of exposure to air pollution, combined with stricter environmental legislation, are forcing local governments to take drastic measures. Although air pollution has often been framed as an apolitical ‘technical’ issue that can be solved through technological intervention, drawing on universal values or scientific knowledge with respect to liveability and public health, notions of equity and justice have increasingly become part of the public and policy debate. This becomes evident when looking at a popular policy instrument in Europe, the low emission zone (LEZ), which wants to improve air quality in city centres by banning the most polluting vehicles based on their emission standard. In various cities LEZs have proven highly contentious, with heated debates focusing on their effectiveness, desirability, and fairness. While supporters think it is a fair “polluter pays” instrument, benefiting more deprived communities that are more exposed but contribute less to air pollution, critical perspectives have implicated LEZs in unevenly constraining spatial accessibility and placing disproportional financial burdens on disadvantaged socio-economic groups. In this presentation I use low emission zones as an exemplary case to shed further light on the inclusion of social justice concerns in the broader discourse on urban sustainability. Through more than 30 semi-structured interviews with policymakers and stakeholders in London and Brussels, two European capitals that have implemented a LEZ, I critically analyse the interpretation and mobilisation of interconnected environmental and transport justice concerns. I uncover how different forms and notions of justice are operationalised, and which role justice concerns play in policymaking and contestation. The analysis shows the relative, cultural, political, and place-bound nature of justice, and the implicit and often convenient spatial and temporal delineation of the “community of justice”. I argue that by recognizing different valid interpretations of justice and fairness, making more room for democratic debate on normative values underpinning policies, and balancing restrictive measures, incentives and support appropriately, greater stakeholder agreement and public acceptability can be reached, which is vital to realise just transitions in the future.

Keywords: environmental justice, transport justice, just sustainability, just transition, air quality management, low emission zones

### References

Agyeman, J. (2013). *Introducing Just Sustainabilities: Policy, Planning, and Practice*. London: Zed Books.

Charleux, L. (2014). Contingencies of environmental justice: the case of individual mobility and Grenoble’s Low-Emission Zone. *Urban Geography*, 35(2), 197-218.

<https://doi.org/10.1080/02723638.2013.867670>

Dietz, S., & Atkinson, G. (2005). Public perceptions of equity in environmental policy: Traffic emissions policy in an English urban area. *Local Environment*, 10(4), 445-459. <https://doi.org/10.1080/13549830500160982>

Grossmann, K., Connolly, J. J. T., Dereniowska, M., Mattioli, G., Nitschke, L., Thomas, N., & Varo, A. (2021). From sustainable development to social-ecological justice: Addressing taboos and naturalizations in order to shift perspective. *Environment and Planning E: Nature and Space*, 25148486211029427. <https://doi.org/10.1177/25148486211029427>

Martens, K., & Lucas, K. (2018). Perspectives on transport and social justice. In G. Craig (Ed.), *Handbook on Global Social Justice* (pp. 351-370). Edward Elgar Publishing.

Mattioli, G. (2016). Transport needs in a climate-constrained world. A novel framework to reconcile social and environmental sustainability in transport. *Energy Research & Social Science*, 18, 118-128. <https://doi.org/https://doi.org/10.1016/j.erss.2016.03.025>

Schlosberg, D. (2009). *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford: Oxford University Press.

Walker, G. (2012). *Environmental justice: concepts, evidence and politics*. London: Routledge.

84483

## What do citizens want from railway stations? Insights from a survey experiment

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The spatial development of city regions is highly interlinked with the transformation of the transportation network. Thereby, railway stations both serve as important nodes for transportation networks as well as important places for the urban fabric. There is a current trend in developing railway stations towards so-called mobility hubs with the goal foster rail-based traffic and intermodal mobility. The potential of mobility hubs seems to be especially high in secondary or suburban railway stations because of their potential to relieve central stations. However, we only know little about what the local population and thus its primary users expect from the development of such mobility hubs. This paper thus aims to find what demands residents have on the current and future development of railway stations in order to be able to provide indications for a successful transformation process. To examine the demands from the residents is important because such stations are more than an accumulation of technical infrastructure as they are part of larger socio-technical systems. Our research design is built around an online survey experiment among 2100 respondents in the perimeter of the three secondary Swiss railway stations. Based on the existing literature on the functions of railway stations, we identified four primary railway station functions: public transport provision, access to multimodality, retail and services, and stations as public space. Results show that the provision of public transport is the predominant concern, followed by the high demand for stations as a public space. Thus, railway stations appear to be more than a means to an end but depict an essential part of neighbourhood identity. While retail and services show some demand, they appear to be not a key concern. Finally, yet importantly, the connection to other means of transport encounters rejection, especially regarding the free-floating supply of micro-mobility solutions such as e-scooters. This finding indicates a lack of demand or lack of understanding for the development of multimodal mobility hubs, thus demanding alternative or creative solutions and measures to be taken by transport companies and public authorities.

Keywords: public transport, urban mobility, social functions, mobility hubs, consumer behaviour, survey experiment

### References

- Bertolini, L. (1996). Nodes and places: complexities of railway station redevelopment. *European Planning Studies*, 4(3), 331-345.
- Hernandez, S., & Monzon, A. (2016). Key factors for defining an efficient urban transport interchange: Users' perceptions. *Cities*, 50, 158-167.
- Lois, D., Monzón, A., & Hernández, S. (2018). Analysis of satisfaction factors at urban transport interchanges: Measuring travellers' attitudes to information, security and waiting. *Transport policy*, 67, 49-56.
- Zemp, S., Stauffacher, M., Lang, D. J., & Scholz, R. W. (2011). Generic functions of railway

stations—a conceptual basis for the development of common system understanding and assessment criteria. *Transport Policy*, 18(2), 446-455.

Zemp, S., Stauffacher, M., Lang, D. J., & Scholz, R. W. (2011). Classifying railway stations for strategic transport and land use planning: Context matters!. *Journal of transport geography*, 19(4), 670-679.

84532

## The Importance of Everyday Mobility in Residential Location Decisions of Berlin Households – First Results from an Innovative Approach to a Complex Relationship

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Promoting and designing sustainable urban mobility requires, above all, an understanding of the complex interactions between residential location and everyday mobility. However, despite numerous studies (e.g. Van Acker et al. 2010; Van de Coevering et al. 2018; Holz-Rau/Scheiner 2019), the nature of the interrelations is not yet fully clear. On the one hand, the built environment influences mobility behavior (De Vos 2015; Cao et al. 2019), on the other hand, mobility attitudes have an impact on where households choose to live (residential self-selection) (Zhou/Kockelman 2008; Cao et al. 2009; Guan et al. 2020).

For the examination of these complex relationships, qualitative approaches to determine the personal attitudes and motivations of households' travel behavior are much needed (Næss 2015; 2016). In order to fill this methodological gap, our project 'STAWAL - Urban structure, residential location choice and everyday mobility' gives qualitative methods special weight in an innovative mixed methods panel design. To examine the role of mobility infrastructure in the desired residential location, we survey households willing to move in three German cities on the role mobility-related considerations play in their residential location choice before and after their move.

In our presentation, we discuss first results especially from qualitative interviews with such households in Berlin. We provide insights to their mobility-related requirements, expectations and desires. First results suggest that mobility attitudes and routines play a major role as criteria for housing search, but that the tight housing market severely restricts the choices of most interviewed households. The resulting need to lower housing aspirations often leads to frustration. Furthermore, we present initial findings on the actual everyday mobility at the new place of residence.

Keywords: everyday mobility, mobility behavior, mobility attitudes, residential relocation, residential self-selection, qualitative panel study

### References

- Cao, Xinyu; Næss, Petter; Wolday, Fitwi (2019): Examining the effects of the built environment on auto ownership in two Norwegian urban regions. In: *Transportation Research Part D: Transport and Environment* 67, pp. 464–474. DOI: 10.1016/j.trd.2018.12.020.
- De Vos, Jonas (2015): The influence of land use and mobility policy on travel behavior: A comparative case study of Flanders and the Netherlands. In: *JTLU* 8 (1), pp. 171-190. DOI: 10.5198/jtlu.2015.709.

Guan, Xiaodong; Wang, Donggen; Jason Cao, Xinyu (2020): The role of residential self-selection in land use-travel research: a review of recent findings. In: *Transport Reviews* 40 (3), pp. 267–287. DOI: 10.1080/01441647.2019.1692965.

Holz-Rau, Christian; Scheiner, Joachim (2019): Land-use and transport planning – A field of complex cause-impact relationships. Thoughts on transport growth, greenhouse gas emissions and the built environment. In: *Transport Policy* 74, pp. 127–137. DOI: 10.1016/j.tranpol.2018.12.004.

Næss, Petter (2015): Built Environment, Causality and Travel. In: *Transport Reviews* 35 (3), pp. 275–291. DOI: 10.1080/01441647.2015.1017751.

Næss, Petter (2016): Built environment, causality and urban planning. In: *Planning Theory & Practice* 17 (1), pp. 52–71. DOI: 10.1080/14649357.2015.1127994.

van Acker, Veronique; van Wee, Bert; Witlox, Frank (2010): When Transport Geography Meets Social Psychology: Toward a Conceptual Model of Travel Behaviour. In: *Transport Reviews* 30 (2), pp. 219–240. DOI: 10.1080/01441640902943453.

van de Coevering, Paul; Maat, Kees; van Wee, Bert (2018): Residential self-selection, reverse causality and residential dissonance. A latent class transition model of interactions between the built environment, travel attitudes and travel behavior. In: *Transportation Research Part A: Policy and Practice* 118, pp. 466–479. DOI: 10.1016/j.tra.2018.08.035.

85121

## Addressing accessibility in peripheral areas: concepts, challenges and perspectives

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To ensure the accessibility to services and opportunities to people, no matter the place where they live and work, is a vital precondition of the EU objectives of smart, sustainable and inclusive growth (EC, 2016). While there is a rich literature on how to improve accessibility in urban contexts, the same is not true for rural areas, especially when considering the concept in its broadest sense and not only as a measure of travelling time from one centre to another.

This gap is problematic, if one considers that most low-density, peripheral rural settlements suffer from accessibility and mobility problems that challenge their liveability and potential for development (Moseley, 1979; Vitale Brovarone et al, 2022). The low density of settlements, the scattered demand and the large distance from the centres where services of general interest are located are all typical features of these areas, that often struggle to invert the decline loop they have been trapped into (Küpper et al., 2018; Vitale Brovarone, 2021), also as a consequence of the increasingly urban-centric approach that has characterised policy-making at all levels in the last 30 years (). In these contexts, the concept of immobility as a right (Nikolaeva et al., 2019) takes on connotations and implications that go well beyond the transport component, and the equity impacts of car dependence are particularly relevant (Camarero and Oliva, 2019).

Beyond mobility-centred approaches, a wider perspective is needed to understand and address these challenges, embracing the societal, economic and spatial components and implications of accessibility. Acknowledging this issue, the contribution reflects on the accessibility challenges in rural – peripheral, marginal, low-density – areas, and contribute to stimulate a debate on this issue. First, the challenges of accessibility in European rural areas will be framed; then, the potentialities and limits of a national policy in Italy aimed at addressing them will be presented, and finally a research agenda will be proposed.

Keywords: accessibility; rural areas; peripheral areas; mobility; policies; equity

### References

- Camarero, L. and Oliva, J., 2019. Thinking in rural gap: mobility and social inequalities. *Palgrave Communications*, 5 (1), 1–7. <https://doi.org/10.1057/s41599-019-0306-x>
- Küpper, P., Kundolf, S., Mettenberger, T., and Tuitjer, G., 2018. Rural regeneration strategies for declining regions: trade-off between novelty and practicability. *European Planning Studies*, 26 (2), 229–255. <https://doi.org/10.1080/09654313.2017.1361583>
- Moseley, M.J., 1979. *Accessibility: the rural challenge*. London: Methuen.
- Nikolaeva, A., Aday, P., Cresswell, T., Lee, J.Y., Nóvoa, A., and Temenos, C., 2019. Commoning mobility: Towards a new politics of mobility transitions. *Transactions of the Institute of British Geographers*, 44 (2), 346–360. <https://doi.org/10.1111/tran.12287>
- Vitale Brovarone, E., 2021. Accessibility and mobility in peripheral areas: a national place-based policy. *European Planning Studies*. <https://doi.org/10.1080/09654313.2021.1894098>

Vitale Brovarone, E., Cotella, G., & Staricco, L. (Eds.). (2021). *Rural Accessibility in European Regions*. Routledge.

85204

## Good in theory, complicated in practice: understanding conflicts behind pedestrianisation initiatives in Turin

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Road closures and pedestrianisations, even in the form of experiments, are in principle welcomed as initiatives aimed at improving the liveability of cities and reducing the impacts of motorised traffic. The benefits of pedestrianisations are widely acknowledged, and also as a consequence of the COVID-19 pandemic, cities are increasingly proposing street closures initiatives, in some cases as isolated experiments - in time, in space, or both - , in others with more structural ambitions.

However, even if introduced with the best of intentions and are generally viewed favourably by the public, road closures, in many cases, give rise to conflicts. These conflicts relate to a number of factors, stemming primarily from the fact that over the last century the road has gradually become a space used primarily for motorised vehicle traffic, where automobility is considered as a right.

The literature on conflicts raised by street closure initiatives focuses mainly on the opposition to the interventions by residents, shopkeepers, or road users in general, while less attention is given to the 'internal' tensions and conflicts related to the governance of the process and the system of actors involved in it.

This paper aims to analyse and understand the conflicts undermining pedestrianisation initiatives, through the study of series of street closures in a central neighbourhood of Turin, the Torino Mobility Lab project. Based on a set on semistructured interviews and document analysis, the paper will show how different types of frictions and conflicts can lie within the governance of pedestrianisation processes, undermining their effectiveness. The responsibilities and reasons for the success or otherwise of pedestrianisation initiatives are linked to procedural and relational factors, which often receive less attention than substantive aspects. The deep-rooted vision of the road as a space for cars, and the absence of a shared vision placing street closures within a system of actions aimed at undermining the principle of automobility as a right, are also highlighted as key underlying factors.

Keywords: pedestrianisation; street closures; conflicts; governance; tensions

### References

Bertolini, L. (2020). From “streets for traffic” to “streets for people”: Can street experiments transform urban mobility? *Transport Reviews*, 40(6), 734–753.

<https://doi.org/10.1080/01441647.2020.1761907>

Soni, N., & Soni, N. (2016). Benefits of pedestrianization and warrants to pedestrianize an area. *Land Use Policy*, 57, 139–150. <https://doi.org/10.1016/j.landusepol.2016.05.009>

Villani, C., & Talamini, G. (2021). Pedestrianised streets in the global neoliberal city: A battleground between hegemonic strategies of commodification and informal tactics of

commoning. *Cities*, 108, 102983. <https://doi.org/10.1016/j.cities.2020.102983>

Wolf, E. (2021). How Policy Institutions Filter Conflict: The (De)Escalation of Policy Conflict through Closing Down or Opening Up the Space for Contestation. *Built Environment*, 47(1), 56–74. <https://doi.org/10.2148/benv.47.1.56>

85055

## What is a street? And where can it really take us?

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Streets are epitomes of public space and of mobility; they are mirrors of the life that surrounds them. They are also spaces of potentiality for in turn changing that life, as they feed every-day imaginaries when people look through windows (from houses, offices, shops, cars, buses, metros), walk to work or to groceries or even to their cars, bikes or public transport and so on. Von Schönfeld and Bertolini (2017) discuss the myriad ways that streets normally focused on mobility also function as public space, and the ways different citizen initiatives have emerged to better appropriate that space as such, mostly by restricting the use of private automobiles. Bertolini (2020) reflects on how streets might effect significant change through experimentation, by, for example, providing a temporary but inspiring experience of streets focused on people rather than on cars, which can then lead to more permanent change. The latter article relates this process to transitions theory. The present article proposes to look at this topic from the angle of changing imaginaries and utopias, based on the work of Woiwode et al. (2021), Bina et al (2020), among others, to explore how different street uses can provide deep leverage points and shape utopias of a more sustainable and inclusive future and practices. Three in-depth qualitative case studies provide the empirical basis for exploring this subject: the Minhocão, São Paulo, Brazil; the initiative 'Brincar de Rua' in multiple cities in Portugal; and the initiative 'Living streets' with its roots in Ghent, Belgium. Each of these initiatives exemplifies ways that the public space use of streets and street-adjacent spaces has important consequences for perceptions of sustainability and justice (in terms of transport and beyond it), for creating a sense of agency in achieving more sustainable and just futures and ultimately for imaginaries and utopias (or dystopias) they inspire. The case studies are explored through interviews with frequenters and observers of the spaces (including residents, politicians, international reviewers, both encouraging and critical) and participatory observation of the case studies and their surrounding areas.

Keywords: street experiments, sustainability, justice, imaginaries, agency

### References

Bertolini, L. (2020). From “streets for traffic” to “streets for people”: Can street experiments transform urban mobility? *Transport Reviews*, 40(6), 734–753.  
<https://doi.org/10.1080/01441647.2020.1761907>

Bina, O., Inch, A., & Pereira, L. (2020). Beyond techno-utopia and its discontents: On the role of utopianism and speculative fiction in shaping alternatives to the smart city imaginary. *Futures*,

115. <https://doi.org/10.1016/j.futures.2019.102475>

von Schönfeld, K. C., & Bertolini, L. (2017). Urban streets: Epitomes of planning challenges and opportunities at the interface of public space and mobility. *Cities*, 68(April), 48–55.  
<https://doi.org/10.1016/j.cities.2017.04.012>

Woiwode, C., Schöpke, N., Bina, O., Veciana, S., Kunze, I., Parodi, O., Schweizer-Ries, P., & Wamsler, C. (2021). Inner transformation to sustainability as a deep leverage point: Fostering new avenues for change through dialogue and reflection. *Sustainability Science*.  
<https://doi.org/10.1007/s11625-020-00882-y>

84972

## Applying mental envelope theorem in human-centered public spaces

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When mobility as a right is considered in the narrow spatial scope, it is necessary to ensure the mobility of pedestrians. Bicycles have been enveloped on sidewalks for a long time in Japan due to the emphasis on economic activities by car traffic, but in the future, road space will need to be reallocated even on main roads to improve pedestrian safety. However, rules are being considered to allow new types of medium and low speed mobility to travel on sidewalks, depending on their speed, and as with bicycles, there may be users who do not follow the rules. The purpose of this research is to conceptualize a new philosophy that will serve as the basis for defining moving principles for various mobility entities, from autonomous vehicles to delivery robots, in public spaces where pedestrians are mixed. It should be a human-centered philosophy of mobility, and we propose a new envelope theory. Envelope in this study can be divided into physical envelope such as guardrails and mental envelope where humans feel danger and anxiety to others. There are two types of mental envelopes: subject mental envelope and object mental envelope (OME). The latter is to create an imaginary fence and be aware that a subject doesn't want others to get any closer. OME differs from the conventional inter-personal space by having a larger free area around the subject. It is possible to implement OME with future digital technology if there is a priority relationship among various subjects.

In this study, traffic simulations will be conducted based on the results of previous surveys by the authors, and moving patterns will be compared for future envelopes to be realized, and moving rules on public spaces will be examined. The spatial justice of land use and mobility rules will be discussed, taking into account the possibility that priority relationships among subjects may differ depending on land use, such as near an elementary school, or in commercial areas. The significance of human-centered rulemaking is then finally emphasized.

Keywords: mobility, pedestrian, mental envelope, object envelope, rulemaking, public space

### References

- Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. OUP Oxford.
- Vassallo, C., et.al. (2017) How do walkers avoid a mobile robot crossing their way?. *Gait & Posture*, Volume 51, January 2017, Pages 97-103.
- Hasegawa, Y., Dias, C., Iryo-Asano, M., & Nishiuchi, H. (2018). Modeling pedestrians' subjective danger perception toward personal mobility vehicles. *Transportation research part F: traffic psychology and behaviour*, 56, 256-267.
- Zhou, L. and Yai, T. (2022). Exploration of mental envelope determinants when pedestrians interact with various mobilities on mixed streets. *Transportation Research Part F: Psychology and Behaviour*, 85, 24-37.
- Zhou, L. and Yai, T. (2022). A proposal of envelope theorem on the interaction between pedestrians and mobilities on urban roads, *Asian Transport Studies*, Elsevier, forthcoming



84453

## Comparative study on spatial characteristics and walkability evaluation of historical areas based on deep learning of street-view image segmentation

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Walkability is an important indicator of pursuing sustainable urban development, especially in historical urban blocks. With the modernization of fossil fueled mobility, people are aware of the negative effects of the automobility era. Walking is the cheapest way to travel and accessible to almost everyone. It has shown various positive impacts on many environmental and socio-economic aspects of urban living.

A walkability index reflects the ability to perform errands on foot from a location to a destination. It is an important indicator of evaluating sustainable urban mobility, and many previous research developed walkability assessment indicators which can be measured quantitatively.

The quantitative evaluation of walkability is mainly based on GIS measurements ranging from city-wider to neighborhood scales. Indicators related to urban form characteristics (e.g., Intersection density, street connectivity, proximity to transit stops, and diversity of Land use) are often used for GIS analysis.

For micro-scale, the measurement of street-level walkability is increasingly valued, but it generally needs an extensive time of observations and requires heavy manual work on the field. Virtual audits by using street view images provide a new insight into assessing the micro-scale environment.

On this basis, this study aims to develop a new methodology for the street-level walkability by applying a deep learning approach, which is an ICT-based tool allowing the analysis of the composition of street view images. In addition to this tool, the analysis results of street attributes obtained from spatial syntax, and the results from a walkability check list for assessing every street view which was analysed by the deep learning tool are also included in this study. These three methods are combined to develop a walkability evaluation model. The two similar case study places are selected to conduct a comparative analysis and test the evaluation model. We have selected Xi'an and Kyoto, well-known historic cities in China and Japan respectively. The both cities have similar historic backgrounds and urban structure and gone through a series of the urbanization process. This paper concludes with identifying the factors that impact on increasing the walkability of the two studies cities.

Keywords: Walkability, Street View, Image Segmentation, Xi'an, Kyoto

### References

Badland, H. M., Opit, S., Witten, K., Kearns, R. A., and Mavoa, S., (2010) 'Can Virtual Streetscape Audits Reliably Replace Physical Streetscape Audits', *Journal of Urban Health*

Bulletin of the New York Academy of Medicine, 87(6), 1007-16.

Bon W. K., Subhrajit G., and Nisha B., (2021) 'How are Neighborhood and Street-Level Walkability Factors Associated with Walking Behaviors? A Big Data Approach Using Street View Images', *Environment and Behavior*, 1-31.

Ewing, R., and Cervero, R., (2010) 'Travel and the Built Environment. A Meta-Analysis', *Journal of the American Planning Association*, 76 (3), 265–294.

Hanibuchi T., Nakaya T., Inoue S., (2019) 'Virtual audits of streetscapes by crowdworkers', *Health and Place*, 59, 102203.

Otsuka, N., Wittowsky, D., Damerau, M., and Gerten, C., (2021) 'Walkability Assessment for Urban Areas Around Railway Stations Along the Rhine-Alpine Corridor', *Journal of Transport Geography*, 93, 103081.

Steinmetz-Wood, M., Velauthapillai, K., O'Brien, G., and Ross, N. A., (2019) 'Assessing the Micro-Scale Environment Using Google Street View: the Virtual Systematic Tool for Evaluating Pedestrian Streetscapes (Virtual-Steps)', *BMC Public Health*, 19.

## TRACK 8: URBAN DESIGN

85482

### A New Building Greenways: As a Case Study of Eskisehir in Turkey

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Eskisehir is at Northwest of Interior Anatolia region. The city is neighbor to Black Sea region at North, Marmara region at Northwest, Aegean region at Southwest. Topographical structure of Eskişehir province which is Northwest corner of Interior Anatolia, is consists of plains in Sakarya and Porsuk river basins and mountains surrounding those plains. Bozdag-Sundiken mountain chain from North, Türkmen Mountain located at the east corner of Interior West Anatolian threshold, Yazılıkaya Plateau and Emirdağ from West and South, surround plains of river basins.

Trails and greenways positively impact individuals and improve communities by providing not only recreation and transportation opportunities, but also by influencing economic and community development. Therefore, City Council of Eskisehir has committed to adding 10 km of trails, constructing several new and renovated trail heads, and providing direct connections to neighborhoods, regional shopping, and cultural and recreation destinations since 5 years.

Also, particularly in recent years an intensive urbanization and industrial and commercial development following the process of urbanization caused to see the necessity of a new transportation system for Eskisehir. For this reason a project of ES-TRAM (Eskisehir Tram) was developed and started in autumn of 2002. After completing ES-TRAM project, Eskisehir has been more clean, green, developed and livable city both economically and environmentally. The centerpiece of our new regional trail system will be the nearly-completed Porsuk Creek and Branches, designed by City Council, world renowned architect, engineer, and artist. The bridge crosses the Porsuk Creek and Branches connecting Yunusemre Park with the newly developed Recreation Area. A celebration for the opening of the bridge and Recreation Area has been for the summer of 2005.

This new system of trails and bikeways is viewed as both a necessary recreation amenity and a vital component of the multi-modal transportation system and helps to establish a sense of place. Trails and bikeways are an important part of who we are as a community.

The aims of this study are to clarify all the aspects of projects of trail and greenways and to analyze its economic and environmental effects. After completing these projects, Eskisehir will be more clean, green, developed and livable city both economically and environmentally.

This study was arranged in three sections. In the first section, the new trail and greenways existing in the city and its problems will be analyzed and described briefly.

In the second section, the future's trail and greenways systems which started with new projects of trail and greenways and ES-TRAM project is going to be discussed.

In the third section, firstly social and environmental contributions of new trail and greenways and ES-TRAM to the city are going to be discussed and then the future's policies and strategies of trail and greenways system in Eskisehir are going to be examined. In addition, in this section, will be present a series of policies and strategies for providing the process of projects trail and greenways in Eskisehir.

Keywords: Greenways, Environment, Trails, Eskisehir City, Turkey.

#### References

Ebru Kıyak - Eskişehir Water and Sewage Administration, Department of Planning (Civil Engineer) (18/03/2011)

Zeynep Erkul - Eskişehir Water and Sewage Administration, Water Treatment Laboratory (Environmental Engineer) (18/03/2011)

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84352

## Physical Environmental Determinants of Children's Place Attachment: Evidence from Children's Place Attachment Maps

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While there are a growing number of studies investigating how participation in urban planning and design activities and engagement in the urban public realm affects children's place attachment (Grimshaw and Mates, 2021; Sancar and Severcan, 2010; Severcan, 2015; Stenberg and Fryk, 2021), far less is known empirically about which physical environmental aspects of the neighborhood environment are associated with children's place attachment. To address this gap in the literature, recently, the authors have initiated a large-scale project in Ankara, Turkey. This paper is based on the initial findings of this project. It aims to identify the physical environmental determinants of children's place attachment in two neighborhoods in Ankara. From the chosen neighborhoods, the authors engaged 9-to-13-year-old children in a participatory place attachment mapping and survey activity. Children worked on two identical base maps showing their neighborhood and its vicinity. A moderator explained to children how to read these maps. Thereafter, on the first map, children were asked to mark the places that they feel happy, miss, and find special by using stickers. They were also asked to discuss the reasons for their feelings. A map legend was created to show the meanings of each sticker and which sticker belonged to which participant. The second map was used to show children's unhappy/non-missed/unspecial places. Next, children were asked about their level of neighborhood place attachment. Finally, from the data set obtained from each neighborhood ( $n > 200$ ), the authors transferred randomly selected 50 children's data to GIS (for two neighborhoods,  $n = 100$ ). Children's survey results were linked to the outcomes of the mapping activity to understand the physical environmental determinants of children's place attachment. Initial results show the importance of various neighborhood open spaces like safe and green parks and playgrounds, streets, home gardens, and schoolyards in affecting children's place attachment. The paper concludes with the implications of these findings.

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**Keywords:** Place Attachment, Children, Children's Places, Mapping, Survey, Neighborhood

### References

Grimshaw, L., & Mates, L. (2021). 'It's part of our community, where we live': Urban heritage and children's sense of place. *Urban Studies*, 00420980211019597.

Sancar, F. H., & Severcan, Y. C. (2010). Children's places: rural-urban comparisons using participatory photography in the Bodrum peninsula, Turkey. *Journal of Urban Design*, 15(3), 293-324.

Severcan, Y. C. (2015). The effects of children's participation in planning and design activities on their place attachment. *Journal of architectural and planning research*, 32(4), 271-293.

Stenberg, J., & Fryk, L. (2021). Making School Children's Participation in Planning Processes a Routine Practice. *Societies*, 11(1), 3.

84304

## Placemaking as an Instrument for Psychological Wellbeing and Urban Health

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According to the United Nations, 68% of the world population is projected to live in urban areas by 2050. The urban population of the world has been growing rapidly which creates multi-faceted problems in cities. The configuration of the urban fabric can be seen as a major cause for chronic illnesses, simultaneously offering potential solutions for the improvement of urban health.

In today's society, mental health issues become more and more prevalent. Cities can play a major role in the mental health state of urban dwellers. By investigating place-making strategies and case studies the research paper traces the relationship between place-making initiatives and their impact on psychological wellbeing of urban users. There is research evidence that quite modest interventions can have a significant impact on people's mental health and wellbeing. Placemaking initiatives and interventions are hereby researched in their potentials to enhance the wellbeing of urban dwellers. The paper argues that place-making projects can improve cases of depression and other health disorders and investigates how through minor urban interventions and transformations, a better psychological state of urban dwellers can be achieved.

According to the *The Case for Healthy Places* (PPS, 2016), place-making initiatives, such as resident-led pavement painting or community garden projects can create opportunities for gathering, socialization, and volunteerism, thus reducing psychological distress and depression. Furthermore, place-making initiatives engage people in creating quality public spaces that include a variety of activities and amenities to facilitate play and active recreation. Regular physical activity is critical for health, helping people live longer lives, improving cognitive function, and decreasing the risk of chronic illnesses such as heart disease and diabetes (PPS, 2016). 'Place' can be perceived both as a social construct and a physical reality- a person's 'place in the world' can feature their socioeconomic status, perceptions of opportunity and sense of belonging (Frumkin, 2003). Thus, it can be argued that place-making initiatives offer miscellaneous opportunities to encourage better lifestyles for urban dwellers of all backgrounds and abilities, stimulating collaboration among local residents, institutions, and businesses, establishing social relationships and providing support in times of need.

Keywords: placemaking, mental health, wellbeing, psychology, urban interventions, participatory design

### References

Frances E. Kuo, "Coping with Poverty: Impacts of Environment and Attention in the Inner City," *Environment and Behaviour* 33, no. 1 (January 1, 2001): 5–34.

Fred London, *Healthy Place Making*, 1st ed. (RIBA Publishing, 2020)

Howard Frumkin, "Healthy Places: Exploring the Evidence," *American Journal of Public Health* 93, no. 9 (September 2003): 1451–56.

Paul Hoggett, *Urban Regeneration and Mental Health in London: A Research Review* (King's Fund, 1999).

Project for Public Spaces, *The Case for Healthy Spaces- Improving Health Outcomes through Placemaking*, PPS, 2016

85332

## Healthy cities: a model of proximity to the city of Florence

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The SARS-CoV-2 global pandemic has changed the way individuals and society value our relationship with others and places in which we live, work and play. But the global pandemic is also an opportunity to take a new way and, for urban planners, a challenge for a paradigm shift of the modern city in which, health and wellbeing, can be considered lead elements for the redevelopment of the city and reactivation of communities.

In this frame health is no longer an issue that is strictly associated with medical services but is a prime goal. Starting from the 2030 Agenda for Sustainable Development and the Healthy Cities Vision, developed by the WHO European Healthy Cities Network, is entirely based upon well-being-oriented principles such as promotion of inclusivity, increased civil participation in policy-making.

Among these new urban visions emerges more and more the need to conceive a city of proximity, in which social innovation, common goods, local communities and care become the key words of a project that shortens distances and re-build an organized community that can last through time.

This study aims to introduce some reflections that should be useful to the academic debate on Urban Health and the proximity approach. In particular, in the context of this research, proximity is investigated about its relational dimension, paying attention to the ability to build ties and produce shared identities, and therefore, to generate community.

The proximity city, and the experiences of “15-minute city”, is the need to promote health and urban social interactions, with alternative modes of transportation (to improve air quality), increasing walkability, creating abundant shared outdoor spaces motivates physical activity, reconnecting cities to food production and to create relationship among citizens.

This contribution presents, interdisciplinary research, of the Department of Architecture of Florence “Healthy and inclusive neighborhoods for communities of the metropolitan area of Florence”. The research objectives are two: to define of a method of visualization, analysis, and design of the proximity spaces of the metropolitan city and the city of Florence linked to health and well-being and to involve communities to building ties and the relationship with and between institutions.

Keywords: Healthy city · 15-Minute city · Proximity · Future cities · Community

### References

Moreno C. (2021), “Vivre dans nos métropoles: la révolution de la proximité”, in *Construcif*, n. 60, pp. 75-78

Allam Z. et al, Carlos Moreno, Didier Chabaud, and Florent Pratlong (2021), Proximity-Based Planning and the "15-Minute City": A Sustainable Model for the City of the Future, in *The Palgrave Handbook of Global Sustainability*, Springer, pp. 1-20

Lingua V., Balz V. (2020), Shaping Regional Futures, Springer

85157

## Habitability of the peri-urban area of the City of Prague

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The chosen area of the research is the peri-urban area of the City of Prague. As a biggest city of the Czech Republic offers the best opportunity where is possible to distinctly observe the urbanization trends. The research focuses on the changes this area came through and recent problems that those changes caused. The aim of the research is a critical evaluation of the peri-urban area of the City of Prague in terms of its habitability.

The research firstly defines the extent of the peri-urban area based on the PLUREL project definition (Piorr, Ravetz, et al. 2011). The research uses for the determination superposition (overlapping) of different landscape layers sorted by the geosystem landscape concept (Miklós a Izakovičová 1997). This data is processed in GIS system and further analysed. Next step of the research is to determine the recreational quality of this peri-urban area. This quality became also known under the term habitability that described Ladislav Žák – "...habitability is the result of conscious, protective or creative human care." (Žák 1947). The recreational quality can be determined by criterion as – density of paths, number of recreational points and their landscape value. This division is also built on the Kevin Lynch recognition of spatial elements – district, edge, path, node, and landmark (Lynch 1960).

Originally the cultural landscape was a by-product of human that managed and was dependent on the land (Kupka 2010). We can still find rests of cultural landscape in the open landscape - old interrupted paths with rows of fruit trees along them, sacral objects and others. The issue is that the agricultural land is formed into monotone huge blocks. There are also missing pedestrian connections. We can find most of desired connections in the mentioned extensive agricultural land. The research differs between the long-distance connections among settlements and immediate connections towards open landscape. There have been also forming new typologies in the Prague peri-urban area – green belts around whole villages (Zeleneč).

The peri-urban area is dynamically developing area with the regional significance. Nevertheless, it is still a public space and therefore requires certain level of quality.

Keywords: peri-urban area, urban and rural, landscape pattern, cultural landscape, spatial analysis, recreational quality

### References

PIORR, Annette, Joe RAVETZ a Ivan TOSICS, ed., 2011. Peri-urbanisation in Europe: towards European policies to sustain urban-rural futures: synthesis report. Frederiksberg: Forest & Landscape, University of Copenhagen. ISBN 978-87-7903-534-8.

KUPKA, Jiří, 2010. Krajiny kulturní a historické: vliv hodnot kulturní a historické charakteristiky na krajinný ráz naší krajiny. Praha: České vysoké učení technické v Praze. ISBN 978-80-01-04653-1.

FORMAN, Richard T. T, 2008. Urban regions ecology and planning beyond the city. Cambridge: Cambridge University Press. ISBN 978-0-521-85446-7.

MIKLÓS, Ladislav a Zita IZAKOVIČOVÁ, 1997. Krajina ako geosystém. Bratislava: VEDA Vydavateľ'stvo slovenskej akadémie vied. ISBN 80-224-0519-1.

LYNCH, Kevin, 1960. The image of the city. Cambridge: The Technology Press & Harvard University Press. ISBN 978-0-262-12004-3.

ŽÁK, Ladislav, 1947. Obytná krajina. 1. ed. Praha: S.V.U. Mánes: Svoboda.

85253

## Breaking the “Big Box”: Urban Redevelopment of Declining Commercial District in the Era of E-commerce and the Pandemic

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Modern-day big box retailers have spread across the US for decades. This results in the controversial car-oriented commercial “enclaves”, and therefore has dramatically changed the urban landscape of American cities. Many have argued that such development has disrupted the spatial, economic, and social fabric in various communities, adversely impacting the environment and ecological diversity. In the past few years, however, many of these large retailers have faced unprecedented challenges following the thriving e-commerce and the changing consumer preferences. The outbreak of COVID-19 pandemic has only accelerated the decline of many retailers. While unfortunate for many, this has brought new opportunities to transform commercial areas and promote more sustainable use of the land where monofunctional retail stores are located. Questions have been raised on how to (re)integrate those spaces back to the city and communities; how life would transform through the pandemic; and how urban strategies could adapt to the new lifestyles given all the uncertainties.

This research strives to answer those urging questions by studying the transformation of commercial districts with big declining retailers. It utilizes a case study - the design and planning to redevelop an urban district in Redmond in the US, driven by the closure of a Sears mall, one of the most iconic and the biggest American retail chains. It analyzes the design effort to create a new spatial identity, to attract diverse uses, and to provide public spaces. It also reveals the competing demands among different actors, and the unexpected challenges when Covid hit. Furthermore, it adopts a set of spatial, social, and environmental criteria to measure the inclusivity, healthiness, and resilience of the project.

The study concludes with several guidelines on designing and planning for similar commercial zones during and beyond the pandemic, including prioritizing public beneficial projects with incentives for profitable redevelopment; providing flexibility in zoning and code for optimal mix-use; accommodating transitional uses during the pandemic, as well as promoting eco-friendly projects and performing environmental impact reviews.

Keywords: urban regeneration, place-making, social and spatial integration, resilience, urban quality, Covid impact

### References

Garreau, J. (1991). *Edge City: Life on the New Frontier*. Anchor.

Haltiwanger, J., Jarmin, R., & Krizan, C. J. (2010). Mom-and-pop meet big-box: complements or substitutes?. *Journal of Urban Economics*, 67(1), 116-134.

Healey, P. (2006). (Second Edition) Collaborative Planning: Shaping Places in Fragmented Societies, London: Palgrave Macmillan.

Jacobs, J. (1961). Death and Life of Great American Cities. New York: Random House

Novak, M. (2019). Assessing the long-term performance of the urban cores in four New Urbanist communities. *Journal of Urban Design*, 24(3), 368-384.

Sciara, G.C., Lovejoy, K., & Handy, S. (2018). The Impacts of Big Box Retail on Downtown: A Case Study of Target in Davis (CA), *Journal of the American Planning Association*, 84:1, 45-60

85034

## Healthy urban regions: Networks of second-tier port cities as frontrunners in reinventing future-proof cities

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During the COP-26, the Mayor of London likened the passiveness of national governments and the proactiveness of cities concerning climate change actions to “night vs. day [...] the difference between delayers and doers” (Khan, 2021). This may well be true, but leadership in sustainable development is also the result of the privileged position of London and other large global cities. These megacities have the resources to act as frontrunners as well as to capture the attention of academics, policymakers and the media. However, single, powerful megacities are rare in Europe, a continent characterized by a network of medium-sized, second-tier cities (Hodos, 2011; Cardoso & Meijers, 2016; Pendras & Williams, 2021). This raises the question of what alternative strategies do these often-overlooked types of cities develop to address today’s most urgent urban challenges. Are there even specific characteristics of these cities that can facilitate sustainable development? To answer these questions, we investigate the capacity for joint action of metropolitan networks of second-tier cities along the TEN-T Rhine-Alpine corridor (CODE24, 2015), a highly integrated region defined by a continuous, transnational network of medium-sized cities. But joint action requires joint priorities and features, so we specifically focus on a key capacity-building element shared by these cities, their river ports. The port is a trigger of interdependence and complementary strategic priorities among cities and regions, a common reference of cultural and historical proximity, a facilitator of economic development and a gateway for knowledge exchange and innovation. However, ports are also drivers of socio-spatial injustices, economic exploitation and pollution (Hein & Schubert, 2020). The concept of Healthy Cities (WHO, 2011) becomes therefore a relevant lens to mediate these roles, and we apply it to ask whether second-tier port city networks can become frontrunners in actions on urgent urban challenges. Healthy cities continuously develop their social and spatial environments and resource accessibility to allow communities to live better. Second-tier port cities along the Rhine-Alpine corridor may offer just the right combination of manageable size, dense networks, economic vitality, shared geographic and cultural features, and governance integration to achieve the status of healthy urban regions.

Keywords: Second-tier Cities, Port Cities, Healthy Cities, Spatial Justice, Rhine Alpine Corridor, Metropolitan Integration

### References

Cardoso, R. V., & Meijers, E. J. (2016). Contrasts between first-tier and second-tier cities in Europe: a functional perspective. *European Planning Studies*, 24(5), 996–1015.  
<https://doi.org/10.1080/09654313.2015.1120708>

CODE24 (2014). Corridor 24 Development Rotterdam – Genoa [online]. Retrieved from <http://egtc-rhine-alpine.eu/code24/>

Hein, C., & Schubert, D. (2021). Resilience, Disaster, and Rebuilding in Modern Port Cities. *Journal of Urban History*, 47(2), 235–249. <https://doi.org/10.1177/0096144220925097>

Hodos, J. I. (2011). *Second cities: Globalization and local politics in Manchester and Philadelphia*. Temple University Press.

Khan, S. [@MayorofLondon]. (2021, November 11). When you compare national governments to cities over recent years, the difference when it comes to taking bold climate action is striking. It's night vs day. It's the difference between delayers vs doers [Tweet]. Twitter. <https://mobile.twitter.com/MayorofLondon/status/1458873595338371077?cxt=HHwWisC55cbz-r4oAAAA>

Pendras, M., & Williams, C. (Eds.). (2021). *Secondary cities: Exploring uneven development in dynamic urban regions of the global north*. Bristol University Press.

World Health Organization (WHO) (n.d.). Healthy cities vision [online]. Retrieved from <https://www.euro.who.int/en/health-topics/environment-and-health/urban-health/who-european-healthy-cities-network/healthy-cities-vision>

83100

## Green Space Availability, Socioeconomic Status and Onset Risk of COVID-19 in Hong Kong: a Spatial Justice Perspective

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Public Green space, especially parks, has been recognised as a valuable health resource and repeatedly proved to have the ability to promote health equity. The COVID-19 pandemic underscores the importance of green spaces and prompted discussions about people's equal right towards these spaces. The areas of Hong Kong are first classified into high, medium and low risk areas according to the onset risk of covid-19 (i.e., infection and mortality rate of residents). The socio-economic status of the residents in areas of different risk levels are analysed. The correlations between the onset risk of covid-19 and the availability of green space such as area per capita, visibility, accessibility are calculated in different risk areas using GIS. The analysis results indicate that low-SES communities are prone to have a higher infection and mortality rate in terms of COVID-19. Meanwhile, green spaces are under-provision and less available in these communities. The vulnerable groups living in these communities are thus disproportionately constrained to conduct physical activity in nearby green spaces. The inequity of green space availability is argued in this research to be one of the manifestations of segregation and an influential factor of the health outcomes at different local scales.

Keywords: Green space, public space, spatial justice, COVID-19, health

### References

- 1) Rigolon, A., Browning, M. H., McAnirlin, O., & Yoon, H. V. (2021). Green space and health equity: a systematic review on the potential of green space to reduce health disparities. *International journal of environmental research and public health*, 18(5), 2563.
- 2) Jian, I. Y., Luo, J., & Chan, E. H. (2020). Spatial justice in public open space planning: Accessibility and inclusivity. *Habitat International*, 97, 102122.
- 3) Jian, I. Y., Chan, E. H., Xu, Y., & Owusu, E. K. (2021). Inclusive public open space for all: Spatial justice with health considerations. *Habitat International*, 118, 102457.
- 4) Rigolon, A. (2016). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning*, 153, 160-169.

84498

## Importance of reclamation of post-industrial areas near cities, challenges to overcome and how it changes the city into smart cities

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Importance of reclamation of post-industrial areas near cities, challenges to overcome and how it changes the city into smart cities

2015, 54.5% of world population are living in cities and it is estimated 60% of the population will be living in cities in 2030(1). As the increasing population there is a more demand in space, facility, energy, resources. For the better life style and economic benefits migration from rural areas to urban areas will increase. The cities with current infrastructure and facilities will fail to accommodate this surge. Strong city planning is required as the urban areas swell (2). Urban areas around the world are facing these issues. Delhi is considered to be most populous city around the world in 2028 and currently issues are due to the overcrowded capital city is getting serious housing problem, waste disposal, public transport, shortage of electric power and security(3).

There are many cities located near abandoned post-industrial areas and mining areas which are yet to be reclaimed or not even have any plans to reclamation. The challenges are If reclamation is done under an affordable cost but people are not willing to move to these places due to the past history of these places, if government or municipalities are failed to manage providing amenities and services in these places, not proper town planning.

. The method of this study will be comparing the post industrial area which is already reclaimed and it is part of the city to the area to be reclaimed. Cities like Katowice which turns black into green, Katowice cultural Zone occupies in the formal coal mine area (4)

My presentation will be based on what are the positive impacts of reclaiming a mining area located in an Urban area, what will be the importance of doing this reclamation and how the current city which can be extended to this reclaimed area, how it can improve the people's life style by providing enough space, and the current and potential challenges for reclamation, what extent of this area can be used, peoples mentality, post management in these areas.

Result will be space for all, better life style and facilities to the people without ruining the ecology

Keywords: Reclamation, Urban area, post industries, population

### References

- 1 Chandan Deuskar How many people will be living in cities in the future?  
[www.weforum.org/agenda/2016/05/how-many-people-will-be-living-in-cities-in-the-future](http://www.weforum.org/agenda/2016/05/how-many-people-will-be-living-in-cities-in-the-future)
2. Haseeb Jamal Urban problems and challenges, <https://www.aboutcivil.org/urban-problems-challenges>
3. Kaur, R. and Kaur, R. (2014). Issue of Migration and Migrants in Delhi. [online] My India. Available at: <http://www.mapsofindia.com/my-india/cities/issue-of-migration-and-migrants-in->

delhi [Accessed 28 Jul. 2015].

4. Richard Fuchs (Katowice, Poland / an), Katowice: A European coal capital goes green, <https://www.dw.com/en/katowice-a-european-coal-capital-goes-green/a-41906740>

85328

## Green space, wellbeing and COVID-19: a survey from London, UK

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This paper explores people's experiences in public greenspace during June-July 2020, the period immediately after the lifting of the first pandemic lockdown in London, UK. Using analysis of online questionnaire survey (n=964), the paper looks at questions of access to, and use of, public greenspace, its perceived benefits and risks during COVID-19, as well as its contribution to active travel and physical activity, and hence to health and wellbeing. Although most people in London have access to public greenspace, there is not enough for everyone with only 19.53sqm per person (Fields in Trust 2020). This capacity was further stretched during the pandemic with social distancing measures introduced and more people using public greenspace frequently. Nevertheless, our findings show that most people's increased engagement with greenspace, as well as positive perceptions of associated benefits, support the value of greenspace during COVID-19 while pointing to the need to address issues of physical distancing and capacity. Our results provide support for benefits of greenspace, including physical activity and active travel associated with wellbeing and lower stress. Even though the majority of our participants already had good levels of wellbeing and lower levels of stress, had access to private greenspace and owned their homes, still their wellbeing increased through use of and access to public greenspace. This is promising and provides further evidence of a correlation between wellbeing and public greenspace as highlighted elsewhere in the literature. Future research could explore the hypothesis that this trend may be even more pronounced among those with lower levels of wellbeing and higher levels of stress, no access to private greenspace and/or living in flats, tenants, or those in deprived areas with lack of public greenspace.

Keywords: access, use and experiences of public greenspace; active travel, physical activity and exercise; wellbeing and perceived stress

### References

- Fancourt, Dr Daisy, Dr Hei Wan Mak, Dr Feifei Bu, and Prof Andrew Steptoe. 2020. 'Covid-19 Social Study: Results Release 2'. 2nd April 2020, UCL. URL: <https://www.covidsocialstudy.org/results>. Accessed 17/01/22
- Fields in Trust. 2020. 'Green Spaces Index'. Fields in Trust. URL: <http://www.fieldsintrust.org/green-space-index>. Accessed 17/01/22
- ONS. 2021. How has lockdown changed our relationship with nature? <https://www.ons.gov.uk/economy/environmentalaccounts/articles/howhaslockdownchangedourrelationshipwithnature/2021-04-26> . Accessed 17/01/22
- Sport England. 2020. 'Covid-19 Briefing: exploring attitudes and behaviours in England during the Covid-19 pandemic. Sport England. 2020. URL: <https://indd.adobe.com/view/793b48d5-bbcd-4de3-a50f-11d241a506b3>. Accessed 17/01/22
- Swanwick, Carys, Nigel Dunnett, and Helen Woolley. 2003. 'Nature, Role and Value of Green Space in Towns and Cities: An Overview'. *Built Environment* (1978-) 29 (2): 94–106.

UK Government. 2022. COVID-19 mental health and wellbeing surveillance: report. URL: <https://www.gov.uk/government/publications/covid-19-mental-health-and-wellbeing-surveillance-report>. Accessed 17/01/22

83750

## Social Cohesion Potential of Indian Streets

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“The street can still be the place where the most important connections are made.” Peter Jukes

Streets have an important social role and perform as social spaces creating affordances for everyday social contacts that are crucial to social cohesion. However, there are considerable differences between streets in the global north and global south in terms of how are used, lived, and experienced. Streets in the Global North are generally quite regulated, rationalised, and commodified, and allow little scope for informal uses and appropriation. In the Global South on the contrary, streets are more adaptable and informal. A good case in point are the streets in India which have a tradition of being in-between spaces negotiating the private and the public shared amongst is varied users as ‘cohabited spaces’. This ‘street culture’ is key to the public life in contemporary India and the city’s identity. Recent practice and research suggest that cities in the Global North are increasingly seeking to make public spaces more multiplicitous and informal, aiming to create more vibrant and socially and culturally diverse cities, highlighting in this respect that cities in the Global North can learn much from streets in the Global South. But what can be learned from streets of the global south? And can this knowledge be transferred?

These questions provide the impetus of this study. To do so, the study presents an empirical survey with ten popular streets in India, such as the FC road Pune that ponders on active appropriation through its commercial activities. Further, the streets of Varanasi have a temporal heritage to generate a sense of belonging and the embedded diversity facilitates is programmatic nature. A similar observation is made through multiple prominent public space studies in the Global North with symbolic, programmatic and minimalist design as social cohesion approaches. The research examines the key commonalities and differences among street designed with social cohesion in mind, in terms of their social, economic and planning policy contexts, social goals, design aims, processes and outcomes, and their diverse representational and use needs. It combines theories and methods from urban design and social sciences, to offer an assessment and comparison of the case studies and their relative merits and limitations in terms of how they used public space design to support the divergent functional and representational needs of diverse social groups, and the common aim of enhancing cohesion among these groups. The analysis is at the end pre-validated against public spaces for social cohesion in Europe, thereby presenting a cross-sectional comparison for its context and design, management and uses and potential lessons and knowledge transfer. The outcome of the research targets to influence public realm policy and practice through continuous engagement with industry professionals and active research groups.

Keywords: Social Cohesion, Indian Public Realm, Street Design, Public Spaces, Urban Design

## References

Aelbrecht, P., Stevens, Q. and Kumar, S. 2021. European public space projects with social cohesion in mind: symbolic, programmatic and minimalist approaches. *European Planning Studies* (10.1080/09654313.2021.1959902)

Aelbrecht, P., Stevens, Q. and Kumar, S. 2020. European public space programs with social cohesion in mind: their social goals, design approaches and representations. Presented at: Anthropology and Geography: Dialogues Past, Present and Future (RAI 2020), Virtual, 14-18 September 2020.

Lopes Simoes Aelbrecht, P and Kumar, S. 2017. European public space programs with social cohesion in mind. Presented at: International Workshop of Research Exchange on 'Public Space and Social Cohesion', Cardiff University, 12 December 2017.

Lopes Simoes Aelbrecht, P. and Stevens, Q. eds. 2018. *Public space design and social cohesion: an international comparison*. Routledge Series on Planning and Urban design. Routledge.

Appadurai, Arjun. "Street Culture". *The India Magazine* 8 (1, December), 1987: 2-23.

Mehta, V., 2013. *The street*. London: Routledge.

82351

## Transformative Approaches to Mitigate the Impacts of Boom-and-Bust in Declining Urban Communities

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Strategic partnerships between universities and declining urban neighborhoods with limited resources have resulted in some innovative and forward-thinking approaches to land use and planning that respond to the impacts of boom-and-bust through the implementation of problem-based solutions, and have spurred development to make communities more resilient. The university-community partnerships and engagements have multiple goals. They include increasing university responsiveness to local needs, stimulating real-world change, and preparing students to effectively address complex social challenges (Dorado, 2004). However, such approaches are complicated by a variety of factors, including stakeholder expectations, power imbalances, and the conflicting goals of educators and community members (Mansuri and Rao, 2004). While the benefits of service-learning programs to universities are well documented, the benefits of such higher education partnerships to community participants are not as well known (Netshandama, 2010). Successful engagements seem to require community involvement and decision-making authority at every phase, mutual accountability, and trust (Winkler, 2013). This presentation refers to a series of case studies of community engagement and neighborhood empowerment in the development of a collective sustainable plan/vision for declining inner-city neighborhoods with limited resources. These neighborhoods, located in Columbus, Ohio, have seen tremendous declines in population and economy over the past years due to significant loss of manufacturing jobs. The case studies demonstrate that service-learning has the potential to provide communities with place-specific guidelines and recommendations that improve the quality of life for residents, but their implementation requires a collective effort that goes beyond the classroom.

Keywords: university-community partnership, service-learning, urban design, participatory planning, sustainable land use approaches

### References

- Dorado, S., Giles, D.E., 2004. Service-learning partnerships: paths of engagement. *Michigan J. Community Serv. Learn.* 11 (1), 25-37.
- Forester, J., 1999b. *The Deliberative Practitioner: Encouraging Participatory Planning Processes*. MIT Press, Cambridge, MA.
- Innes, J.E., Booher, D.E., 1999. Consensus building as role playing and bricolage: toward a theory of collaborative planning. *J. Am. Plan. Assoc.* 65 (1), 9- 26.
- Senbel, M., 2012. Experiential learning and the co-creation of design artifacts: a hybrid urban design studio for planners. *J. Plan. Educ. Res.* 32 ( 4), 449-464.

84260

## Planning practice for privately owned public space in Germany. The case of Hafencity, Hamburg.

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New types of public spaces keep emerging due to societal changes, including the retreat of the state and a trend toward the co-production of public services. Privately owned public space/s (POPS) is a type of co-produced public space that was first introduced in New York City in the 1960s. Since their initial introduction, POPS have become a popular mechanism to increase public space, particularly in highly populated and densely built cities. While POPS have been largely studied, especially in the Anglo-American world, there is a lack of knowledge on the subject in Germany. Instead, there is a common understanding that public spaces in Germany are solely or primarily publicly provided. In our previous research, we challenged this commonly held perception and demonstrated that private stakeholders are important partners in providing public spaces. This research builds on the previous research, and thereby, illustrates the German planning practice in relation to POPS.

This paper presents empirical results drawn from a survey, document analysis, site analysis and expert interview. The survey responses from the local planning officers from the ten largest cities in Germany indicate that a wide range of planning instruments are used to provide and manage POPS. The results of the survey also reveal the local planning officers' motivation to cooperate with private actors in providing and managing public space. Moreover, respondents reported challenges they have in working with private actors as well as their desire to improve the practice. A number of POPS in HafenCity in Hamburg were selected for a detailed study, including document analysis, site analysis and expert interview. Being the largest inner-city urban development project in Europe, the HafenCity development provides ample opportunity for POPS study. 37% of the area are to be developed as public spaces, from which one third are POPS. Based on findings, the paper demonstrates the planning practice of providing and managing POPS in Germany and presents a number of policy recommendations.

Keywords: privately owned public space; public space governance; co-production; welfare state

### References

De Magalhães, C., & Carmona, M. (2009). Dimensions and models of contemporary public space management in England. *Journal of Environmental Planning and Management* 52 (1): 111-129.

Kaden, J., New York City Department of Planning, & Municipal Art Society. (2000). *Privately Owned Public Space: The New York City Experience*. New York: John Wiley and Sons.

Lee, D. (in press). Public space in transition. Co-production and co-management of privately

owned public space in Seoul and Berlin. transcript Verlag: Bielefeld.

Lee, D., & Scholten, N. (in press). Do welfare states need privately owned public spaces? The relevance of and need for such spaces for German cities. *Journal of Urban Design*.

84583

## Logar do Falcão transformation: a proximity process for a collective urban space definition

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We are living a critical and symbolical moment, stressed by the COVID19 pandemic, the prediction of a new economic crisis and the now evident climatic changes.

On architectural and urban planning research, this scenario seems to be creating a productive generation of thoughts, theories and practices on how we can contribute as a discipline and how we should act as professionals. The concept of participation on urban design processes with an emphasis on more precise, evolutive and adaptive design processes are at the core of this phenomenon.

On this context, URBiNAT H2020 project (Healthy corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS, 2018-23) is co-developing urban regenerative and collaborative projects, which are implementing healthy corridors with a human-centred approach (Ferreira & Moniz, 2019).

This paper aims to map, frame and analyse the new collective projections for the transformation of a specific place of the healthy corridor that URBiNAT is developing in the city of Porto (Portugal): a vacant ruin of an old farm located on the parish of Campanhã - Logar do Falcão.

The urban project that will change this place is still in progress, but it is already possible to identify and review most opinions, arguments and strategies that will contribute for the intervention. In this sense, following a framework based on Action Network Theory methodology (Latour 2005), this research scans articles and reports related with the case study and goes through all the field work notes, project drawings and media captions of all the discussions where the intervention was thought and this specific local was mentioned.

This inclusive cartography tries to monitor and show the contradictions of the participated urban design process and examine the subjectivities of all the actors involved (Ranciére 1998). This way, attempts to achieve a better understanding of the architectural development of the project and the relevance of the methodological approach used during the spatial definition of the new Logar do Falcão.

Keywords: Architecture, Participation, Inclusive design processes, Porto, Campanhã

### References

Cruz, T. (2019) With Teddy Cruz on “Power” and “Powerlessness”/Interviewer: Ş. Yıldız. Archinet.com.

Crysler, C. G. (2015). The Paradoxes of Design Activism: Expertise, Scale and Exchange. *FIELD, A Journal of Socially-engaged art criticism*(2).

Ferreira, I., & Moniz, G. C. (2019). Healthy Corridors for Inclusive Urban Regeneration. *Rassegna di Architettura e Urbanistica, How Many Roads*(158), 51-59.

Latour, Bruno. (2005). *Reassembling the Social. An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Miessen, M. (2017). *Crossbenching, Towards a proactive mode of participation as a Critical Spatial Practice*. (PhD). Goldsmiths College / University of London, London.

Petrescu, D. (2012). *Relationscapes: Mapping agencies of relational practice in architecture*. *City, Culture and Society*(3), 135-140.

Ranci re. 1998. *On the shores of politics* Translated by Liz Heron. Londres: Verso Books.

Sanoff, H. (2000). *Community Participation Methods in Design and Planning*. New York: John Wiley & Sons.

83936

## Public Art and Identity in Emergent Communities: a comparative study of Portugal and the United Kingdom

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Public art has been used globally for many purposes, including socio-economic regeneration and community-building. As part of such broad aims, it is evident that public art may have a role to play in encouraging and strengthening community identity and cohesion, factors which may be particularly important in emergent communities, defined as those subject to swift and significant social change in terms of population composition. This presentation examines the use and effects of public art in emergent communities in Portugal and the UK, focusing on Lisbon and London. These contexts are significant for different reasons, with Lisbon having developed an international reputation for the quality and quantity of public art, and London having applied innovative policy mechanisms to encourage appropriate public art in the context of wider cultural and related policy. The presentation considers these cases and identifies implications for good practice, including linkage to wider cultural and spatial planning policy; local participation and engagement; and use of one-off events to catalyse public art development.

Keywords: public art; emergent communities

### References

- McCarthy, J. 2006. 'Regeneration of Cultural Quarters: Public Art for Place Image or Place Identity?', *Journal of Urban Design*, 11(2), pp. 243-262.
- McGregor, E. and Ragrab, N. 2016. *The Role of Culture and the Arts in the Integration of Refugees and Migrants*. Brussels: European Commission.
- Mulcahy, L. and Flessas, T. 2015. 'Limiting Law: art in the street, and street in the art', *Law, Culture and Humanities*, 14(2), pp. 219-241.
- O'Neill, M. 2008. 'Transnational Refugees: The Transformative Role of Art', *Forum: Qualitative Social Research*, 9(2), Article 59, May.

85277

## Participatory reinvention of public space in remote places: Smoties review of best European practices

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Public spaces in small and remote settlements have been given much less attention in scholarly work than their urban counterparts, partly due to the fact that remote areas have been less attractive as one's living space in the last decades due to their declining economic vitality, decreasing amenities and missing infrastructures, among others. The initial expectations that the development of ICT as well as the rising environmental awareness and sustainable living practices will increase the interest of people to live in the remote places did not become the case until recently when the covid-19 increased the popularity of non-urban place. This paper addresses the issues of contemporary living in small and remote places and the roles of public realm for the quality of life there. It is based on an exploratory research of 50 case studies from Estonia, Poland, Austria, Slovenia, Greece, Italy, France, Portugal, United Kingdom and Iceland where international project Smoties researched the best practices of participatory revitalisation of public spaces. The common analytical template was used for all case studies and focused on four main themes and their relations: the socio-spatial characteristics of remote places in general, the morphological and functional characteristics of their public places, the actors and their activities in public spaces and the level and impacts of the participatory and creative practices for the reinvention of public spaces of remote places. The results reflect the complexities of remote communities and the need for the locally adjusted and tailored approaches for the success of public spaces revitalisation. The roles and activities of different players are highlighted and the creative approaches are stressed as an important driver of change, also in terms of developing the economic potentials of remote areas, e.g. tourism development. In the conclusion the contemporary intertwinedness of social, spatial and economic construction of public realm in remote places is stressed.

Keywords: public space, remote place, participation, creative practices, actors and activities

### References

- Bocco, G. (2016) Remoteness and remote places. A geographic perspective. *Geoforum*, 77, 178–181
- Boller, F., Hunziker, M., Conedera, M., Elsasser, H. in Krebs, P. (2010) Fascinating Remoteness: The Dilemma of Hiking Tourism Development in Peripheral Mountain Areas: Results of a Case Study in Southern Switzerland. *Mountain Research and Development*, 30(4), 320–331, [www.jstor.org/stable/mounresedeve.30.4.320](http://www.jstor.org/stable/mounresedeve.30.4.320)
- Carmona, M. (2010) Contemporary Public Space: Critique and Classification, Part One: Critique. *Journal of Urban Design*, 15(1), 123–148, <https://doi.org/10.1080/13574800903435651>
- Francis, J., Giles-Corti, B., Wood, L., & Knuiaman, M. (2012) Creating sense of community: The role of public space. *Journal of Environmental Psychology*, 32(4), 401–409, <https://doi.org/10.1016/j.jenvp.2012.07.002>

Kristen, T. (2004) *The Physical Context of Creativity, Creativity and Innovation Management*, Volume 13, Issue 2, p. 89-96

Skoglund, W., & Jonsson, G. (2013) The potential of cultural and creative industries in remote areas. *Nordisk Kulturpolitisk Tidsskrift*, 15(02), 181–191

Turnock, D. (2004) *The Economy of East Central Europe, 1815–1989: Stages of Transformation in a Peripheral Region* (1st ed.), Routledge

83562

## Proposing a complex urban pattern and integrated sustainable framework for Smart Cities

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Lack of equal access to the environment and its productivity has led to increased urbanization and migration, so there are numerous risks to metropolitan areas, including air pollution, global warming, and the loss of natural resources. Designing and implementing new ideas for developing smart cities that provide easy and equity access to the environment for people is the responsibility of landscape architects and urban designers.

Our integrated design can address all the Five prominent issues, such as climate change, public health and mobility, sustainable development, smart growth, and innovation in planning methods, expressed in the congress. The integrated design primarily supports the fifth track (Innovation in Planning Methods, Tools and Techniques) based on four general ideas. Its output will be available to pedestrians as a practical and personalized tool.

The designed tool can be used with one of the newest technologies called Augmented Reality to analyze data in space online and provide information, such as air pollution, thermal comfort, space security, and vegetation cover. Then, according to their age, gender, and former activities, the application will suggest different routes.

This idea covers two fundamental issues and concerns. First, this idea can increase walkability and reduce CO<sub>2</sub> emission and insurance costs that will be helpful in the direction of a circular economy. In addition, optimizing urban dynamics, residential mobility, enhancing the air quality, and preventing the increase of the earth's temperature can provide more justice and equality in the field of access and productivity of the environment.

**Keywords:** Smart cities, Augmented reality, Integrated design, Circular economy, Environmental justice

### References

J. A. Tuhtan, S. Nag, and M. Kruusmaa, "Underwater bioinspired sensing: New opportunities to improve environmental monitoring," *IEEE Instrum. Meas. Mag.*, vol. 23, no. 2, pp. 30–36, Apr. 2020.

[2] V. Lember et al., "Stabilizing the dynamic behavior and Position control of a Remotely Operated Underwater Vehicle," *Eur. Phys. J. Spec. Top.*, vol. 39, no. 1, pp. 2–20, 2018.

[3] V. Lember, R. Kattel, and P. Tõnurist, "Technological capacity in the public sector: the case of Estonia," *Int. Rev. Adm. Sci.*, vol. 84, no. 2, pp. 214–230, Jun. 2018.

[4] V. Fernandez-Anez, J. M. Fernández-Güell, and R. Giffinger, "Smart City implementation and discourses: An integrated conceptual model. The case of Vienna," *Cities*, vol. 78, pp. 4–16, Aug. 2018.

[5] T. Yigitcanlar and M. Kamruzzaman, "Does smart city policy lead to sustainability of cities?," *Land use policy*, vol. 73, pp. 49–58, Apr. 2018.

[6] jong H. P. pradip kumar Sharma, "No Title," *sciencedirect*, vol. 86, no. 01, pp. 650–655,

2018.

[7] marjin janssen Leonidas Anthopoulos, Vishanth Weerakkody, A Unified Smart City Model (USCM) for Smart City Conceptualization and Benchmarking. 2019.

[8] Z. Allam and P. Newman, "Redefining the Smart City: Culture, Metabolism and Governance," *Smart Cities*, vol. 1, no. 1, pp. 4–25, 2018.

85311

## Pandemic's effects: towards a more holistic paradigm.

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The SARS-Cov-2 pandemic has evidenced critical issues such as urban sprawl, climate change, natural disaster, and socio-economics disparities. The ever-expanding city has opened increasingly vulnerable areas for development and multiplied the number of people subject to the inevitable catastrophic event. The answer to reconstruct and protect the city is often inadequate. The key lessons of Hurricane Katrina is related to what humans did to nature and how it came back to haunt all. It has demonstrated the appalling consequences of maintaining vulnerable populations in dangerous locations, the low-lying areas of the city. New Orleans is the inevitable city in an impossible location that is wretched (Lewis, 2003, Ari Kelman, 2006). In the post-Covid era is not necessary to repeat the mistakes of the past. It is time to change re-adopting more traditional solutions, soft and adaptive, that may seem now radical. We cannot exclude nature, we need to work with nature's own processes to better protect the city and the world. A design-led planning practices, as traditional urbanism, have been re-gaining importance worldwide: a practices based upon geography, soil type, vegetation, watershed catchment patterns, spatial knowledge, systemic urbanism, to foster tailored place-based spatial solutions by resettling scales and views in a more holistic way to re-generate wellbeing. The paper aims to raise questions concerning the pandemic's assumed effects, and how these disrupted prevailing regional and urban planning paradigms (healthy city, happy city etc.).

Keywords: SARS-Cov-2, systemic urbanism, regional and urban planning

### References

- Brugmans G., Strien J. (eds., 2014), IABR-2014-URBAN BY NATURE, Rotterdam, IABR.
- Peirce F. Lewis (2003) New Orleans: The Making of an Urban Landscape second edition, University of Virginia Press, 2003. ISBN-13: 978-1930066090.
- Kelman A., (2006), A River and Its City. The Nature of Landscape in New Orleans, First Edition University of California Press, ISBN: 9780520234338.
- McDonough W., Braungart M., (2013), The Upcycle: Beyond sustainability. Designing for Abundance. North Point Press, New York.
- Zolli A., Healy A.M., (2012), Resilience why things bounce back. Headline publishing group business plus, London.

85303

## Villa Mondeggi Project: new ways of living together

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Today, the social and economic crisis resulting from the Covid-19 pandemic offers the opportunity to rethink the paradigm of consumption, production, mobility and collective life in the metropolitan area. A new approach to urban spaces seems necessary to meet the needs of local communities in a more inclusive and ecologically sustainable way, as well as through new behavioural patterns, both individual and collective, in line with the principles of sustainability and environmental and social responsibility.

Following these ambitions, the Metropolitan City of Florence – taking advantage of the opportunity offered by the Integrated Urban Plans, introduced in Italy at the end of 2021, as tools for sustainable urban regeneration to be supported by the funds of the National Recovery and Resilience Plan – decided to develop a project for the villa Mondeggi estate, a vast territorial heritage site in the municipality of Bagno a Ripoli, on the south-eastern outskirts of Florence. The project proposal considers in its entirety the territorial system of the Villa Mondeggi Estate, consisting of the main villa, the large garden and the appurtenant buildings, and almost 170 hectares of land divided into seven agricultural estates with their farmhouses.

The estate is a large, complex and articulated property in which different functions, dynamics and rhythms coexist. The Villa Mondeggi estate is meant to become a platform for a new shared generation of innovation and social inclusion, with the aim of increasing the social and economic opportunities of the women, men, young people, and minors who live and will live in the metropolitan area, leaving no one behind and fully respecting the environmental ecosystem and natural resources.

Starting from these considerations, the project proposal identifies the most coherent ideas and strategies starting from the three Vision of the Strategic Plan of Florence and the Metropolitan Goals of the 2030 Agenda.

From this point of view, the proposal is structured along three main project lines:

- protection and valorisation in an eco-systemic and agro-ecological key;
- widespread knowledge, training and research between tradition and innovation;
- generative proximity, social inclusion and community relations.

Through a varied but coherent set of functional priorities, urban and infrastructural solutions and actions along these project lines, the Villa Mondeggi Estate will constitute the soul and beating heart of a new metropolitan conscience centred on integral sustainable human development, both individual and shared, for the future of the entire Metropolitan City of Florence.

Keywords: Urban regeneration; landscape urbanism; social inclusion; life cycle; territorial project; regional design

## References

Carlo Pisano (2020). Strategies for Post-COVID Cities: An Insight to Paris En Commun and Milano 2020. SUSTAINABILITY vol. 12, pp.5883-5897 - ISSN:2071-1050, DOI:10.3390/su12155883

Carlo Pisano; Giuseppe De Luca; Ahmadreza Shirvani Dastgerdi (2020). Smart Techniques in Urban Planning: An Insight to Ruled-Based Design. SUSTAINABILITY vol. 12 - ISSN:2071-1050

Carlo Pisano, Valeria Lingua (2021). The Impact of Regional Design on River Agreements: The Case of the Ombrone River in Tuscany. PLANNING PRACTICE & RESEARCH, DOI: 10.1080/02697459.2021.2005870

Mario Biggeri, Luca Bortolotti (2020). Towards a 'harmonious society'? Multidimensional development and the convergence of Chinese provinces. REGIONAL STUDIES, pp. 1-13, ISSN:1360-0591

85199

## Wellbeing score (WBS) for evaluating the quality of the built environment: The integration of “objective” physiological and “subjective” psychological responses of citizens to the spatial characteristics of public places

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The quality of the urban environment is one of the key factors influencing health and wellbeing. The latter consists of physical and mental counterparts, where mental health to a large extent contributes to physical health and vice versa. Traffic noise, air pollution, litter and dirt, poor vegetation, etc., are among the major causes of environmental stress (Lederbogen et al., 2011). Natural environments, and certain built environments, in turn, alleviate stress and foster mental restoration (Knez et al., 2018; Twedt et al., 2016; Scopelliti et al., 2019). As the human population is increasingly concentrating in urban settlements, it is of utmost importance to understand the characteristics of the built environments with the restorative capacities. The research aims to identify the relationship between the spatial qualities of public spaces and the citizens' psychological and physiological responses to these spaces.

The case study is located in Narva, Estonia. Narva is a shrinking city, thus public space needs to be carefully assessed and evaluated in order to improve quality of life and well-being while determining the expediency of future investments. Test locations are identified through a holistic analysis of the urban fabric on macro- and microlevel. The macrolevel analysis includes the accessibility and connectivity of the public spaces (Space Syntax) according to modal split on a city-wide scale (Dembski, 2020), the inter-visibility connections within the urban network (visibility graph analysis) on a neighbourhood scale (Turner et al., 2001), as well as housing attachment and mobility. The microlevel includes the retention time of public spaces and activities, which are captured through the video analysis. It, also, includes the physiological reactions of individuals to the space, measured through biosensors, and the psychological assessment, collected via a questionnaire.

The study yields a well-being score, which integrates “objective” physiological and “subjective” psychological assessment of selected public places. The measured and perceived responses are interpreted in relation to spatial characteristics, resulting in evaluating human-environment relations in a given location.

Keywords: environmental stress, mental health, public space, restorative capacity, quality of urban environment, wellbeing score

### References

Dembski, F. (2020), *Energy Conscious Urban Inward Development. Analytical Design Strategies for the Post-Oil City - The Case Study of Greater Paris*. Dissertation, TU Wien, Faculty of Architecture and Spatial Planning, Institute for Spatial Planning, Local Planning, Vienna.

Knez, I., Ode Sang, Å., Gunnarsson, B., and Hedblom, M. (2018) Wellbeing in Urban Greenery: The Role of Naturalness and Place Identity. *Front. Psychol.* 9:491. doi: 10.3389/fpsyg.2018.00491

Lederbogen, F., Kirsch, P., Haddad, L. et al. (2011) City living and urban upbringing affect neural social stress processing in humans. *Nature*, 474, 498–501. doi: 10.1038/nature10190

Scopelliti, M., Carrus, G. and Bonaiuto, M. (2019) Is it Really Nature That Restores People? A Comparison With Historical Sites With High Restorative Potential. *Front. Psychol.* 9:2742. doi: 10.3389/fpsyg.2018.02742

Turner, A., Doxa, M., O'Sullivan, D., and Penn, A. (2001). From isovists to visibility graphs: a methodology for the analysis of architectural space. *Environment and Planning B*, 28 (1), 103–121. doi:10.1068/b2684

Twedt, E., Rainey, R.M., and Proffitt, D.R. (2016) Designed Natural Spaces: Informal Gardens Are Perceived to Be More Restorative than Formal Gardens. *Front. Psychol.* 7:88. doi: 10.3389/fpsyg.2016.00088

84433

## Measuring School Spaces beyond pandemic. Learnings from two cities in Northern Italy

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School foreclosure and sanitation measures in education and learning services due to the COVID-19 pandemic represent an unprecedented event that has affected all students but everyone's everyday lives worldwide. The issue has substantial implications in several public domains: social equality, working conditions, urban mobility, cultural environment, etc. The pandemic condition gave a crucial role in school spaces in the public debate, with all the rhetoric, clichés, and stances accumulated and settled over time on the different school systems. School spaces have expanded their own perimeters: the awareness of the physical dimension has surpassed attention exclusively relegated to school buildings (maintenance conditions, energy efficiency, and adaptation of the building envelopes) and the urban and territorial dimensions of the school emerged. They brought to the fore the contexts where the spaces of education are situated, their conditions of use (by whom, at what times of day, with what conflicts and mutual coexistence), their access conditions.

Against this complex backdrop and considering the Italian context, the paper addresses spatial and territorial issues, moving from ongoing projects in collaboration with the municipalities of the city of Milan and Bergamo in Northern Italy. They provide interesting evidence regarding two different metropolitan and medium-sized city contexts, involving schools and the surrounding city, questioning the urban role of education spaces.

The paper discusses such works' outcomes, proposing a methodological approach in a comparative perspective to identify spatial criticalities inside and outside the school buildings. In particular, these topics will be discussed: i) data mapping at metropolitan scale and classification of education facilities, institutional networks, the number of students, building typologies, etc.; ii) exploration on the neighborhood scale, characteristics of schoolyards, sidewalks, nearby open public spaces, streets, and facilities; iii) a transdisciplinary approach that integrates urban regeneration, pedagogical perspectives, and social policies while building innovative governance settings based on collaborations between schools, local administrations and other territorial actors.

Keywords: schools, education and learning services, public space, urban regeneration

### References

Darian-Smith K., Willis J., eds. (2017), *Designing Schools. Space, place and pedagogy*, London-New York, Routledge.

Klinenberg E., *Palaces for the people. How infrastructure can help fight inequality, polarization, and the decline of civic life* (2018), New York, Crown.

Million A., Heinrich A.J., Coelen T., eds. (2017), *Education, Space and Urban Planning. Education as a Component of the City*, Springer.

Pacchi C., Ranci Ortigosa C., Boterman W.; Musterd S. (2019), «School segregation in contemporary cities: Socio-spatial dynamics, institutional context and urban outcomes», *Urban Studies, Special Issue*, volume 56, n. 15, pp. 3055 – 3073.

Renzoni C., Savoldi P. (2019), "Starting from schools: urban spaces of transition and learning", *Urbanistica*, n° 163, pp. 140- 147.

84042

## Can Neighbourhood Sustainability Assessment tools improve urban wellbeing?

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Urbanization and ageing population are two main issues that contemporary cities have to face urgently (UN, 2019). This requires a rethinking of public spaces in order to ensure health and wellbeing for all and stimulate active ageing. In line with the goals of the Agenda 2030 – particularly obj. 11 –, it is necessary aiming at inclusive cities which can support the life of people regardless of age, gender, skills (UN, 2015).

In this sense, the district scale seems to be the better choice to act in a sustainable way achieving these goals. It is in the neighbourhoods that sense of place and sense of community are generally realized. These are urban spaces of proximity, which have played a fundamental “social” role during the pandemic. Therefore, can Neighbourhood Sustainability Assessment (NSA) tools improve urban wellbeing?

NSA tools are voluntary rating systems used for certifying sustainable neighbourhoods in the case of new constructions or urban renewal. They consist of categories and indicators to evaluate specific performances. Their purpose is to objectify planned interventions assigning a final score which identifies the overall performance of the district in terms of sustainability (Boyle et al., 2018). However, it emerges that in most NSA tools environmental dimension prevails on the social and economic ones (Pedro et al., 2019; Sharifi et al., 2021).

The present study wants to investigate some of the most commonly used neighbourhood scale tools (BREEAM Communities, GBC Italia, ITACA Scala Urbana, DGNB Districts, Living Community Challenge, EcoDistricts) looking at how these systems can help to create more inclusive districts. In particular, the study aims to analyse the social categories of each protocol in order to underline criticalities and potentialities of NSA systems, backed by literature review on these themes.

Rethinking these protocols making them more flexible (e.g., with both quantitative and qualitative indicators) could be a solution to support municipalities, planners and stakeholders in designing inclusive and accessible environments for all.

**Keywords:** Neighbourhood Sustainability Assessment; urban wellbeing; social sustainability; inclusive environments.

### References

- Boyle, L., Michell, K., Viruly, F. (2018). A critique of the application of neighborhood sustainability assessment tools in urban regeneration. *Sustainability*, 10. doi:10.3390/su10041005.
- Pedro, J., Reis, A., Duarte Pinheiro, M., Silva, C. (2019). A systematic review of the international assessment systems for urban sustainability. In *IOP Conf. Series: Earth and Environmental Science*, 323. doi:10.1088/1755-1315/323/1/012076.
- Sharifi, A., Dawodu, A., Cheshmehzangi, A. (2021). Limitations in assessment methodologies

of neighborhood sustainability assessment tools: A literature review. In *Sustainable Cities and Society*, 67, doi.org/10.1016/j.scs.2021.102739.

- United Nations (2015). *Transforming our world: the 2030 Agenda for Sustainable Development* (A/RES/70/1).

- United Nations, Department of Economic and Social Affairs, Population Division (2019b). *World Population Prospects 2019: Highlights* (ST/ESA/SER.A/423).

85890

## HISTORIC PRECEDENTS OF THE X-MINUTE CITY

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Time-related urban modules based on walking distances— 5-minute for 400m, 10-minute for 800m, 15-minute for 1200m— emerged as urban design and planning tools that would heal the environmental and social impacts of the automobile age. However, it was the Covid-19 pandemic that fueled a global trend toward localization and offered a ‘performance preview’ of a healthier lifestyle in urban models with fewer commutes and more walking, more free time, and ‘greener’ neighborhoods. Aligned with this trend, City Models where daily needs can be reached in few minutes from home on foot, bike, or public transport are globally pursued so as to reduce greenhouse emissions, mitigate climate crisis and promote health and well-being as well as social cohesion and economy: Paris pilots the ‘15-minute city’ concept, Barcelona plans to super-size its car-free ‘superblock’ and cities in Australia and UK pursue the ‘20-minute neighborhood’, a strategic city planning for walkable environments and complete communities that originated in Portland, OR. Furthermore, Sweden pursues on a national scale a smaller, hyper-local module, the ‘One-minute city’. Yet, most of the ideas and principles underpinning X-minute City concepts are not new. The paper aims to understand and enhance current time-related urban concepts through a multi-faceted examination of historic paradigms. To this end, it examines both ideal and real city plans derived from the past and reveals the hidden origins and the underlying persistence of the 5-, 10-, 15-minute modules along with their varied aspects in their urban forms. Through a typo-morphological analysis, it evaluates and critically discusses the findings from historic cases where city modules are functions of walking time, ranging from Polybius’s Roman military camp descriptions to Oglethorpe’s Savannah plan, from Filarete’s Sforzinda to Scamozzi’s Palmanova, from Hebrard’s World Centre of Communication to his Thessaloniki Reconstruction Plan and from Howard’s Garden City to Milton Keynes. Alluding to the European Commission’s Green Deal initiative to improve the well-being and health of citizens and future generations, the paper looks back to elaborate city planning paradigms so as to advocate the matching of sustainability and time-related planning in the pursuit of an innovative framework towards the green transformation and the creation of eco-social urban systems.

Keywords: 15-Minute City, sustainability, urban design, historic city plans, walkability, 20-Minute City

### References

- Andersen, H., Jenks, O., Hebrard, J., Hébrard, E., Umamo, & Hébrard, Jean. 1918. Creation of a world centre of communication. Rome. Balletto, Ginevra, Michèle Pezzagno, and Anna Richiedei. 2021. “15-Minute City in Urban Regeneration Perspective: Two Methodological Approaches Compared to Support Decisions.” In *Computational Science and Its Applications – ICCSA 2021*, 535–48. Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-030-86976-2\\_36](https://doi.org/10.1007/978-3-030-86976-2_36). Cuthbert, Alexander. 2007. *The Form of Cities*. New York: John Wiley & Sons Hein, Carola. 2004. *The Capital of Europe: Architecture and Urban Planning for the European*

Union. Westport, Conn.: Praeger. Moreno, Carlos. 2020. Droit de cité : de la ville-monde à la ville du quart d'heure Paris: Éditions de l' Observatoire. O'Sullivan, F. "Make Way for the 'One-Minute City'". Bloomberg CityLab 2021, 5 Jan., <https://www.bloomberg.com/news/features/2021-01-05/a-tiny-twist-on-street-design-the-one-minute-city> Perry, Clarence Arthur .1929. The Neighborhood Unit, a Scheme of Arrangement for the Family-Life Community. Published as Monograph 1 in Vol.7 of Regional Plan of N.Y. Regional Survey of N.Y. and Its Environs.

85318

## Age-Friendly Communities in Estonia: Supporting Healthy Ageing by Spatial Interventions. Challenges for Urban Planning and Design

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Population ageing (urban ageing) is creating challenges for many communities over the world. Supporting environments that meet the needs and expectations of people over the life-course has become more and more relevant (Buffel & Phillipson, 2016, 2018). These global demographic trends and challenges occur also in Estonia. Demographic data shows that the number of people over 65 years old consisted 20% of the population in 2021 and it will increase to 28% by 2050 according to the baseline projections (Statistics Estonia, 2019, 2021). Furthermore, Estonia has one of the highest proportions of people aged 60 and over in the United Nations countries (United Nations, 2013, p. 94). Hence, one in five Estonians are already over 65 and possibly require more assistance and supportive environment in terms of their functional abilities.

In response to a global ageing society, the concept of Age-Friendly Communities (AFC) have emerged as community development initiative (Gilroy, 2008; Steels, 2015; WHO Regional Office for Europe, 2017). More recently, United Nations have declared 2021–2030 the Decade of Healthy Ageing. For more than two decades, this endeavour has continuously expected to reach to local level and to day-to-day practices. Healthy or active ageing is not solely the working field of public health, social welfare and gerontology, but it is also rooted in all fields of community development. As such, urban planning has an opportunity and obligation to influence improving the well-being and quality of life of older adults.

The aim of this paper is to explore how to understand community development and urban planning challenges in 5-10 years or in a longer term in the context of age-friendly communities; it examines what are the current actions and spatial interventions in Estonia in the field, and how urban planning can foster creating supportive environments that enables people to maintain independence and to grow old in their communities. Methodology of grounded theory has guided this research, and qualitative content analysis have been deployed. The results show that health and various components of built environment, transportation and mobility, social engagement and interactions are critical to achieve age-friendliness of the place. The findings demonstrate what is the current state of Estonian communities in the context of AFC, the results inform what are the possibilities and obstacles to achieve age-friendly and healthy places in Estonia, and acts as a call for discussion and action in the urban planning field.

Keywords: Age-Friendly Communities, Healthy Communities, Healthy Ageing, Urban Planning, Built Environment, Estonia

### References

Buffel, T., & Phillipson, C. (2016). Can global cities be 'age-friendly cities'? Urban development and ageing populations. *Cities*, 55, 94–100.

<https://doi.org/10.1016/j.cities.2016.03.016>

Buffel, T., & Phillipson, C. (2018). A Manifesto for the Age-Friendly Movement: Developing a New Urban Agenda. *Journal of Aging & Social Policy*, 30(2), 173–192.  
<https://doi.org/10.1080/08959420.2018.1430414>

Gilroy, R. (2008). Places that Support Human Flourishing: Lessons from Later Life. *Planning Theory & Practice*, 9(2), 145–163. <https://doi.org/10.1080/14649350802041548>

Statistics Estonia. (2019). Population projection until 2080 by Sex and Age (based on the population figure as at 1 January 2019 (RV086)).  
[https://andmed.stat.ee/en/stat/rahvastik\\_\\_rahvastikunaitajad-ja-koosseis\\_\\_rahvaarv-ja-rahvastiku-koosseis/RV086](https://andmed.stat.ee/en/stat/rahvastik__rahvastikunaitajad-ja-koosseis__rahvaarv-ja-rahvastiku-koosseis/RV086)

Statistics Estonia. (2021). Population by Sex and Age group, 1 January 2021 (RV021).  
[https://andmed.stat.ee/en/stat/rahvastik\\_\\_rahvastikunaitajad-ja-koosseis\\_\\_rahvaarv-ja-rahvastiku-koosseis/RV021](https://andmed.stat.ee/en/stat/rahvastik__rahvastikunaitajad-ja-koosseis__rahvaarv-ja-rahvastiku-koosseis/RV021)

Steels, S. (2015). Key characteristics of age-friendly cities and communities: A review. *Cities*, 47, 45–52. <https://doi.org/10.1016/j.cities.2015.02.004>

United Nations, Department of Economic and Social Affairs, Population Division. (2013). *World Population Ageing 2013*. United Nations, Department of Economic and Social Affairs, Population Division.  
<https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeingReport2013.pdf>

WHO Regional Office for Europe. (2017). *Age-friendly environments in Europe. A handbook of domains for policy action*.  
<https://apps.who.int/iris/bitstream/handle/10665/334251/9789289052887-eng.pdf>

85374

## Mobility in the historic city - Redefining corridors of mobility for all

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The historic city is a place of formal and informal corridors of movement. The former are usually well defined and formulate the perceived structure and urban morphology of these places. The latter are less evident, but are equally important to the everyday functioning of the city. They may pass thru zones in the public sphere but they may also cut through publicly used private zones to serve their community. The proposed methodology for this investigation aims to examine the built fabric in the historic city of Nicosia in Cyprus and to bring to light characteristics and components of urban places and how these are put together against the way in which they are perceived by urban dwellers. The study looks at the issue through a number of prongs, such as: spatial perception through the senses of sight, sound and smell on one hand migrating to the ability of access and navigation depending on gender and on people of all ages with various degrees of mobility challenges. Additional parameters of investigation include the issue of safe passage and increased mobility for public health. Tools used are extensive thematic mappings evaluated through the critical lens of the investigative prongs mentioned above and which include indicators of both a quantitative and qualitative nature as both sources of information but also as primers for architectural and urban designers. In this proposal the information extracted from the initial investigation and analysis is used to put together a toolset of spatial interventions that is subsequently utilized to propose urban transformations and infill proposals that help expand this informal network of movement through the city while at the same time broadening accessibility and making it more inclusive for a greater number of city dwellers. The work hopes to conclude with thoughts and recommendations to grass roots organizations delving on this challenge and emanating from local ambitions and concerns to submissions to local planning boards that may lead to revision of local codes at the municipal level to policy making at the district level.

Keywords: historic city, urban mobility, social justice, third places, interstitial space, informal corridors of movement

### References

Adelfio, Marco, et al. "Social Activity in Gothenburg's Intermediate City: Mapping Third Places through Social Media Data." *Applied Spatial Analysis and Policy* 13.4 (2020): 985-1017.

Pojani, Dorina. "The self-built city: theorizing urban design of informal settlements." *Archnet-IJAR: International Journal of Architectural Research* (2019).

Fullagar, Simone. "Fullagar, S, O'Brien, W & Lloyd, K.(in press, 2019) Feminist perspectives on third places. In Dolley, J. & Bosnan, C.(Eds). *Rethinking Third Places: Informal public spaces and community building*, Cheltenham, UK: Edward Elgar."

Simões Aelbrecht, Patricia. "‘Fourth places’: the contemporary public settings for informal social interaction among strangers." *Journal of Urban Design* 21.1 (2016): 124-152.

Mowen, A. J., Graefe, A. R., Barrett, A. G., Roth, K., & Godbey, G. C. *Americans’ Broad-Based Support for Local Recreation and Park Services: Results from a Nationwide Study*. Ashburn, VA: National Recreation and Park Association, 2016.

Carroll, Penelope, et al. "Kids in the City: children's use and experiences of urban neighbourhoods in Auckland, New Zealand." *Journal of urban design* 20.4 (2015): 417-436.

Troped P. *The Power of Trails for Promoting Physical Activity in Communities. A Research Brief*. Princeton, NJ: Active Living Research, a National Program of the Robert Wood Johnson Foundation; January 2011.

Dannenberg, et al. *The Impact of Community Design and Land-Use Choices on Public Health: A Scientific Research Agenda*. *American Journal of Public Health*, September, 93(9), p.p 1500–1508, 2003

85141

## Digital tools to plan health-promoting urban environments

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Walking as a form of transport is the most sustainable way of mobility. This simple fact has long been neglected in urban planning where an increasingly health-aware urban population is now starting to reclaim city space for their needs. Prominent city planners like Jan Gehl and Hugh Barton have inspired a range of activities to mitigate deficiencies in the built environment for the walkability for urban neighbourhoods and plan for pedestrian-friendly social spaces. According to the urban renaissance paradigm this school of thinking advocates for new ways of assessing urban space with a focus on pedestrians and their needs with the added benefits of positive health effects and social cohesion. At the same time, research on socio-economic disparities emphasizes that this movement should not be the domain of privileged neighbourhoods. Environmental and procedural justice as well as capacity building to empower disadvantaged people and neighbourhoods for this purpose is just as important.

This contribution shows key results of a research project that aimed to inform digital planning tools for the assessment of health-promoting walkable neighbourhoods from an interdisciplinary perspective. A team of psychologists and spatial planning experts applied a mixed-methods approach to study areas in Stuttgart to identify reasons why residents do not necessarily walk more in walkable neighbourhoods than in car-dependant areas. The study tests a range of hypotheses based on walkability data, trip diaries of local residents, and lifestyle segmentation of households available from market research institutes. An ambulant assessment scrutinizes the influence of environmental natural and built-up characteristics on the well-being of test persons along daily walking routes. Additional surveys and interviews help to better understand the influence lifestyle-specific motivational aspects and urban planning. Field work was conducted during different phases of lockdowns in the Corona pandemic. The results are therefore interpreted with a view towards adaptation strategies of test persons to this special situation. The analysis helps to inform a new GIS-based digital planning tool to assess walkable neighbourhoods for urban planning. It is designed to conduct comparative research between neighbourhoods and city regions. Initial results of this tool have been published in a web-based interactive mapping application. In addition, the tool is designed to incorporate location-specific policy targets to monitor and evaluate the outcomes of planning interventions to improve the walkability of neighbourhoods. This use case extends to public participation and supports the co-design of urban spaces between stakeholders in urban planning and local residents. The contribution closes with an outlook into future research designs on the topic where we aim to facilitate digital co-creation of walkable neighbourhood designs with virtual design options visualized in digital twins.

Keywords: Public health, walkability, digital planning tools, ambulant assessment, lifestyle preferences

## References

Barton, Hugh (2016): *City of Well-being. A Radical Guide to Planning*: Taylor & Francis.

Calogiuri, G.; Chroni, S. (2014): The impact of the natural environment on the promotion of active living: An integrative systematic review. In: *BMC public health*, 14(1), S. 873.

Gehl, Jan (2013): *Cities for people*: Island Press.

van Holle, V.; Deforche, B.; van Cauwenberg, J.; Goubert, L.; Maes, L.; Van de Weghe, N.; Bourdeaudhuij, I. de (2012): Relationship between the physical environment and different domains of physical activity in European adults: a systematic review. In: *BMC Public Health* 12(1), S. 807. doi: 10.1186/1471-2458-12-807.

84494

## Greening Wadis as a strategic tool for green infrastructure

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The presentation is based on recent studies of the author in Muscat/Oman on the development of green infrastructure in 2017 and 2018. Aim is to extend green areas in the city to enhance the quality of life for the residents, to support a sustainable urban development and to address climate change. As strategic tool, existing wadis (dry riverbeds) which are currently dividing the urban fabric apart will be used as new open green spaces. These Wadis are mostly characterized today as “empty areas” with blank soil in the middle of the city. Wadis cannot, due to the danger of rare flash floods, be designed as normal urban parks but rather as green open spaces with low intervention level for recreational activities, sports, relaxing and in the flood safe higher areas also for picnic. These activities were highlighted in two sets of questionnaires (in toto 500 interviews) by asking local residents for their outdoor activity preferences. The main objective of two studies in in Muscat, Oman, was to identify resident’s needs, to analyze spatial potentials and to develop technical approaches for a transformation of wadis into green urban spaces for recreational activities.

Findings showed that Wadis are already used by the residents for various informal activities and can be also seen as valuable urban space with a great potential to create new green public spaces. The feasibility of this approach has been confirmed by expert interviews. Surprisingly, water as fundamental resource for green spaces in arid countries is not the bottleneck. Treated waste water, nowadays discharged into the Omani sea, could be used in large quantities for irrigation. The feasibility of Wadis as flash flood prone parks with facilities requested by residents has been confirmed by several test designs.

Keywords: Green Infrastructure, open spaces, well-being, Middle East,

### References

- Al-Ghafri, A. (2008). Traditional water distribution in Aflaj irrigation systems: Case study of Oman. In Adeel, Schuster, & Bigas (Eds.), *What makes traditional technologies tick? A review of traditional approaches for water management in drylands* (pp. 74–85). Tokyo: UNU Desertification Series No. 8: The United Nations University.
- Al Sabti, A. S. (2016). Treated effluent (TE) utilization and balance. Presentation at the Oman Energy and Water Exhibition and Conference. Presentation slides obtained from: <http://www.energyandwateroman.com/downloads/2016/Presentations/Day%203/Session%202/New%20folder/Oman%20Energy%20and%20Water%20Exhibition%20%20Conference%2023-25%20May%20-%20AM%20GM.pdf>. Retrieved on 9 December 2017.
- Scholz, W., Kaiser, M., Pallasch M. 2020: The Potentials and Risks of Wadis in Cities in the Gulf Region. In: Martinez J., Mikkelsen C.A., Phillips R. (Hrsg): *Handbook of Quality of Life and Sustainability. International Handbooks of Quality-of-Life*. Springer. [https://doi.org/10.1007/978-3-030-50540-0\\_25](https://doi.org/10.1007/978-3-030-50540-0_25)

Deffner, V., & Pfaffenbach, C. (2015). Urban spatial practice of a heterogeneous immigration society in Muscat, Oman. TRIALOG 114: Oman – Rapid Urbanisation No. 3, 9.

85229

## Places, pandemic and multiple risks: new emerging urban challenges

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The Covid-19 emergency, although in different manner and measure, is changing habits and use of places and cities at global level. In many cities, public spaces became completely empty for months and new urban landscapes have substituted the previous ones, transforming the private in public. Children and young have interrupted the school in presence to start that by internet; adults started the smart working; elderly begun to meet their sons through the computer. Houses and balconies were used for work and study, allowing people to go inside the private life of everyone. The reopening of public spaces has happened after months of closing, allowing again “live” social interactions, although in respect of the physical distance, confirming the importance for all people of these places.

In this scenario the current problems of any places could create further challenges: areas characterized by industrial dismission, cultural heritage in a poor state of conservation, and public spaces with low level of accessibility, maintenance or inclusion, if interested by pandemic emergencies – or other kinds of both sanitary and environmental crisis -, require more integrated and flexible interventions.

To analyse these places and provide a suitable sustainable regeneration meant in its three-fold meaning and adaptation, different new methodological approaches were created.

Starting from these premises, this study, carried in the framework of a Prin 2020 - Research Projects of National Relevance - with the author responsibility, is aimed at illustrating: the main questions deriving from the pandemic emergency with respect to the public spaces and relative challenges; the main current methods of analysis and design of these spaces; an emblematic case study, characterized by flexibility and accessibility at different level. Conclusion concerning both critical and positive issues of the case study will complete the paper.

Keywords: Places, pandemic, multiple risks, urban design, sustainability, flexibility

### References

- Carmona M. (2019) Place value: place quality and its impact on health, social, economic and environmental outcomes, *Journal of Urban Design*, 24:1, 1-48, DOI: 10.1080/13574809.2018.1472523
- De Roo G.; Yamu C.; Zuidema C. (2020), *Handbook on Planning and Complexity*, Edward Elgar Publishing, Cheltenham Glos UK
- Desouza, K.C. & Flanery, T.H. (2013). Designing, planning, and managing resilient cities: A conceptual framework. *Cities*, 35, 89-99
- Sepe, M., 2019. *Liveable and healthy city design*, Wit Transactions on Ecology and the Environment, Wit Press, Southampton
- Sepe, M., *The Role Of Public Space To Achieve Urban Happiness*, *International Journal of Sustainable Development and Planning*, 2 (4), pp. 724-733, 2017.

85201

## Urban beekeeping. Designing spaces of cohabitation between humans and bees in the urban environment

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During the last 20 years, the world has experienced a serious loss of bee colonies, with important consequences for the global economy. The cause of this massive disappearance depends on several factors including the use of pesticides, global climate change, electromagnetic radiation, monocultures, and also viruses. Faced with the ever-increasing disappearance of bees, the city and its spaces offer hospitality to bee colonies. Like the phases of urbanization, from the countryside to the city, which has marked history since the second half of the 17th century, bees are becoming the "involuntary" inhabitants of our cities, with the fears and consequences of any cohabitation and integration. This contribution focuses on the 'honey bee' (*apis mellifera*), which is the most widespread species in temperate climates. Always linked from the past, the lives of humans and those of the bees are now crossing paths in this somewhat atypical environment: the city. Cities have proven a particularly favorable location due to the reduced presence of pesticides and the presence of greater biodiversity that favors the pollinating and honey-producing activity of bees. The relatively recent introduction of bees in the city has brought a major awareness to this wonderful insect, sometimes causing a fashionable phenomenon. This is not always synonymous with putting the issue of bee health on the back burner, as social networks and product marketing are increasingly giving visibility and dissemination. The collectives have an important role to play in raising awareness of the threat to bees and to beekeeping skills, building small communities, and promoting sustainable lifestyles. They are committed to providing beekeeping courses by professional farmers and recruiting people who are sensitive to the subject and willing to install a beehive in their homes. The study proposes to trace these new practices in the European context and to question the role of bees in the city, thus discovering the potential they have in renewing human relationships with nature in the urban environment, seen as a multi-species habitat. The questions that this contribution proposes to answer are the following: what is the place of bees in contemporary cities? What kind of spaces are reserved for them? Can our cities be a reserve for bees? The contribution thus proposes to explore the issue of the presence of bees in the city, both at the small architectural scale and at the larger urban scale, on the assumption that our cities can constitute a protected habitat reserve to safeguard the existence of this precious insect.

Keywords: cohabitation; multi-species habitat; honey bees; urban environment

### References

ROUILLARD Dominique, «L'autre animal de l'architecture», in Cahiers thématiques: architecture, histoire, conception n.11, décembre 2011, pp.105-117;

ITSAP (Institut technique et scientifique de l'abeille et de la pollinisation)

URL: <http://itsap.asso.fr/>;

Le Plan Biodiversité 2011-2015

URL: <http://www.paris.fr/biodiversite> ;

Schéma régional de cohérence écologique (SRCE) d'Île-de-France, 2013

URL: [http://www.driee.ile-de-france.developpement-durable.gouv.fr/IMG/pdf/SRCE2013\\_21oct2013\\_RNT\\_cle739945.pdf](http://www.driee.ile-de-france.developpement-durable.gouv.fr/IMG/pdf/SRCE2013_21oct2013_RNT_cle739945.pdf) ;

UNAF (union Nationale des Apiculteurs de France)

URL: <http://www.abeillesentinelles.net/ville-de-paris.html> ;

Plan de Développement Durable de l'Apiculture, 2013

URL: <http://agriculture.gouv.fr/plan-de-developpement-durable-de-lapiculture-stephane-le-foll-presente-les-premiers-resultats-et-les>

84266

## Developing a 360° built-environment assessment for urban research and planning practice

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The coronavirus pandemic highlighted the vital role urban areas play in supporting citizens' health and well-being (Ribeiro et al., 2021). In times of (personal) vulnerability, citizens depend on their neighbourhood for performing daily physical activities to restore their mental state, but public spaces currently fall short in fulfilling the appropriate requirements to achieve this. The situation is exacerbated by Western ambitions to densify through high-rise developments to meet the housing demand. In this process of urban densification, public spaces are the carriers where global trends, local ambitions and the conditions for the social fabric materialise (Battisto & Wilhelm, 2020). High-rise developments in particular will determine users' experiences at street-level. Consequently, they have an enduring influence on the liveability of neighbourhoods for the coming decades but, regarding the application of urban design principles, their impact is hard to dissect (Gifford, 2007).

Promising emerging technologies and methods from the new transdisciplinary field of neuroarchitecture may help identify and monitor the impact of certain physical characteristics on human well-being in an evidence-based way. In the two-year Sensing Streetscapes research study, biometric tools were tested in triangulation with traditional methods of surveys and expert panels. The study unearthed situational evidence of the relationship between designed and perceived spaces by investigating the visual properties and experience of high-density environments in six major Western cities. Biometric technologies—Eye-Tracking, Galvanic Skin Response, mouse movement software and sound recording—were applied in a series of four laboratory tests (see Spanjar & Suurenbroek, 2020) and one outdoor test (see Hollander et al., 2021). The main aim was to measure the effects of applied design principles on users' experiences, arousal levels and appreciation.

Unintentionally, the research study implied the creation of a 360° built-environment assessment tool. The assessment tool enables researchers and planners to analyse (high-density) urban developments and, in particular, the architectural attributes that (subliminally) affect users' experience, influencing their behaviour and perception of place. The tool opens new opportunities for research and planning practice to deconstruct the successes of existing high-density developments and apply the lessons learned for a more advanced, evidence-based promotion of human health and well-being.

Keywords: Well-Being, Biometric Monitoring, Streetscapes, Eye-Tracking, High-Density Environments, Evidence-Based Design

## References

Battisto, D., & Wilhelm, J. J. (Eds.). (2020). *Architecture and Health Guiding Principles for Practice*. Routledge, Taylor & Francis Group.

Gifford, R. (2007). The Consequences of Living in High-Rise Buildings. *Architectural Science Review*, 50(1), 2–17. <https://doi.org/https://doi.org/10.3763/asre.2007.5002>

Hollander, J. B., Spanjar, G., Sussman, A., Suurenbroek, F., & Wang, M. (2021). Programming for the subliminal brain: biometric tools reveal architecture's biological impact. In K. Menezes, P. de Oliveira-Smith, & A. V. Woodworth (Eds.), *Programming for Health and Wellbeing in Architecture* (pp. 136–149). Routledge, Taylor & Francis Group. <https://doi.org/https://doi.org/10.4324/9781003164418>

Ribeiro, A. I., Triguero-Mas, M., Jardim Santos, C., Gómez-Nieto, A., Cole, H., Anguelovski, I., Silva, F. M., & Baró, F. (2021). Exposure to nature and mental health outcomes during COVID-19 lockdown. A comparison between Portugal and Spain. *Environment International*, 154, 106664. <https://doi.org/https://doi.org/10.1016/j.envint.2021.106664>

Spanjar, G., & Suurenbroek, F. (2020). Eye-Tracking the City: Matching the Design of Streetscapes in High-Rise Environments with Users' Visual Experiences. *Journal of Digital Landscape Architecture (JoDLA)*, 5(2020), 374–385. <https://gispoint.de/gisopen-paper/6344-eye-tracking-the-city-matching-the-design-of-streetscapes-in-high-rise-environments-with-users-visual-experiences.html?IDjournalTitle=6>

84133

## The interplay between activities performed in the physical and digital sphere - effects of the COVID-19 pandemic

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Technion

The rapid development of ICT leads to a constant movement of activities from the physical space to the digital world relaxing time-space limitations, re-arranging human activity, and affecting activity spaces. Home is becoming a place that is not only for living but also for working and shopping. The COVID-19 pandemic accelerated these trends, especially among young generations. The lockdowns and the fear of infection in public spaces enabled individuals to experience the benefits and disadvantages of digital-based life. As a result, there was an increase in digital usage of most activities, such as leisure, retail, education and healthcare. The pandemic also disrupted the home-work relationship as employees switched to remote work instead of commuting to the office every day. Previous studies evaluated this digital shift during the pandemic's lockdowns and for only one activity (such as working or shopping). Thus, not considering the variation between different activities and the broader implications on the public sphere in cities in the digital era.

This study examines which physical activities are more likely to be substituted by digital activity. We relate to a generational point of view due to digital behavior variation among various generation cohorts. Data collected by a survey conducted among 671 residents in the four central cities in Israel is used to examine the effect of the pandemic. We apply a classification and regression tree model to analyze the influence of individuals' behavior before the pandemic on a period with restrictions due to the pandemic and on a future period without restrictions. Results indicate that although the pandemic accelerated digital trends, the physical sphere will remain dominant in the long term. At the same time, activities related to retail have a higher possibility for substitution compared to entertainment and leisure activities. In addition, the usage of digital services before the pandemic and remote work accelerated the digital-physical substitution effect. Results also show a variation between cities, indicating that spatial or cultural aspects might influence the substitution between the spheres. These results will contribute to the planning of future cities in the digital age.

Keywords: Digital activity, activity spaces, COVID-19, accessibility

### References

- Akter, S., Ashrafi, T., & Waligo, V. (2021). Changes in Consumer Purchasing Behavior Due to COVID-19 Pandemic. *Changes*, 77.
- Dannenberg, P., Fuchs, M., Riedler, T., & Wiedemann, C. (2020). Digital transition by COVID-19 pandemic? The German food online retail. *Tijdschrift voor economische en sociale geografie*, 111(3), 543-560.
- Hall, M. C., Prayag, G., Fieger, P., & Dyason, D. (2020). Beyond panic buying: consumption

displacement and COVID-19. *Journal of Service Management*.

Parker, K., Uddin, R., Ridgers, N. D., Brown, H., Veitch, J., Salmon, J., ... & Arundell, L. (2021). The Use of Digital Platforms for Adults' and Adolescents' Physical Activity During the COVID-19 Pandemic (Our Life at Home): Survey Study. *Journal of medical Internet research*, 23(2), e23389.

Wang, B., Zhen, F., Wei, Z., Guo, S., & Chen, T. (2015). A theoretical framework and methodology for urban activity spatial structure in e-society: Empirical evidence for Nanjing City, China. *Chinese Geographical Science*, 25(6), 672-683.

Watanabe, T., & Omori, Y. (2020). Online consumption during the COVID-19 crisis: Evidence from Japan. *Covid Economics*, 32, 208-241.

Yousefi, Z., & Dadashpoor, H. (2020). How do ICTs affect urban spatial structure? A systematic literature review. *Journal of Urban Technology*, 27(1), 47-65.

85274

## Healthy Urban Blue: A methodological framework for linking human health and blue space design

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With the expansion of the population in urban areas, there is growing global concern about health issues caused by the prevalence of chronic lifestyle-related diseases. Existing research indicates that exposure to natural environments in the urban environment can enhance human health and well-being. Therefore, urban planning and design should be responsible for using these natural spaces to promote human health. However, the main difficulty in incorporating health into spatial design and planning is the lack of methodological support for linking experts on public health with planners and designers. Therefore, to address the dilemma, this study develops a three-step methodological framework to translate abstract health-related evidence into practical design knowledge that can be directly utilized in natural spaces planning and design.

The available health-related evidence about urban blue space is used as the initial input to validate the feasibility of the methodological framework. It is widely acknowledged that water is the foundation of humanity, and it has had a profound impact on city planning and development throughout history. However, the health advantages of blue space have received less attention than the benefits of green space, particularly in urban areas. In addition, waterfront rejuvenation has become a growing trend in urban planning and design in recent decades, making it necessary to integrate health benefits into the spatial design and planning process. Subsequently, based on the input health-related evidence, several urban blue space samples are proposed to illustrate the application of the methodological framework. Using Rotterdam as an example, these samples contain several design principles, spatial patterns, and evaluation methods corresponding to the input of health-related evidence. This study can assist planners and designers to incorporate health benefits into urban blue spaces' spatial planning and design. On the other hand, it may serve as an inspiration for other academics to extend the methodological framework to additional locations for the purpose of developing healthy cities.

Keywords: Health Benefits, Blue Space, Methodological Framework, Design Principle, Spatial Pattern, Design through Research

### References

1. Alexander, C. (1977). *A Pattern Language: Towns, Buildings, Construction*. Oxford University Press.
2. Bell, S., Fleming, L. E., Grellier, J., Kuhlmann, F., Nieuwenhuijsen, M. J., & White, M. P. (2021). *Urban Blue Spaces*. Routledge. <https://doi.org/10.4324/9780429056161>
3. Frumkin, H., Bratman, G. N., Breslow, S. J., Cochran, B., Kahn, P. H., Lawler, J. J., Levin, P. S., Tandon, P. S., Varanasi, U., Wolf, K. L., & Wood, S. A. (2017). Nature contact and human health: A research agenda. *Environmental Health Perspectives*, 125(7), 1–18. <https://doi.org/10.1289/EHP1663>

4. McDougall, C. W., Quilliam, R. S., Hanley, N., & Oliver, D. M. (2020). Freshwater blue space and population health: An emerging research agenda. *Science of the Total Environment*, 737, 140196. <https://doi.org/10.1016/j.scitotenv.2020.140196>
5. Nijhuis, S., & Bobbink, I. (2012). Design-related research in landscape architecture. *Journal of Design Research*, 10(4), 239–257. <https://doi.org/10.1504/JDR.2012.051172>
6. Nijhuis, S., & de Vries, J. (2019). Design as Research in Landscape Architecture. *Landscape Journal*, 38(1–2), 87–103. <https://doi.org/10.3368/lj.38.1-2.87>
7. Remme, R. P., Frumkin, H., Guerry, A. D., King, A. C., Mandle, L., Sarabu, C., Bratman, G. N., Giles-Corti, B., Hamel, P., Han, B., Hicks, J. L., James, P., Lawler, J. J., Lindahl, T., Liu, H., Lu, Y., Oosterbroek, B., Paudel, B., Sallis, J. F., ... Daily, G. C. (2021). Nature and physical activity in cities: an ecosystem service perspective. *Proceedings of the National Academy of Sciences*, 118(22), 1–10. <https://doi.org/10.1073/pnas.2018472118>
8. Smith, N., Georgiou, M., King, A. C., Tiegies, Z., Webb, S., & Chastin, S. (2021). Urban blue spaces and human health: A systematic review and meta-analysis of quantitative studies. *Cities*, 119(August), 103413. <https://doi.org/10.1016/j.cities.2021.103413>

84919

## Evaluation of climate-oriented planning and design tools for "street open space" in the local roads

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With the continuous reconstruction of buildings in Taiwan to cope with earthquake threat and owners' demand, a unique opportunity exists for integrating climate-oriented planning and design measures into the "street open space" in front of the reconstruction sites for some of the country's major cities. Consequently, a gradual urban transition to more sustainable and environment-friendly "street open space" may accompany the reconstruction of the buildings in these well-developed, high-density cities.

While past literature has provided minimal knowledge of operational spatial planning guidelines or tools at the community street level, where the sidewalks in Taiwan either do not exist or are too narrow to accommodate climate-related design concepts. Studying street open space along community streets, this empirical study examines the effectiveness of spatial planning and design tools for adaptation and mitigation functions, as well as their synergies and co-benefits. As a result, this research can contribute to several of the Sustainable Development Goals (SDGs), namely "build resilient infrastructure" (SDG 9), "make cities and human settlements resilient and sustainable" (SDG 11), and "take urgent action to combat climate change and its impacts" (SDG 13).

Taipei's local streets serve as the study cases, and the primary sources of data are field surveys, Google street view, and satellite images. In this study, the before-and-after analysis will be performed using paired samples t-tests, and synergy analysis will be done via qualitative methods. Research results indicate that with the reconstruction of the street open space, the climate-oriented physical environment output (e.g., the size of street open space, nature-based solutions, and green transportation), as well as the mitigation and adaptation benefits, and non-climate co-benefits, all improved. Such planning tools as building setbacks and expanding the open space along the street shoulders create synergies. Policy implications include initiating citywide planning on expanding the width of street open space to accommodate planned NBS packages based on local needs to foster synergies and co-benefits and improving the completeness and continuity of shaded sidewalks.

**Keywords:** Climate-oriented Planning and Design, "Street Open Space," Synergies, Nature-based Solutions

### References

Ahern, J. (2011). From fail-safe to safe-to-fail: Sustainability and resilience in the new urban world. *Landscape and Urban Planning*, 100(4): 341–343.

Apsimon, H., Amann, M., Åström, S., & Oxley, T. (2009). Synergies in addressing air quality and climate change. *Climate Policy*, 9(6), 669–680.

Berland A., Shiflett S.A., Shuster W.D., Garmestani A.S., Goddard H.C., Herrmann D.L., Hopton M.E (2017). The role of trees in urban stormwater management. *Landsc. Urban Plan.* 2017;162:167–177.

Brown, R. D., Vanos, J., Kenny, N., and Lenzholzer, S. (2015). Designing urban parks that ameliorate the effects of climate change. *Landscape and Urban Planning*, 138: 118-131.

C.Y.Jim. (2004). Green-space preservation and allocation for sustainable greening of compact cities. *Cities*, pp. 311-320.

Carrus, G., Scopelliti, M., Laforteza, R., Colangelo, G., Ferrini, F., Salbitano, F., Agrimi, M., Portoghesi, L., Semenzato, P., Sanesi, G., 2015. Go greener, feel better? The positive effects of biodiversity on the well-being of individuals visiting urban and peri-urban green areas. *Landsc. Urban Plan.* 134, 221–228.

85047

## Pandemic-induced street experiments: problem-solving character and the potential to enable systemic change

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The COVID-19 pandemic urged cities to quickly respond to sanitary and health challenges that were for many new and unknown. In order to curb virus spread, various types of temporary measures in the public space, such as outdoor dining precincts on parking spaces and pop-up cycling lanes, have been introduced which better guarantee physical distancing and safe traffic flows. Many of these interventions can be regarded as street experiments: they primarily intend to temporarily change the use, regulation and/or form of streets. Besides, it has been suggested that they have the potential to not only answer to some pressing needs, but also trigger systemic change in urban mobility. Using a meta-analysis on case studies and literature, this paper demonstrates how pandemic-induced street experiments provide a solution to specific challenges in mobility, public space and the economic downturn. Examples are providing in the need for and access to qualitative open and green outdoor spaces, ensuring better road safety and access to safe travel for all, and assisting in the safe (re)opening of businesses and facilities. However, some issues, such as an unequal spatial distribution among different neighbourhoods and a lack of citizens' participation in the decision process, are also observed, which raises questions on equity. Finally, we find that the pandemic impacted street experiments in three ways: they tend to have a higher acceptance among the public and authorities, develop a more permanent character, and have a greater embeddedness in long-term planning agendas. The paper concludes that the pandemic stimulated the introduction of street experiments and fostered their potential to enable systemic change in mobility.

Keywords: street experiments, urban mobility, public space, systemic change, COVID-19, crisis response

### References

- Bertolini, L. (2020), From "Streets for Traffic" to "Streets for People": Can Street Experiments Transform Urban Mobility?. *Transport reviews*, 40(6), pp. 734-753. <https://doi.org/10.1080/01441647.2020.1761907>.
- Combs, T. S. & Pardo, C. F. (2021). Shifting Streets COVID-19 Mobility Data: Findings from a Global Dataset and a Research Agenda for Transport Planning and Policy. *Transportation Research Interdisciplinary Perspectives* 9, 100322. <https://doi.org/10.1016/j.trip.2021.100322>.
- Glaser, M. & Krizek, K. J. (2021), Can Street-Focused Emergency Response Measures Trigger a Transition to New Transport Systems? Exploring Evidence and Lessons from 55 US Cities. *Transport Policy* 103, pp. 146-155. <https://doi.org/10.1016/j.tranpol.2021.01.015>.
- Honey-Rosés, J., Anguelovski, I., Chireh, V. K., Daher, C., Konijnendijk van den Bosch, C.,

Litt, J. S., ... & Nieuwenhuijsen, M. J. (2020), The Impact of COVID-19 on Public Space: an Early Review of the Emerging Questions—Design, Perceptions and Inequities. *Cities & Health*, pp. 1-17. <https://doi.org/10.1080/23748834.2020.1780074>.

Macharis, C., Tori, S. M., De Séjournet, A., Keserü, I. & Vanhaverbeke, L. (2021), Can the COVID-19 Crisis be a Catalyst for Transition to Sustainable Urban Mobility? Assessment of the Medium-and Longer-Term Impact of the COVID-19 Crisis on Mobility in Brussels. *Frontiers in Sustainability* 2. <https://doi.org/10.3389/frsus.2021.725689>.

84294

## Exploring the Link Between Built Environment and Children's Happiness in Ankara, Turkey

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Although there is a great deal of literature examining the relationship between the happiness of adults and the built environment (Chen and Zhang, 2018; Su et al., 2021), only a limited number of studies have explored the link between built environment and children's happiness (see, e.g., Laatikainen et al., 2017; Moore et al., 2019). This paper asks whether subjectively measured children's level of happiness is related with objectively measured aspects of the built environment, and which characteristics of the neighborhood environment promote/hinder children's happiness the most. To this end, as part of a larger scale study, two neighborhoods in Ankara with different urban characteristics were selected – one from the inner-city and one from the periphery. The street connectivity, building density, land use mix and greenness of these two neighborhoods were analyzed by using GIS. Next, the authors have selected all the public schools from the chosen neighborhoods. All nine-to-thirteen year old children who wanted to participate in the larger scale study were selected from these schools. Thereafter, the authors have conducted a participatory mapping activity with the selected children. As part of this activity, children were asked to mark and discuss the places where they feel happy and unhappy on the satellite images of their neighborhoods. They were also asked to respond to a short survey, which included a question related to their level of happiness in the neighborhood. For this paper, approximately 100 randomly selected children's marked places were transferred into GIS. Finally, the authors have correlated the survey data of these 100 children with the data obtained from their maps and objective measures of their built environment. Initial findings show the role of active organized recreation areas, schoolyards and home gardens in promoting positive feelings among children. The study results aim to guide urban designers in creating places that promote children's happiness.

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**Keywords:** Happiness, Children, Built Environment, Place Mapping, Neighborhood

### References

Chen, C. and Zhang, H. (2018) Do you live happily? Exploring the impact of physical environment on residents' sense of happiness. IOP Conference Series: Earth and Environmental Science, 112, 012012.

Laatikainen, T. E., Broberg, A., and Kyttä, M. (2017) The physical environment of positive places: Exploring differences between age groups. *Preventive medicine*, 95, S85-S91.

Moore, D., Morrissey, A. M., and Robertson, N. (2021) 'I feel like I'm getting sad there': early childhood outdoor playspaces as places for children's wellbeing. *Early Child Development and Care*, 191(6), 933-951.

Su, L., Zhou, S., Kwan, M., Chai, Y., and Zhang, X. (2021) The impact of immediate urban environments on people's momentary happiness. *Urban Studies*, 004209802098649.  
doi:10.1177/0042098020986499

## TRACK 9: SPATIALITIES

82974

### Translating social exclusion of vulnerable groups into space: An alternative review through print and social media

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Democracy relates to space in a wide variety of ways. When discussing democracy and space, as necessary as it is to address human rights, individualism, the place of the individual within society, and the societal relations established between space and spatial experience (Harvey, 2009; Sen, 2009), it is also important to conceptualize democracy as an agent of (re)structuring space through the concept of the right to the city, which has become associated with human rights and their democratic or non-democratic effects and sanctions on individuals and social relations in various urban settings (Lefebvre, 1991). The existence and state of society, on the other hand, is closely related to the various vulnerabilities of individuals and groups (Turner, 2006). Bearing in mind the space-related principles of the aforementioned theories as well as the appropriation of vulnerabilities within this framework, this study investigates the spatial and social relations that different social groups and non-human members of society establish in public space, both with the space and with each other. Building on Hannah Arendt's (1998) influential book, *The Human Condition*, these groups in public spaces were evaluated within the framework of a 'communal' and 'irrelevant' pair of opposing concepts, and the state of 'vulnerability' was associated with that of being deemed 'irrelevant' in society.

To this end, answers were sought to the following research questions: In what ways does democracy manifest itself in space, and how is it ensured for different groups co-living in society? What is the equivalent of the concepts of 'communal' and 'irrelevant' in the public sphere regarding vulnerable individuals and groups? In answering these questions, the study focuses on the complex relationships between these concepts observed in Turkey over a content analysis of print and social media—national satire magazines and YouTube channels, respectively—that reflect on various states of and perceptions on vulnerability in Turkish society and culture. By doing so, it evaluates the inclusive and exclusionary qualities of public spaces. It argues that the terms 'communal' and 'irrelevant' have been associated with groups that are accepted as 'normal' or 'not normal' and those that are 'vulnerable.' The study concludes with some broader implications of this discussion for social exclusion, democracy and space.

Keywords: Democracy, Social exclusion, Communal, Irrelevant, Public space, Vulnerability

#### References

- Arendt, H. (1998). *The human condition* (second edition). Chicago, IL: The University of Chicago Press.
- Harvey, D. (2009). *Social justice and the city* (revised edition). Athens, GA: The University of Georgia Press.

Lefebvre, H. (1991). *The production of space*. Cambridge, MA: Blackwell Publishing.

Sen, A. K. (2009). *The idea of justice*. Cambridge, MA: Harvard University Press.

Turner, B. S. (2006). *Vulnerability and human rights: Essays on human rights*. University Park, PA: Penn State University Press.

84978

## Towards a moped-style scooter regulation that favours social and spatial equity: Findings from semi-structured interviews from Barcelona's mobility ecosystem

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Moped-style scooter sharing services offer a short-time rent for daily urban mobility and are present in more than fifteen European cities. In May 2020, Barcelona City Council became a pioneering administration regulating its service, and gave 6.958 licences to 10 private operators, under a model with capped vehicle licences and an uncapped number of operators. The main criticisms of this regulation focused on a perpetuation of social inequality, a lack of spatial equity guarantee and weak economic viability to private operators.

In this context, in this study, we employ a semi-structured interviewing approach to discern which regulation model might be most appropriate to ensure a public interest of the service, but at the same time can guarantee the long-term economic viability of private operators.

Interviewees included five operators' managers with experience in Barcelona, five public officials involved in Barcelona's regulation or responsible for transportation policies, and five local experts of the mobility urban ecosystem.

Results show a diversity of opinions depending on the experience, the own interests, and the nature (public or private) of the interviewed stakeholders. A strong consensus is identified in proposing an alternative to the Barcelona regulatory model, but with an approach that ranges from a model based on *numerus clausus* (such as Paris or Amsterdam regulation) to a *laissez-faire* model (such as Madrid or Berlin regulation) which is based on an open dialogue between administrations and private sector. However, many respondents pointed out that the natural path of the regulation (as happened decades before with public transport, or a few years ago with bike-sharing) is towards a very close public-private partnership model, with greater management and control capacity by the public sector. This option is also the one that generates the greatest consensus of favouring a more territorially and socially equitable service while preserving its economic viability, but it has significant public sector spending. This set of statements is very valuable for urban policymakers who want to implement a micromobility regulation soon.

**Keywords:** Moped-style scooter sharing, Micromobility; Shared mobility; Equity; Transport policy; Public-private collaboration

### References

Arias-Molinares, D., Romanillos, G., García-Palomares, J. C., & Gutiérrez, J. (2021). Exploring the spatio-temporal dynamics of moped-style scooter sharing services in urban areas. *Journal of Transport Geography*, 96 doi:10.1016/j.jtrangeo.2021.103193

Butrina, P., Le Vine, S., Henao, A., Sperling, J., & Young, S. E. (2020). Municipal adaptation to changing curbside demands: Exploratory findings from semi-structured interviews with ten U.S.

cities. *Transport Policy*, 92, 1-7. doi:10.1016/j.tranpol.2020.03.005

Fishman, E., & Allan, V. (2019). Bike share doi:10.1016/bs.atpp.2019.05.003

Laa, B., & Emberger, G. (2020). Bike sharing: Regulatory options for conflicting interests – case study vienna. *Transport Policy*, 98, 148-157. doi:10.1016/j.tranpol.2020.03.009

Marquet, O., & Miralles-Guasch, C. (2016). City of motorcycles. On how objective and subjective factors are behind the rise of two-wheeled mobility in barcelona. *Transport Policy*, 52, 37-45. doi:10.1016/j.tranpol.2016.07.002

Shaheen, S., Cohen, A., Chan, N., & Bansal, A. (2019). Sharing strategies: Carsharing, shared micromobility (bikesharing and scooter sharing), transportation network companies, microtransit, and other innovative mobility modes. *Transportation, land use, and environmental planning* (pp. 237-262) doi:10.1016/B978-0-12-815167-9.00013-X

Wang, H., Xiong, W., Yang, L., Zhu, D., & Cheng, Z. (2020). How does public-private collaboration reinvent? A comparative analysis of urban bicycle-sharing policy diffusion in china. *Cities*, 96 doi:10.1016/j.cities.2019.102429

85227

## Creating an “in-between”: The post-migrant perspective in participatory urban development

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Multiculturalism is an influential policy agenda in Western participatory planning (Fincher et al., 2014, Sandercock, 1998). It highlights the coexistence between ethnocultural different groups and aims equal access of marginalized ethnocultural minority groups in the planning process. In contrast to multiculturalism, the “post-migrant perspective” (Foroutan, 2019) is a theoretical approach from German migration studies that has been introduced recently in the field of planning and urban studies (Pilz and Kirndörfer, 2021, Wiest, 2020). The post-migrant perspective embodies the deconstruction of the migrant-native divide and a boundary blurring of ethnocultural categories, without neglecting their power and importance in society. It pays attention to hybrid identity formations of public participation participants, which can be involved through an “in-between” (Bhabha, 2004) of shared positionalities around a multitude of categories like class, milieu, age, gender, or lifestyle. Using a post-migrant perspective, we analyze how notions of normality of migration have been used by participation practitioners from local administrations and civil society actors in the German cities Berlin and Wiesbaden. We show how a stigmatizing migrant-native divide has been questioned in participatory urban development, and in which ways the “in-between” of hybrid identity formation beyond ethnocultural homogenous ascriptions has been articulated. The overall goal is to understand how addressing participants in a more inclusive way can improve conception and design of future participation processes. We conducted 42 semi-structured expert interviews with participation practitioners from local administrations and civil society in Berlin and Wiesbaden. The research was part of two experimental and transformative real-world labs within the research project INTERPART – intercultural spaces of participation.

post-migrant, participatory planning, urban development, migration, public participation,

### References

Bhabha, H. K. (2004) *The Location of Culture*, London, Routledge. Fincher, R., Iveson, K., Leitner, H. and Preston, V. (2014) ‘Planning in the multicultural city: Celebrating diversity or reinforcing difference?’, *Progress in Planning*, vol. 92, pp. 1–55. Foroutan, N. (2019) ‘The Post-migrant Paradigm’, in Bock, J.-J. and Macdonald, S. (eds) *Refugees welcome?: Difference and diversity in a changing Germany*, New York, Oxford, Berghahn, pp. 142–167. Pilz, M. and Kirndörfer, E. (2021) ‘“Tense encounters”: How migrantised women design and re-imagine urban everyday life’, in Gaonkar, A. M., Ost Hansen, A. S., Post, H. C. and Schramm, M. (eds) *Postmigration: Art, Culture, and Politics in Contemporary Europe*, Bielefeld, transcript, pp. 299–318. Sandercock, L. (1998) *Towards cosmopolis: Planning for multicultural cities*, Chichester, Wiley. Wiest, K. (2020) ‘Ordinary Places of Postmigrant Societies: Dealing with Difference in West and East German Neighbourhoods’, *Urban Planning*, vol. 5, no. 3, pp. 115–126.

83827

## CIVIC ACT 2 : local public action and collective mobilization in the Great Paris, the place of socio-environmental inequalities

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CIVIC ACT 2 project is the fruit of a partnership between the University of Paris and Sciences Po Paris. This project studies the evolution of relationships between local governments and associations and collectives in the framework of socio ecological transition and whose territories reveal socio environmental injustices. Firstly, the researchers (geographers, a socio-economist, a sociologist, a statistician, and a computer science linguist) analysed quantitatively socio and environmental inequalities about the cities of the Great Paris (with a combination of eleven socio-demographic variables and eleven land use pattern variables). This quantitative analysis allowed them to create various classes of cities and to sample four urban territories (Paris 18e, Ivry-sur-Seine, Aubervilliers, Clamart), that exemplifies the observed inequalities. They made monographs about the selected cities, then conducted qualitative (semi-structured) interviews with associations, collectives, local elected representatives and local experts of the cities who are engaged or work in the socio ecological transition. The collectives and associations are classified in five categories of themes in which they are engaged (alimentation, circular economy, mobilities, urban nature, solidarity and insertion). The comparative approach between the four territories and between the collectives and associations aims to study the specificity of civil society mobilizations depending on the socio environmental inequalities.

The first exploratory results show the various types of links between local public action and mobilizations according to the inequalities of the territories. The way associations and collectives see socio environmental justice and take charge of inequalities corresponds as much to the associative skills as the answer they give at the social and environmental crisis. Plus, according to the relationships between actors of different scales (French department, local council community, city council) and to the consultation dynamic between civil society and public actors, the politization of ecological and social issues reflects historical territorial trajectories under pressure. In this communication, we will explore the difficulties that experiment civil society in the socio ecological transition, in the territories we study, and the interactions between civil society and local authorities.

Keywords: public action, civil society, inequalities, Great Paris, participation

## References

- ANTOLINOS-BASSO, Diego, Nathalie BLANC, Jean CHICHE, and Flaminia PADDEU. "S'engager pour l'environnement dans le Grand Paris." *Cybergeog*, March 2020, 1–36. <https://doi.org/10.4000/cybergeog.34544>
- Blanc Nathalie et Paddeu Flaminia, « L'environnementalisme ordinaire. Transformer l'espace public métropolitain à bas bruit ? », *EspacesTemps.net* [En ligne], Travaux, 2018 | Mis en ligne le 5 avril 2018. URL : <https://www.espacestems.net/articles/lenvironnementalisme-ordinaire-transformer-lespace-public-metropolitain-a-bas-bruit/>
- Pommerieux Mélanie, Nathalie Blanc, Lydie Laigle, Stéphane Tonnelat. « Capabilités et adaptation en Île-de-France. De la difficulté à intégrer les capabilités dans les plans locaux d'adaptation au changement climatique », *Natures Sciences Sociétés*, vol. 29, no. 2, 2021, pp. 185-197.
- Emelianoff Cyria, 2008. La problématique des inégalités environnementales, un nouveau paysage conceptuel, *Écologie et Politique*, 35 : 19-31.
- Emelianoff Cyria, Blanc, Nathalie. L'investissement habitant des lieux et milieux de vie : une condition du renouvellement urbain ? Étude prospective France, Etats-Unis, Russie, Pays-Bas, Allemagne Inhabitant engagement in their lived environment: a condition of urban renewal ? Prospective study France, United States, Russia, Netherlands, Germany. May 2008. DOI:10.13140/RG.2.1.1624.7520 Rapport final, 2008 Programme exploratoire de recherche prospective européenne PUCA, 2004

84604

## Tourist Digital Imprints: Towards a Sustainable Smart City

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As cities become increasingly complex, Information and Communication Technologies (ICTs) bring smartness into organisations and communities, contributing to a more competitive tourism destination, i.e., smart tourism destinations. Enhanced information access coupled with a new kind of tourists avid for online content and predisposed to share information on social media, allows for a better understanding of tourist behaviour regarding their spatial distribution in urban destinations. Thus, smart tourism portrays individuals as information makers, refining the available alternatives for tracking their location. Big data analytics is a technology with the potential to develop

Smart City services. From the analysis of the spatial distribution of tourists in the city of Lisbon based on data collected from the 'Panoramio' social network, we identify the most popular places in the city in a context of tourist visits. This new data largely contributes to understanding the consumption

of space within urban tourist destinations and therefore enables us to differentiate the overcrowded places from the ones with potential to grow. This allows decision-makers to imagine new ways of planning and managing towards a sustainable 'smart' future.

Keywords: smart city; smart tourism; big data; sustainability; social networks; geotagged photos

### References

Encalada, L., Boavida-Portugal, I., Cardoso Ferreira, C., & Rocha, J. (2017). Identifying tourist places of interest based on digital imprints: Towards a sustainable smart city. *Sustainability*, 9(12), 2317.

Boavida-Portugal, I., Rocha, J., & Ferreira, C. C. (2016). Exploring the impacts of future tourism development on land use/cover changes. *Applied Geography*, 77, 82-91.

Encalada, L., Ferreira, C. C., Rocha, J., & Boavida-Portugal, I. (2018). Geographical patterns in the tourist city: GIS for spatiotemporal analysis. In *GIS Applications in the Tourism and Hospitality Industry* (pp. 76-97). IGI Global.

Encalada, L., Ferreira, C. C., Boavida-Portugal, I., & Rocha, J. (2019). Mining big data for tourist hot spots: Geographical patterns of online footprints. In *Geospatial Challenges in the 21st Century* (pp. 99-123). Springer, Cham.

85046

## Delineations of Justice in an Oil City: Nature, Capital, and the Geographies of Urban Inequality

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Yale-NUS

Luanda, a city shaped by centuries of racial, spatial, and ecological differentiations, has undergone tremendous transformations over the past couple of decades. New buildings sprouted all over the centre, new housing projects were built in the outskirts, new centralities emerged in and beyond the periphery, and a whole new mode of being in the city was established in the process. In the meantime, as the city's population grew by the millions, the vast majority continued to dwell in ever-expanding settlements with inadequate provision of water, sanitation, drainage, or public services. After decades of civil war, riding through the ups and downs of the international oil market, the Angolan capital became bigger, further compartmentalized, and more unequal. This paper grapples with these petroleum-fuelled transformations to consider delineations of justice in an oil city.

The paper takes seriously the idea that space, time, and nature are constituted in relation to each other, and builds on an interdisciplinary approach to study the city to seek new ways to think about the making of socio-spatial justice in the twenty-first century. In describing how spatial differences in the Angolan capital have been produced out of relations and transmissions across multiple scales, the paper also reflects on the object of spatial planning and its scopes of action. Finally, making sense of how the plundering of nature and the instrumentalization of dead matter produces urban forms within and across global flows of resources, finance, and expertise, the aim is to chart possibilities of socio-spatial justice from a decentred location in the world map of planning and policy-making.

### References

- Gastrow, C. (2017). Cement Citizens: Housing, Demolition and Political Belonging in Luanda, Angola. *Citizenship Studies*, 21(2), 224–239.
- Harvey, D. (1997). *Justice, Nature and the Geography of Difference*. Wiley.
- Soares de Oliveira, R. (2015). *Magnificent and Beggar Land: Angola Since the Civil War*. Oxford University Press.
- Watson, V. (2009). Seeing from the South: Refocusing Urban Planning on the Globe's Central Urban Issues. *Urban Studies*, 46(11), 2259–2275.
- Tomás A (2022) *In the Skin of the City: Spatial Transformation in Luanda*. Duke University Press.

83130

## The investment interest and the land-use management. The case study of the coastal Metropolitan Area of Attica, Greece.

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Spatial planning and economic activity, being inevitably interdependent with their boundaries becoming significantly blurry, function complementary as a dipole. This functional structure, i.e. the dipole, is affected by external factors which cause noteworthy spatial pressure. This proposal refers to how investments in the coastal area of Attica provoke both urban discontinuities in the urban fabric and continuous disparities and deepening spatial divides. As a part of a wider PhD research, this article examines the land-use conflicts that are the result of large-scale investments in the waterfront of the Metropolitan Area of Attica in Greece. The Metropolitan Area of Attica is selected as the case study of this research, mainly because of the evident administration, institutional and economic transformations occurring on it: the different systems of administration division, the constitutional review, the fiscal adjustment and the emerging development model. Coastal areas constitute a particular domain of interest for a wide range of investors, and this is the case in the Metropolitan Area of Attica. Today, there are many, existing or under construction, large-scale and intensive investments on the waterfront of this Metropolis, such as the Port of Piraeus, Faliro Bay, Hellenikon Project, Asteras Vouliagmeni. These projects reflect not only the need for the creation of new, open, green spaces but also the demand for climate adaptation due to coastal areas. These investments, resulted from the direct demand for human activities and the indirect competitiveness for space, because of urban fabric discontinuities, intense land-use conflicts, and incompatibilities at the local scale. The development of large-scale investments influences property ownership, spatial management, stakeholder participation, and the decision-making processes.

Keywords: urban development, coastal area, urban disparities, large-scale investments, land use conflicts

### References

Asprogerakas E., Serraos K., Sofianopoulos D. (2007) 'Policies for the replanning of urban coastal areas. The case of Athens. Comparisons with Hamburg', XXI AESOP Conference, Naples, 11th -14th July.

Batista E Silva F, Lavalle C, Jacobs C, Ribeiro Barranco R, Zulian G, Maes J, Baranzelli C, Perpiña Castillo C, Vandecasteele I, Ustaoglu E, Lopes Barbosa A, Mubareka S. Direct and Indirect Land Use Impacts of the EU Cohesion Policy. Assessment with the Land Use Modelling Platform. Luxembourg: Publications Office of the European Union.

Theodora, Y. (2014) 'Land uses as a spatial expression of the development model. Issues of methodological consideration for spatial development and regulation', Scientific conference for the spatial regulation and development, Athens, 26th June. [in Greek]

Kuhl, L., van Maanen, K. Scyphers, S. (2020) An analysis of UNFCCC-financed coastal adaptation projects: Assessing patterns of project design and contributions to adaptive capacity. *World Development*. 127.

De Puydt, L., Gladytz, A. and Karrasch, L. (2016) Developing sustainable coastal areas: A comparison between the Netherlands and the United Kingdom. *Aegean Journal of Environmental Sciences*. 2, pp. 24-55.

United Nations (2008) *Spatial planning. Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition*. New York & Genova: United Nations.

84717

## The Displacement Story of Yıldız Campus, Istanbul

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Variants of displacement are emerging through neoliberal urban policies. Students, who have been referred as displacers to date, have been changed to displacees in our study. We associate the example of displacement on the Yıldız Campus with the term of “neighborhood resources displacement”. It is still a gap that university campuses take the position of being the subject of displacement processes in the literature. Yıldız Technical University (YTU) has two main campuses, Yıldız and Davutpaşa. Yıldız Campus is in the Yıldız district with strong transportation connections in the Istanbul city center, close to the administrative units and adjacent to Yıldız Palace. The main problem of the study is that YTU is both directly and indirectly displaced from the Yıldız Campus where it takes its name. The persistence of the rumor “Yıldız campus is moving” for many years not only causes displacement by disturbing its users, but also paves the way for the campus to remain uninvested as it is seen as an expected end. On the one hand, Yıldız campus is deprived of all kinds of infrastructure investments such as internet, parking, and recreation areas, on the other hand Davutpaşa campus attracts all physical facilities such as library, technological classrooms, student dormitories and guesthouses. This situation increases the inequality between the two campuses and the students they host. Hence, although the number of Yıldız Campus users seems to be decreasing, the main reason for this situation is that the users are forced to use Davutpaşa campus because of the displacement policies implemented over the infrastructure and superstructure facilities of the campus. It might be very difficult to realize that this is a displacement policy, as it spreads throughout the process. But it is very perilous because it causes users to be inured to this policy. In the study, we adopted a mixed method approach in which quantitative process analysis and qualitative oral history are utilized. Our sample consists of students, academics, and administrative staff. We claim that this displacement policy is related to the increase in the economic values of Yıldız Campus.

Keywords: displacement, neoliberal urban policies, Yıldız Technical University, comparative analysis

### References

- Davidson, M. (2008). Spoiled Mixture: Where Does State-led ‘Positive’ Gentrification End? *Urban Studies*, 45(12), 2385-2405.
- Lefebvre, H. (2003). Space and the State. N. Brenner, B. Jessop, M. Jones, & G. MacLeod within, *State/Space: A Reader* (pp. 84-101). Malden: Blackwell Publishing.
- Marcuse, P. (1985). Gentrification, Abandonment, and Displacement: Connections, Causes, and Policy Responses in New York City. *Journal of Urban and Contemporary Law*, 28(195), 195-240.
- Smith, N. (1979). Toward a Theory of Gentrification A Back to the City Movement by Capital, not People. *Journal of the American Planning Association*, 45(4), 538-548.

Soja, E. W. (1980). The Socio-Spatial Dialectic. *Annals of the Association of American Geographers*, 70(2), 207-225.

Wacquant, L. (2008). *Urban Outcasts: A Comparative Sociology of Advanced Marginality*. Polity.

84627

## Urban informality as a land redistribution problem. A critical cartography of housing typologies in São Paulo

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The sustainable transformation of informal areas is largely predicated on slum upgrading interventions, yet it is unclear if upgrading can spatially integrate high-dense informal areas and low-dense formal areas. Using critical cartography, the paper compares the population densities of selected residential typologies in São Paulo. The results show that slum upgrading housing cannot reduce the density gap existing between formal and informal areas, and that the private open spaces in upscale single-family housing contribute the most to spatial inequality. These findings aim to support the implementation of spatially redistributive policies and to provide urban designers with tools to address inequality.

Keywords: Urban informality, land redistribution, critical cartography, spatial inequality, slum upgrading, sustainability transformation

### References

Crampton, J., & Krygier, J. (2005). An Introduction to Critical Cartography. *ACME: An International Journal for Critical Geographies*, 4(1). <https://acme-journal.org/index.php/acme/article/view/723>

de Castro, A., Sikder, S. K., & Pedro, A. A. (2022). Spatializing inequality across residential built-up types: A relational geography of urban density in São Paulo, Brazil. *Habitat International*, 119, 102472. <https://doi.org/10.1016/j.habitatint.2021.102472>

Jones, M. (2009). Phase space: Geography, relational thinking, and beyond. *Progress in Human Geography*, 33(4), 487–506. <https://doi.org/10.1177/0309132508101599>

McFarlane, C. (2020). De/re-densification: A relational geography of urban density. *City*, 24(1–2), 314–324. <https://doi.org/10.1080/13604813.2020.1739911>

85259

## Designing the Just City: the promising life of the small urban spaces

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Our contribution is part of the broader attempt to focus on the specificities/responsibilities of urban planning expertise for creating or contrasting (by design) the conditions of spatial in/justice in cities and territories, and then to be able to operationalize spatial justice (as suggested by Cozzolino and Jonkman in the Conference 2022). The contribution is focused on a deep small-scale interventions analysis as a way for verifying essential components of justice in space. The proposed working hypothesis derives from the critical comparison of various specific interventions focusing on conditions of justice in space in which we try to define the “spatial qualities of a just space” according to:

- Availability (of public space, goods, resources)
- physical and non-physical Accessibility (i.e., physical and cultural barriers),
- Responsiveness to the needs of local communities (inclusive/exclusive sociality, ...)
- Habitability (I can feel comfortable there ...)
- Healthiness and Safety (I can stay there without taking risks...)

These specific spatial conditions produce significant positive effects on users/inhabitants which are enabled by that. It means that people are not forced or limited in any way but they can freely meet, exchange, build up new relationships, and, last but not least, participate in the social life/community.

Within these research evidences, the main idea is to share this practical “knowledge and tools for Social Justice design” at the small scale within the international scientific community in order to:

- consider these learnings within an appropriate scale and repeatability in urban design,
- formalize addresses of spatial justice, less as wishful thinking and more in terms of practical changes.

From one side, the research highlights how those interventions are explicitly connected to the individual perspective of each planner, who can simply decide (as usual) to say yes or no (Forester 1995); from the other one, it underlines the need to share Spatial Justice horizon in urban planning practices in which designers are aware of this relevant challenges.

Keywords: Just City, small urban spaces, small-scale interventions, spatial planning

### References

- Fainstein, S. S. (2014). The just city. *International journal of urban Sciences*, 18(1), 1-18.
- Forester, J. (1995). *Deliberazione politica, pragmatismo critico e storie traumatiche: ovvero non lasciare il dolore fuori della porta*. CRU, 4, 60-78.
- Marcuse, P., Connolly, J., Novy, J., Olivo, I., Potter, C., & Steil, J. (Eds.). (2009). *Searching for the just city: debates in urban theory and practice*. Routledge.
- Whyte, W. H. (1980). *The social life of small urban spaces*. Washington, D.C., Conservation Foundation

85031

## The values of managing public space – exploring managers' perspectives beyond planning and design

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The public space is increasingly under pressure due to an increasing degree of urbanization and the major transition challenges. These challenges require physical changes thereby management and maintenance of public space responding to such challenges in the existing urban realm. The knowledge and expertise on planning and design of public space is well established. However, the management of the existing urban realm is a blind spot in spatial planning and urban design and hitherto neglected in the academic debate. This contribution seeks to better understand how public space is managed in practice to explore the values underlying managing public space. Based on a qualitative explorative research design, management of public space in the Netherlands is explored based on a solid in-depth study consisting of 18 narrative interviews and a focus group session. The participants in the study are predominantly managers of public space selected for their expertise in the field of and/or knowledge on management of public space as well as their holistic view of the situation within organizations responsible for managing public space.

The results of this research showed that the values pursued with public space management are mostly implicit. The lack of explicit knowledge about the value within public space management makes it impossible for the managers to reflect critically, which keeps them behaving hands-on and the need for strategic thinking unfulfilled. The values that are explicitly mentioned in the research point to a paradigm shift that is linked to the major theoretical debate of the paradigm shifts in planning. A shift is taking place from object-oriented management to process and context-oriented management. This shift is taking place as we speak, as a result, the pioneers in management feel they are in a split between the desire for context-oriented management and the object-oriented assessment of the administration.

Keywords: Managing Public Space, Existing Urban realm, Public Space, Perspectives

### References

Duivenvoorden E, Hartmann T, Brinkhuijsen M, et al. (2021) Managing public space—A blind spot of urban planning and design. *Cities* 109: 103032.

Hartmann T and Geertman S. (2016) Planning theory. *Handbook on Theories of Governance*. Edward Elgar Publishing.

Allmendinger P. (2002) Towards a post-positivist typology of planning theory. *Planning theory* 1: 77-99.

M. Dignum, A. Correljé, E. Cuppen, U. Pesch, B. Taebi

Contested technologies and design for values: the case of shale gas  
Sci. Eng. Ethics, 22 (4) (2016), pp. 1171-1191, 10.1007/s11948-015-9685-6

B. Needham, E. Buitelaar, T. Hartmann  
Planning, law and economics: The rules we make for using land (2nd), Routledge, New York (2018)

P. Knoepfel, C. Larrue, F. Varone, M. Hill  
Public Policy Analysis  
The Policy Press, University of Bristol, Bristol (2011)

M. Elsinga, J. Hoekstra, M. Sedighi, B. Taebi  
Toward sustainable and inclusive housing: underpinning housing policy as design for values  
Sustainability, 12 (5) (2020), pp. 1-15, 10.3390/su12051920

84512

## Exploring the role of community enterprise organisations and their community assets in urban regeneration and gentrification

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As has been well-documented, there is a long-standing and seemingly irreconcilable debate regarding how regeneration can benefit existing residents and increase socio-spatial justice, while gentrification is limited. Existing literature has explored more nuanced conceptualisations of gentrification (for example, Shaw, 2005; Shaw & Porter, 2009); the factors that can help to limit gentrification's negative consequences (for example, Shaw, 2005; Colomb, 2009; Lees & Ferreri, 2016); and the role of asset-managing/owning community enterprises (CEs) within regeneration (for example, Aiken et al., 2011; Bailey, 2012). Yet, there is less research linking these fields by specifically exploring the role of CEs, and their community assets, within processes of regeneration and gentrification.

Based on doctoral research and follow-on research to be completed this year, this paper contributes to this gap by examining the potential and actual role of CEs, and their community assets, in contributing to, leading or contesting urban regeneration and planning agendas in socioeconomically unequal neighbourhoods in the UK. It considers how the work of CEs, via their community assets, can limit, reflect or even exacerbate gentrification (see Marche, 2015). The methodology for the doctoral research involved 1) scoping interviews with policy/practice experts; and 2) in-depth qualitative case study research with two asset owning/managing CEs.

The case study findings highlight that both organisations, and their community assets, have played a key role in their communities over time, for those who engage. In different ways, they have contributed to regeneration; and they have sought, to varying extents and in different ways, to address varied community needs locally. Their work, via their assets, has arguably largely reflected and, at times, reinforced, neighbourhood changes, including those relating to gentrification (see Marche, 2015).

The paper thus contributes to knowledge regarding the nuances of, and interrelations between, regeneration and gentrification; and to understandings of how community-led regeneration can be better achieved, while gentrification is limited. The findings further problematise policy narratives which often uncritically promote the benefits of CEs and community assets, instead emphasising the need for much greater state intervention to address structural inequalities and redistribute economic and social capital, if community-based efforts are to reach their potential.

Keywords: regeneration, gentrification, community enterprise, community assets, community ownership

References

Aiken, M., Taylor, M and Moran, R. (2011) Community organisations controlling assets: A better understanding. York: JRF. Available:  
<https://www.jrf.org.uk/file/41246/download?token=cS2MqW-H&filetype=full-report>

Bailey, N. (2012) The role, organisation and contribution of community enterprise to urban regeneration policy in the UK, *Progress in Planning*, 77, pp.1-35

Colomb, C. (2009) Gentrification and community empowerment in East London. In Porter, L. and Shaw, K. (2009a) (eds.) *Whose Urban Renaissance? An International Comparison of Urban Regeneration Strategies*. London: Routledge, pp.157-166

Lees, L. and Ferreri, M. (2016) Resisting gentrification on its final frontiers: Learning from the Heygate Estate in London (1974-2013), *Cities*, 57, pp.14-24

Marche, G. (2015) What can urban gardening really do about gentrification? A case study of three San Francisco Community Gardens, *European Journal of American Studies*, 10(3), pp.1-13

Shaw, K. (2005) Local limits to gentrification: Implications for new urban policy. In Atkinson, R. and Bridge, G. (eds.) *Gentrification in a Global Context: The New Urban Colonialism*. London: Routledge, pp.168-184

Shaw, K. and Porter, L. (2009) Introduction. In Porter, L. and Shaw, K. (eds.) *Whose Urban Renaissance? An International Comparison of Urban Regeneration Strategies*. London: Routledge, pp.1-8

85165

## Unequal Estonia: Regional disparities and their consequences on socio-spatial justice

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Estonia currently faces a turning point in its socioeconomic development. Recent achievements in sectors such as information technology are increasingly being challenged by global competition for business opportunities and the prospects they offer for a highly educated workforce. There is a vicious circle that needs to be diffused: on the one hand, some “forgotten areas” are falling behind in economic activity, resulting in highly -skilled people to move away. This in turn results in worsening infrastructure and public services. On the other hand, highly urbanised areas, where economic activity is concentrated, attract more and more people, resulting in increasing competition for jobs, higher living and housing costs and a higher risk of social exclusion.

Based on these considerations, this contribution provides a current overview of regional disparities that Estonian people are faced with. A team of quantitative researchers and local experts portray living conditions with the use of economic indicators and measures of social well-being. Based on a detailed geostatistical analysis, Estonia can be divided into four distinct regions. Roughly half of the population lives in dynamic urban regions, while the other half lives in areas that do not reach the same level of welfare. At the same time, the latter category consists of two- thirds of Estonian municipalities with higher rates of unemployment and poverty, higher dependency ratios and lower income levels as well as a lower provision of public services. Policy analysis reveals an uneven picture of the Estonian growth story. Similar to other European countries, economic, digital and ecological transitions have amplified structural change. The capability to adapt to these changes in society and economy is unequally spread, with some regions benefiting from change and others falling behind. There is more and more evidence that social inequalities are increasingly linked to regional disparities. It appears difficult to fight inequalities without addressing the regional divide. Policy recommendations of the study address the ability of public institutions to guarantee equal living standards and equal chances for individuals. They crucially depend on the way in which non-urban areas and small cities will be integrated into the development strategy.

The contribution will show results specific to Estonia and compare them with the key findings of studies conducted for four other European countries. Similarities and differences on the national and regional levels help to differentiate between global drivers of inequality and location-specific socioeconomic disparities.

Keywords: Estonia, disparities, social justice, territorial development, indicators

### References

Estonian Cooperation Assembly (2020): Estonian Human Development Report. Estonian Human Development Report 2019/2020. Spatial Choices for an Urbanised Society, Tallinn.

European Commission (2020): Country Report Estonia 2020: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011 SWD/2020/505 final, Commission Staff Working Document, Brussels.

Feldmann, Magnus (2017): Crisis and opportunity: Varieties of capitalism and varieties of crisis responses in Estonia and Slovenia, in: *European Journal of Industrial Relations* 23 (1), pp. 33–46.

OECD (2017): *OECD Economic Surveys. Estonia 2019*, Paris.

85040

## The spatial and social structure of income inequality in Germany

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Against the background of positive economic growth, diminishing unemployment and a strong redistribution system, Germany remains an unequal country with regards to economic opportunities and social circumstances (Fink et al., 2019). Out of the multiple possible dimensions of inequality such as income, health or education, inequality of income is the highest (Hufe et al., 2022). Starting from the hypothesis that, spatially, the greatest share of inequality is within location (Schluter & Trede, 2021), we focus on the relationship between income inequality and location attributes such as characteristics of the built environment. Moreover, this study complements similar research on income inequality and socio-economic and spatial disparities (van Ham et al., 2021), with a comprehensive analysis of spatial descriptors of inequality in Germany.

Using anonymized gross income tax declarations, we compute the Gini inequality index at the municipality level. We extract spatial variables from mostly open spatial datasets, and socioeconomic variables, from the openly available 2011 national census. We focus on measures of spatial variability, such as variation of spatial attributes or measures of population segregation and diversity between spatial units of one squared kilometer census cells within municipalities. We capture the relationship between spatial features and income inequality using linear regression and random forest models for each federal state in Germany.

Results show that a random forest model performs variable in predicting inequality across federal states, with a R2 statistic ranging between 0.3 and 0.58. Predictions are found significantly better for big municipalities with more than 10,000 inhabitants. For most states, inequality positively correlates with diversity of religion and nationality. Between the different states, inequality is associated with specific attributes of the built environment, from density of residential living space or size of residential annexes such as garages to coefficient of variation of building height or the amount of green spaces.

In conclusion, this study aims at a better understanding of the different expressions of inequality in space, which could potentially lead the way to regional or local policy initiatives supporting a fairer access to public and private spatial resources and greater possibilities of social integration

and interaction.

Keywords: income inequality, Gini, built environment, spatial metrics, segregation

#### References

Fink, P., Henricke, M., & Tiemann, H. (2019). Unequal Germany: Socio-economic disparities report. Friedrich-Ebert-Stiftung. From <https://www.fes.de/ungleiches-deutschland/> abgerufen

van Ham, M., Tammaru, T., Ubarevičienė, R., & Janssen, H. (Eds.). (2021). Urban Socio-Economic Segregation and Income Inequality - A Global Perspective. Springer.

Hufe, P., Peichl, A., Schüle, P., & Todorović, J. (2022). Fairness in Europe: A Multidimensional Comparison. CESifo Forum, 23, 45–51.

Schluter, C., & Trede, M. (2021). Spatial Inequalities and Local Job Polarisation. Working paper.

84516

## Living together in Dortmund-Hörde: Upper middle-class newcomers and long-established working-class residents in a neighbourhood of contrasts

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Attracting middle-class residents to disadvantaged neighbourhoods as an urban regeneration strategy is still universally accepted and promoted by city officials, planning practitioners and policy makers, even though the strategy has been criticized for promoting gentrification processes. In the former working-class district of Hörde in Dortmund, Germany, where a closed-down steel mill has been replaced by a posh new housing development around an artificial lake, the planned influx of upper middle-class newcomers causes a spatial and social divide in the neighbourhood.

This paper examines how winners and losers of structural change live together. It shows that interaction between newcomers and long-established working-class residents is extremely rare. Newcomers feel uncomfortable being an affluent minority in Hörde and withdraw into the private sphere at Lake Phoenix. Long-established residents, on the other hand, criticize the newcomers' lack of interest in interacting with the neighbourhood. They have ambivalent feelings towards the transformation: although they welcome Lake Phoenix as a project that improves environmental quality and the image of their neighbourhood, it makes them aware of their own marginalization. I argue that this ambivalence prevents open conflicts between long-established residents and newcomers but at the same time increases both groups' social distance.

The findings from the Lake Phoenix case study support the theory that middle-class oriented urban regeneration leads to small-scale segregation instead of an actual social mix. Furthermore, they stress the importance of participative planning approaches in urban renewal for the established community's acceptance and identification with new-build developments.

Keywords: (middle-class oriented) urban regeneration, social interaction, social mix, small-scale segregation

### References

- Atkinson, R. (2006), 'Padding the Bunker: Strategies of Middle-class Disaffiliation and Colonisation in the City', *Urban Studies*, Vol. 43, 4, pp. 819–832;
- Doucet, B.; van Kempen, R.; van Weesep, J. (2011), "'We're a Rich City with Poor People': Municipal Strategies of New-Build Gentrification in Rotterdam and Glasgow', *Environ Plan A*, Vol. 43, No. 6, pp. 1438–1454.
- Frank, S. (2021), 'Gentrification and neighborhood melancholy. Collective sadness and ambivalence in Dortmund's Hörde district', *Cultural Geographies*, Vol. 28, No. 2, pp. 255-269.
- Galster, G. (2013): 'Neighborhood Social Mix: Theory, Evidence, and Implications for Policy and Planning' in Carmon, N., Fainstein, S. S. (eds), 'Policy, planning, and people. Promoting

justice in urban development', University of Pennsylvania Press, Philadelphia, pp. 307–336.  
Lees, L., Slater, T., Wyly, E. K. (2008), 'Gentrification', Routledge, New York.

85057

## Tourism growth at the expenses of tourist sector workers. The case of Barcelona, 2008-2021.

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University Rovira i Virgili

This contribution tackles the issue of the growth of tourism activity as a driver of social inequality, focusing on the very workers of the tourism industry and on a novel perspective based on the enmeshments between labour precarity and housing conditions. We examine this issue in an in-deep, mixed-methods case of the evolution of Barcelona over a period of time bookended by two systemic crises, the 2008 financial crisis and the 2020-21 COVID-19 pandemics. The work departs from an analysis of the intersection between the residential and labour trajectories of tourism workers, using panel data from the Spanish ‘continuous sample of working lives’. These results indicate the risk of residential displacement of workers that have precarious and low-paid jobs is higher for tourism sector workers than for any other sector of Barcelona’s economy, and is subject to remarkable stratifications for specific profiles along lines of age, gender, household composition and nationality. It then uses information collected in field interviews with a sample of different profiles of workers to clarify mechanisms and avenues of exclusion unfolding through the double tier of labour precarity and housing exclusion, and contextualises this evidence through the evolving regimes (both political and related to mobilities, housing, labour, citizenship, and tourism) which have accompanied the development and facilitated transitions in the post-crisis tourist landscape. The tourist city is thus seen to grow (and to stop growing when COVID-19 hits) through an assemblage of processes that widen the marginalisation of its very workforce. In the midst of a societal and academic debates on post-COVID recovery strategies, our insights call for a closer integration of tourist development strategies with social and housing policies, and to reorient and strengthen urban resilience (including that of the tourist industry) through a focus on the social equity of working lives.

Keywords: tourism; precarious work; social geographies; residential displacement; mobilities; Barcelona

### References

- Bianchi, R.V. and De Man, F. (2019). Tourism, inclusive growth and decent work: a political economy critique. *Journal of Sustainable Tourism*, 29, (2-3)
- López-Gay, A., Cocola-Gant, A., Russo, A.P. (2020). Urban tourism and population change: Gentrification in the age of mobilities. *Population, Place and Place*, 27(1)
- Freudental-Pedersen, M. and Kesselring, S. (2020). What is the urban without physical mobilities? COVID-19-induced immobility in the mobile risk society. *Mobilities*, 16(1), 81-95
- Jordhus-Lier, D. (2015). Fragmentation revisited. Flexibility, differentiation and solidarity in hotels. In Jordhus-Lier, D. and Underthun, A. (Eds). *A Hospitable World? Organising work and workers in hotels and tourist resorts*. Routledge.
- McFarlane, C. (2011). The city as assemblage: dwelling and urban space. *Environment and Planning D: Society and Space*, 29, 649-671

Paugam, S. (2013). *Les formes élémentaires de la pauvreté*. 3e Ed. Le Sien Social

Schierup, C.U. and Jørgensen, M.B. (2006). From 'Social Exclusion' to 'Precarity'. *The Becoming-migrant of Labour: An Introduction*. In Schierup, C.U. and Jørgensen, M.B. (Eds). *Politics of precarity. Migrant conditions, struggles and experiences*. Koninklijke Brill.

Wills, J., Datta, K., Evans, Y., Herbert, J.M., and McIlwaine, C. (2010). *Global cities at work. New migrant divisions of labour*. Pluto, London.

84563

## Comparing patterns of densification in Utrecht and Bern: A method to evaluate the redistributive effects of land policies

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Governments worldwide have developed a variety of policies to promote urban densification. Subsequently, resulting forms of densification should be expected to be highly diverse, too, regarding differences in locations and amounts of densification, as well as housing types produced and target groups addressed. Put differently, the variety in policies should also affect the distribution of profits and burdens of densification. While these redistributive effects raised concerns from many strands of urban research, only a few studies compare inner-urban developments across countries to allow for an empirically-based assessment of policies. While policies are studied comparatively, the key challenges in comparing resulting urban development lie in harmonising and processing spatial data in the required high level of detail across national contexts. This so far precluded the development and application of an indicator concept for urban development in the context of densification.

To address this issue, we introduce a method to measure and compare urban development in two countries with contrasting planning systems: the Netherlands, where public actors play a strong and active role, and Switzerland, where strong private property titles and a highly democratic planning system are prevailing. We develop a GIS-based method to analyse densification processes within their surrounding morphological and socio-demographic context. We perform a k-means cluster analysis on highly detailed spatial and statistical data based on housing units, covering 2011 to 2019. The resulting densification types and their distribution reveal different patterns in the two city regions of Utrecht (NL) and Bern (CH). We find that, generally, the new developments show higher population and building densities, as well as smaller household sizes than their surroundings. However, we also see large, family-friendly apartments being built in areas where these are lacking. This is especially remarkable in the case of Utrecht. For the Netherlands, in contrast to Switzerland, the transformation of urban green spaces and former brownfields appears to result in housing types featuring much larger household sizes. While having developed an empirical basis in this study, future research that refines the analysis of the legal, planning and ownership conditions underlying the identified densification patterns can contribute significantly to policy evaluation.

Keywords: Urban densification, Switzerland, the Netherlands, policy evaluation, k-means

### References

Bibby, P., Henneberry, J. and Halleux, J. M. (2020) 'Under the radar? "Soft" residential densification in England, 2001–2011', *Environment and Planning B: Urban Analytics and City Science*, 47(1), pp. 102–118. doi: 10.1177/2399808318772842.

Buitelaar, E. and Segeren, A. (2011) 'Urban structures and land. The Morphological effects of

dealing with property Rights’, *Housing Studies*, 26(5), pp. 661–679. doi: 10.1080/02673037.2011.581909.

Charmes, E. and Keil, R. (2015) ‘The Politics of Post-Suburban Densification in Canada and France’, *International Journal of Urban and Regional Research*, 39(3), pp. 581–602. doi: 10.1111/1468-2427.12194.

Debrunner, G., Hengstermann, A. and Gerber, J.-D. (2020) ‘The business of densification: distribution of power, wealth and inequality in Swiss policy making’, *Town Planning Review*, 91(3), pp. 259–281. doi: 10.3828/tpr.2020.15.

Jehling, M., Schorcht, M. and Hartmann, T. (2020) ‘Densification in suburban Germany: Approaching policy and space through concepts of justice’, *Town Planning Review*, 91(3), pp. 217–237. doi: 10.3828/tpr.2020.13.

84062

## Revisiting the planning paradigm of `stable neighbourhoods` and social mix in times of migration, diversity and growing socio-spatial injustice

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With a view to combating continuing segregation, the planning policy principle of `social mix` has gained prominence in various (European) countries. Urban policymakers and planners are guided by their interest to stabilise urban neighbourhoods and to keep them as attractive housing and living locations. In Germany, this planning practice is legally based on the guiding principle of "balanced population structures" enshrined in the German Building Code and national strategic plans. The principle of stable neighbourhoods in the sense of social mix is thus politically anchored, guiding the activities of many different players, also regarding housing allocation policies within the city.

Against this background, the paper discusses two (interrelated) challenges:

- What remains unclear in planning debates and (local) policies is what is understood by the `right` mix and `neighbourhood stability`, especially in the face of high immigration rates and superdiversity (Vertovec 2007). The paradigm gives room for manoeuvre for housing market players and street-level bureaucrats (Lipsky 1980), often with the effect of disadvantaging those households perceived as `endangering` stability. Related to this, the question arises as to whether the goal of achieving a mix is compatible with the objective of non-discriminatory letting enshrined in the German General Equal Treatment Act.

- The planning principle of mixed stable neighbourhoods partly contradicts the idea of arrival neighbourhoods as a first point of entry for newcomers to a city and providing housing specifically accessible for low-income groups. Arrival neighbourhoods, formally addressed by the German Government for the first time 2020, are also increasingly finding its way into different policy documents at national level (e.g. National Action Plan on Integration). These documents highlight the important citywide functions these neighbourhoods can have. This contribution is based on a research project with 80 stakeholder interviews (housing providers, local government officials, civil society representatives) in three large German cities (Berlin, Hamburg, Dusseldorf). The research analyses diverging understandings of `neighbourhood stability`, related housing allocation policies and their implications for migrant households' access to housing (Hanhörster and Ramos Lobato 2021). The study clearly shows that it is not just general housing shortages that restrict migrants' access to the housing market. Housing companies and their respective embeddedness in local government governance structures also play a key role in (re)producing socio-spatial inequality (McQuarrie and Marwell 2009). The paper argues that the dominant principle of achieving social mix and `stable neighbourhoods` clearly decreases migrants' opportunities to gain access to housing, contributes to increased socio-spatial injustice and thus needs to be revisited.

Keywords: social mix, stable neighbourhoods, superdiversity, housing, socio-spatial injustice

## References

- Hanhörster, H., & Ramos Lobato, I. (2021). Migrants' Access to the Rental Housing Market in Germany: Housing Providers and Allocation Policies. *Urban Planning* 6(2): 7–18. doi: 10.17645/up.v6i2.3802.
- Lipsky, M. (1980). *Street-level bureaucracy*. New York, NY: Russel Sage Foundation.
- McQuarrie, M., & Marwell, N. P. (2009). The missing organizational dimension in urban sociology. *City & Community*, 8(3), 247–268.
- Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and Racial Studies*, 30(6), 1024–1054.

85051

## Enhancing cultural diversity and inclusion in participatory knowledge building through social design – Case Kontula Mall, Finland

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Urban planning has a major role in promoting cultural diversity and thus enabling more just cities (Fainstein, 2014). However, current planning practices can lead to urban homogenisation (Hewidy, 2021). Stakeholders are not representatively reached, and practices mainly support participation of the native speaking, highly educated and active citizens (Hewidy, 2021; Thoneick, 2021). The need for emphasizing marginalized groups both in building (Hewidy, 2021; McCall, 2021) and using (Jon, 2020) participatory knowledge has been recognised. Such knowledge building processes can be difficult to achieve administratively, for example due to a lack of trust or resources (Thoneick, 2021; Listerborn, 2007). In this paper, we ask if social design can help in developing a more inclusive participatory knowledge building process. Social design aims to improve the inclusion and well-being of the marginalized at the micro level by using co-planning activities (Markussen, 2017). We conducted a case study in Kontula shopping mall, in Helsinki, Finland, where entrepreneurs with immigrant backgrounds are major actors but have been marginalized in the planning process (Hewidy, 2021). Through the methods and tools used by the city, we formed a bottom-up participatory process accessible to this stakeholder group. This included, for example, providing multilingual information about planning and participation; a multilingual map survey for both independent and assisted participation, and opportunities to give opinions face-to-face.

Social design enabled us to understand participation from the entrepreneurs' perspective and form an accessible participation process. Firstly, our study shows that the entrepreneurs want to participate in the planning of the mall. They constitute a diverse group, but share many challenges to participation, such as tight schedules and language barriers, which need to be recognized when applying participation methods. Secondly, the encounters were important. The entrepreneurs wanted to discuss and answer the survey with the help of an interpreter. On the other hand, the encounters were important for the information collector because understanding was created and transmitted to the data. Thirdly, our research showed that entrepreneurs shape the place through their business. We argue that their contribution to the development of the place goes far beyond participation in the planning.

**Keywords:** Cultural diversity; participatory knowledge building; representativeness; social design

### References

- Fainstein, S. S. (2014). The just city. *International Journal of Urban Sciences*, 18(1), 1–18. <https://doi.org/10.1080/12265934.2013.834643>
- Hewidy, H. (2021). Just city planning competitions in Helsinki: between the power of image and many images of power. *European Planning Studies*, 1–21. <https://doi.org/10.1080/09654313.2021.1990216>

- Jon. (2020). Reframing postmodern planning with feminist social theory: Toward “anti-essentialist norms.” *Planning Theory* (London, England), 19(2), 147–171. <https://doi.org/10.1177/1473095219851214>
- Listerborn, C. (2007). Who speaks? And who listens? The relationship between planners and women’s participation in local planning in a multi-cultural urban environment. *GeoJournal*, 70(1), 61–74. <https://doi.org/10.1007/s10708-007-9114-8>
- Markussen, T. (2017). Disentangling “the social” in social design’s engagement with the public realm. *CoDesign*, 13(3), 160–174. <https://doi.org/10.1080/15710882.2017.1355001>
- McCall, M. K. (2021). Participatory Mapping and PGIS: Secerning Facts and Values, Representation and Representativity. *International Journal of e-Planning Research*, 10(3), 105–123. <https://doi.org/10.4018/IJEPR.20210701.oa7>
- Thoneick, R. (2021). Integrating Online and Onsite Participation in Urban Planning: Assessment of a Digital Participation System. *International Journal of e-Planning Research*, 10(1), 1–20. <https://doi.org/10.4018/IJEPR.2021010101>

84282

## Reading New Urban Practice in Syrian Neighborhoods in Ankara Through Forced Migration

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In recent years, new urban codes and new public space practices have emerged with global changes and urban social movements. While the world is dealing with the increasing number of refugees crisis that has become one of the biggest challenges of the 21st century, almost all people are facing significant changes in the urban environment and especially in Turkey both citizens and “Urban Refugees” are facing socio-spatial changes.

With this effect, numerous different disciplines have conducted on Syrian refugee crisis. Yet, it is examined that larger part of these research are oriented towards the outcasts of living within the refugee camps and there is a need of inquire about the refugees so called “Urban Refugees” settled in the cities in spite of the expanding significance of this concept.

While urban environments are also affected by this social trend and the struggle for survival of this new concept, as urban designers, we need to look for answers to new urban questions and crises from a wider viewpoint in order for this newly developing agora to have a new social inclusiveness.

In this sense, with the aim of contributing in order to enrich the inadequacy in the literature, this research focuses on the recent and predicted future socio-spatial situation and effects of Syrian urban refugees within the cases of specific neighborhoods such as Önder and Örnek Neighborhoods, which are called as Syrian Neighborhoods hereafter, in Ankara, Turkey. In this research, a reading of the new socio-spatial texture formed in the Syrian urban refugee neighborhoods in Ankara will be made from a Lefebvrian perspective. The phenomenon of socially produced space is being reshaped in the context of urban crises that occur in the neighborhoods, where refugees have settled as a result of forced migration. Afterall, derived information from the literature review on concept of social space and refugee movements, and case studies on daily life of refugees in the context of social spatial practice discussions will be analyzed.

Keywords: Keywords: Urban refugees, Forced migration, Spatial segregation, Spatial practice, Social inclusion

### References

Brenner, N. (2019). *New Urban Spaces, Urban Theory and the Scale Question*. OUP USA.

Collyer, M. (2014). *Geographies of Forced Migration*. In E. F. Qasmiyeh, G. Loescher, K. Long, & N. Sigona (Eds.), *The Oxford Handbook of Refugee and Forced Migration Studies*.

Diken, B. (2010). *From Refugees Camps to Gated Communities: Biopolitics and the End of the*

City. *Citizenship Studies*, 8:1, pp 83-106.

Erman, T. (2017). Syrian Refugees in a Slum Neighbourhood: Poor Turkish Residents Encountering the Other in Önder Neighbourhood, Altındağ, Ankara, Turkey's Syrians Today and Tomorrow. In D.E. Utku K.O. Unutulmaz & İ. Sirleci (Eds.), *Transnational Press London*, pp 99-130.

Foucault, M. (1967). *Of Other Spaces*. (Miskowiec, J., Trans. 1986), *The Johns Hopkins University Press*, 16:1, pp 22-27. <https://doi.org/10.2307/464648>

Lefebvre, H. (1991). *The Production of Space*. *Urban Studies* (Vol. 29). <https://doi.org/10.1080/00420989220081001>

Lefebvre, H. (2009). *State, Space, World: Selected Essays*. N. Brenner & S. Elden (Eds.), *University of Minnesota Press*. <https://doi.org/10.1002/9780470755686.ch5>

UNHCR. (2018). *Global Trends Forced Displacement in 2017*.

85140

## Injustice as a future crises? Experiences from spatial planning in Hamburg, Copenhagen, Oslo and Helsinki

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This presentation is based on preliminary work from the “Real Estate and Sustainable Crisis management in Urban Environments”-project. It explores how crises are currently understood within spatial planning in four cities, what knowledge this understanding is built on, and how this understanding reverberates onto spatial plans. Often crises preparedness is related foremost to natural disasters and climate change. The Covid-pandemic, however, has shown that crises hit neighbourhoods differently making visible how the socio-economic position of their residents make them unequally resilient to external change. The presentation specifically looks at socio-spatial injustices at the neighbourhood level, and the way that these injustices are described in comprehensive planning in Hamburg, Copenhagen, Oslo and Helsinki. Drawing on planning documents and interviews with planners in the cities it asks: In which ways are socio-spatial injustices at the neighbourhood level recognized in the planning context as something that may influence or even create future crises? Specifically, are these injustices seen as a problem only in places where there is a concentration of disadvantage; in other words, how are injustices framed and are they normative in their character? An analytical matrix emphasizing specifically the concepts of “reaction” and “adaption” will be developed to distill the differences and similarities of the cities. The presentation will present some preliminary paradoxes that occur, if spatial crises management is framed merely normatively.

Keywords: Segregation, comprehensive planning, housing policy, socio-spatial justice, crises

### References

- Rashidfarokhi, A., Wallenius, M., Toivonen, S., & Viitanen, K. (2018) Social Sustainability framework for assessing land use planning process. *European Planning Studies*, 26(6), 1269-1296.
- Sousa, S. & P. Pinho (2015). Planning for Shrinkage: Paradox or Paradigm. *European Planning Studies* 23(2), 12-32. doi 10.1080/09654313.2013.820082
- Toivonen, S. & Viitanen, K. (2015) Forces of change shaping the future commercial real estate market in the Helsinki Metropolitan Area in Finland. *Land Use Policy* 42 (2015) pp. 471–478.
- Tunström, Moa, Timothy Anderson & Liisa Perjo (2016). Segregated cities and planning for social sustainability - a Nordic perspective Nordregio Working Paper 2016:3.

84337

## Spatial-temporal Accessibility of Elderly-care Service Facilities: A Case Study of Tianjin, China

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### Background

With the accelerating population aging in urban China, resource allocation towards senior citizens has been given particular precedence. In recent years, elderly-care service facilities in large cities in China have developed rapidly, but the supply of facilities still cannot meet the needs of the elderly population, which is complicated by a spatial imbalance between supply and demand. With most existing researches focusing on the geographical accessibility distribution of facilities based on GIS, studies are rare that combine the spatial-temporal factors on the part of the elderly themselves and their families.

### Aims

Scientific evaluation of the accessibility of elderly-care service facilities is the basis of rational space allocation, and has immense practical significance. This study explores the spatial-temporal accessibility to facilities in the city of Tianjin, China, aiming to incorporate spatial and temporal variables related to facilities, transport modes, and the characteristics of older adults.

### Methods

The study accesses data on population and facility from relevant government websites. Via API of Amap, travel data between supply points and demand points are obtained based on real-time traffic conditions. Resident questionnaires are designed to obtain data on frequency of visits to the elderly by their offspring. . This spatial-temporal accessibility study combines a number of key variables, including offspring visit frequency, traffic mode, traffic time, facility cost, capacity, family income. Finds and approaches from a variety of relevant studies are also invoked to synthesize and process the above variables in order to verify the methodology.

### Results

1. The pension of the elderly and the income of the children jointly determine the grade of the selected facility. The distance between the facilities and the children's accommodation has an impact on the choice of the spatial location of the elderly-care service facilities. In general, the frequency of the children's visit is 1 time / month.
2. The overall accessibility level of elderly-care service facilities in Tianjin presents obvious center-periphery characteristics. Discrepancy between supply and demand exists in some areas on the fringes of Tianjin.

## Conclusions

The improved spatial-temporal accessibility model promises a more realistic supply-demand distribution pattern on elderly care services. This study provides an analytical basis for equity researches and reference for healthy urban development.

Keywords: Elderly-care Service Facilities; Spatial-temporal Accessibility; PublicFacilities; Planning Strategy; Tianjin

## References

1. Tao, Z., Cheng, Y. & Liu, J. Hierarchical two-step floating catchment area (2SFCA) method: measuring the spatial accessibility to hierarchical healthcare facilities in Shenzhen, China. *Int J Equity Health* 19, 164 (2020).
2. Wang D, Qiao C, Liu S, Wang C, Yang J, Li Y, Huang P. Assessment of Spatial Accessibility to Residential Care Facilities in 2020 in Guangzhou by Small-Scale Residential Community Data. *Sustainability*. 2020; 12(8):3169.
3. Long Cheng, Min Yang, Jonas De Vos, Frank Witlox, Examining geographical accessibility to multi-tier hospital care services for the elderly: A focus on spatial equity, *Journal of Transport & Health*, Volume 19, 2020.
4. Luo, W.; Wang, F.H. Measures of spatial accessibility to health care in a GIS environment: Synthesis and a case study in the Chicago region. *Environ. Plan. B Plan. Des.* 2003, 30, 865–884.
5. Wang F. *Quantitative methods and socio-economic applications in GIS*. 2nd ed. Boca Raton: CRC Press; 2015.
6. Chen X, Jia P. A comparative analysis of accessibility measures by the two-step floating catchment area (2SFCA) method[J]. *International Journal of Geographical Information Science*, 2019, 33(9): 1739-1758.

84419

## Size Does Matter: Justice versus Equality in Urban Green Space Policy in Beersheba Israel

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Why do urban green space (UGS) policies often fail to promote justice? This research investigates such a policy in Beersheba, the “capital” of Israel’s southern region and one of the nation’s fastest developing cities. The new municipal UGS policy aims for justice by investing an equal amount of resources per square meter in both old, inner-city neighborhoods and the newer, more desirable outlying neighborhoods. Nevertheless, most of the inner-city UGSs are still run down (Yiftachel and Mandelbaum, 2017).

The study reveals the disparity between justice and equality in the policy. The findings suggest that social and environmental injustice is an outcome of basic planning decisions. Beersheba continues to plan large UGSs, under the misguided notion that they will foster local prestige and improve residential quality. In reality, however, planning large UGSs creates nonurban spaces (Talen, 2005; Lund, 2008) and encourages climatically unsuitable development that requires more maintenance (Feierstein, 2010). Thus, the city is, unintentionally, pouring public funds into large UGSs in the newer areas at the expense of smaller UGSs in the older, weaker, and denser inner-city neighborhoods. As a consequence, the current policy preserves existing social disparities and promotes social and environmental injustice instead of using the UGS policy to create a more just city.

Keywords: Urban green space, Urban policy, Just City, Beersheba, Urban inequalities

### References

- Feierstein, G. (2010). *The Quality, Amount and Use of Public Open Spaces: Analysis of Different Climatic Zones and Settlement Sizes*. Master diss., Ben-Gurion University in the Negev, the Jacob Blaustein Institutes for Desert Studies, Sde-Boker.
- Lund, H. (2008). Testing the Claims of New Urbanism: Local Access, Pedestrian Travel and Neighboring Behaviors. *Journal of the American Planning Association*, 69(4): 414-429.
- Talen, E. (2005). *New Urbanism and American Planning: The Conflict of Cultures*. New York and Oxford: Routledge.
- Yiftachel, O. & Mandelbaum, R. (2017). Doing the Just City: Social Impact Assessment and the Planning of Beersheba, Israel. *Planning Theory & Practice*, 18(4): 525-548.

84850

## Working from Home after Covid-19 - the changing relationship between spatial planning and gender inequality

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The social distancing measures adopted during COVID-19, transformed the relationship between work and space worldwide. This study examines the effects of the expansion of working from home (WFH) on the relationship of gender, employment, and space. It outlines the changing role of planning policies in shaping women's opportunities across and within geographical regions.

Since the industrial revolution, home and work have been constructed as two separate spheres. This separation influenced many of the gendered and class-based inequalities which plague modern labor markets, by limiting access to quality employment for women, who are still responsible for most of the unpaid work done in the home (Rapino & Cooke, 2011), and for others who have little choice and opportunity regarding where to live and where to work (Van-Ham & Hooimeijer, 2009).

Following critical planning theories that emerged in the 1960s, lowering the spatial barriers created by the home-work separation has become a central goal in modern planning paradigms (Soja, 2013; Fainstein & Servon, 2005). Today, we may be witnessing a partial reversal of this separation. Does this mean we can expect some reversal of its negative gendered and socio-spatial outcomes? If so, should this change the planning discourse aimed at increasing access to employment?

Israel's labor market and spatial planning characteristics make it an interesting case study for this exploration. The Israeli labor market is characterized by a large technological sector with high levels of WFH, high rates of women's labor force participation, significant gender and regional segregation, and demanding work norms (Yaish et al., 2021). Israel's spatial planning policy is characterized by an increasing separation of public and private land uses, which can increase women's motivation to WFH and allow families to move further away from the large metropolitan areas (Mann & Hananel, 2021).

The research uses a combined methodology. We employ quantitative methods to map the spatial aspects of WFH in Israel, and explore macro-level effects on gender and spatial inequalities. We use a qualitative method to explore individual-level changes in workers' perceptions of their spatial constraints. The findings are discussed in the context of current planning and employment policies.

Keywords: planning policy, gender, working from home, COVID-19, spatial inequalities, employment

## References

- Fainstein, S. S., & Servon, L. J. (Eds.). (2005). *Gender and planning: A reader*. Rutgers University Press.
- Mann, Y., & Hananel, R. (2021). Moving away from equality: The impact of planning and housing policy on internal migration and women's employment in Israel. *Progress in Planning*, 100537.
- Rapino, M. A., & Cooke, T. J. (2011). Commuting, gender roles, and entrapment: A national study utilizing spatial fixed effects and control groups. *The Professional Geographer*, 63(2), 277-294.
- Soja, E. W. (2013). *Seeking spatial justice* (Vol. 16). U of Minnesota Press.
- Van Ham, M., & Hooimeijer, P. (2009). Regional differences in spatial flexibility: long commutes and job related migration intentions in the Netherlands. *Applied spatial analysis and policy*, 2(2), 129-146.
- Yaish, M., Mandel, H., & Kristal, T. (2021). Has the Economic Lockdown Following the Covid-19 Pandemic Changed the Gender Division of Labor in Israel?. *Gender & Society*, 35(2), 256-270.

84468

## Being a lesbian in parisian transport: self-representation confronting gender-based violence

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The city is a fragmented space that gives homosexuality a right to visibility while imposing daily heteronormative constraints (Doan, 2010). It produces even more exclusion when characteristics of gender, sexual orientation, race, and social class are intertwined (Lieber, Lépinard, 2020). Lesbians experience a double marginalization related to their gender identity and sexual orientation, and transportation, as captured places, is a laboratory for observing this stigmatization (Chetcuti, Jean-Jacques, 2018, Lubitow, 2020). We will try to capture the differences in appropriation felt by lesbians in transport in order to show why they must be taken into account in the framework of an action of operators committed to the fight against sexual and gender-based violence. This study is part of an ongoing thesis work at the parisian transport operator RATP and is anchored in the experimentation of a plan to fight gender-based violence implemented since March 2020. Based on a survey of daily users of the RATP network who define themselves as lesbian couples or who have been in lesbian couples, the aim is to understand the implicit norms that govern the space (Chetcuti, Jean-Jacques, 2018).

Keyword: Transports, heteronormativity, lesbians, discriminations, visibility

### References

Chetcuti-Osorovitz, N., Jean-Jacques, S. (2018). Usages de l'espace public et lesbianisme : sanctions sociales et contournements dans les métropoles françaises. *Cahiers de géographie du Québec*, 62(175), 151–167.

Doan, P.L., 2010. The tyranny of gendered spaces: reflections from beyond the gender dichotomy. *Gend. Place Cult.* 17, 635–654.

Lieber M., Lépinard E., 2020, *Les théories en études de genre*, Ed La Découverte

Lubitow M., J. Abelson, E., Carpenter E., « Transforming mobility justice: Gendered harassment and violence on transit », *Journal of Transport Geography*, 82, 2020

Nadine Cattan, Stéphane Leroy. La ville négociée : les homosexuel(le)s dans l'espace public parisien. *Cahiers de géographie du Québec*, 2010, pp.9-24

84668

## Socio-spatial justice through public participation? How different socioeconomic groups perceive measures from a mobility planning process in Hamburg

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Citizen Involvement in Mobility Transitions / Heinrich Heine University Düsseldorf

Spatial mobility as a condition for accessing many goods and services is a fundamental requirement of modern societies. At the same time, socioeconomic groups differ in their mobility needs and preferences and hence require different mobility options (Jensen 1999; Sheller 2020). Through a variety of planning instruments from strategic plans to specific infrastructure measures in the built environment, public authorities shape (urban) space in ways that further or hinder certain mobility options and as a consequence privilege or disadvantage certain groups. Public authorities increasingly aim to integrate these different needs, among other things through public participation. However, so far there is little knowledge on whether this results indeed in more socio-spatial justice (Emery et al. 2015; Vetter and Remer-Bollow 2017). To approach this question, we are interested in how well current planning procedures do actually lead to measures that are perceived as beneficial and fair by different groups.

To this end, we have investigated in detail the case study of the renovation and remodeling of the Elbchaussee, a representative main road of citywide importance in the district of Altona in Hamburg, Germany. Drawing on both qualitative and quantitative data, we first provide a rich description of the context, the planning process, and how the measures have been developed, especially focusing on the characteristics and the role of the participation process for the political decision. Second, based on a representative survey of inhabitants and building on the existing findings on mobility needs and differential mobility behavior (Dangschat and Segert 2011; Götz et al. 2003; Götz 2007), we identify several different mobility types in Altona. We show how the subjective assessment of the proposed measures is differing among these mobility types and associated socioeconomic groups. Integrating insights from both approaches, we discuss how the public's perception of these measures is related to the participatory planning process and conclude with possible implications for the design of planning procedures.

Keywords: socio-spatial justice, mobility equity, social inequality, public participation, urban governance, social exclusion

### References

Dangschat, Jens S.; Segert, Astrid (2011): Nachhaltige Alltagsmobilität — soziale Ungleichheiten und Milieus. In *Österreichische Zeitschrift für Soziologie (ÖZS)* 36 (2), pp. 55–73. DOI: 10.1007/s11614-011-0033-z.

Emery, Steven B.; Mulder, Henk A. J.; Frewer, Lynn J. (2015): Maximizing the Policy Impacts of Public Engagement. In *Science, Technology, & Human Values* 40 (3), pp. 421–444. DOI: 10.1177/0162243914550319.

Götz, Konrad (2007): Mobilitätsstile. In Oliver Schwedes, Weert Canzler, Andreas Knie (Eds.): Handbuch Verkehrspolitik. 1. Auflage. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 759–784.

Götz, Konrad; Loose, Willi; Schmied, Martin; Schubert, Steffi (2003): Mobilitätsstile in der Freizeit. Minderung der Umweltbelastungen des Freizeit- und Tourismusverkehrs. Berlin: Schmidt (Umweltforschungsplan des Bundesministeriums für Umwelt, Naturschutz und Reaktorsicherheit, 2003,2).

Jensen, Mette (1999): Passion and heart in transport — a sociological analysis on transport behaviour. In *Transport Policy* 6 (1), pp. 19–33. DOI: 10.1016/S0967-070X(98)00029-8.

Sheller, Mimi (2020): Mobility justice. In Monika Büscher, Malene Freudendal-Pedersen, Nikolaj Grauslund Kristensen, Sven Kesselring (Eds.): *Handbook of research methods and applications for mobilities*. Cheltenham, UK, Northampton, MA: Edward Elgar Publishing (Handbooks of research methods and applications), pp. 11–20.

Vetter, Angelika; Remer-Bollow, Uwe (2017): *Bürger und Beteiligung in der Demokratie*. Wiesbaden: Springer Fachmedien Wiesbaden.

84591

## Social support services for elderly in Portuguese cities – challenges for local planning in pos-pandemic times

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Changes in demographic and family structures have been reflected in an increased need for public strategies to monitor and respond to aging process in Portuguese society. Portugal emphasizes the attention to “proximity services”, traduced in the formal support network (Order nº 407/98) which includes: Day Centers, Social Centers, Social Services Home Support (SAD) and Residential Structures for the Elderly (ERPI). The increasing demand for this type of support responds to the need for a better quality of life, fighting the loss of neighborhood relationships and the separation of families, especially in rural areas. From another perspective, its inclusion in urban policies is highlighted, namely by the World Health Organization (WHO), which brought the concept of “An age-friendly city” in 2008. In this context, the availability and physical accessibility to this type of services are fundamental for their access. This study aims to identify the potential coverage of formal support services in view of the aging framework that characterizes our territory, taking Aveiro, Coimbra, Faro (3 medium-sized cities) and Lisbon (the capital of Portugal) as case studies. The methodology used includes the collection and georeferentiation of formal support equipment, with the determination of their coverage potential through the application of a network analysis, values that are compared with the distribution of the elderly population. The results show a dysfunction between the demand and the offer of these services, especially because their geographical location not fulfil the proximity concept. This pattern is not exclusive of Lisbon city but also in medium-sized cities of Portugal, putting the relation between health and urban planning in the core of municipal action.

Keywords: Ageing; Local services; Social support facilities; Iniquities; Urbanization model

### References

- Costa, Eduarda Marques da, Costa, Nuno Marques da, Louro, Ana, & Barata, Marcela. (2020). “Geografias” do acesso dos idosos aos cuidados de saúde primários na Área Metropolitana de Lisboa, Portugal: um território de diferenças. *Saúde e Sociedade*, 29(2), e200108
- INE (2002). *Altas das Cidades Portuguesas*. Instituto Nacional de Estatística
- Despacho nº407/98, de 18 de Junho. *Diário da República nº 407/98 - – Série II*. Ministério da Saúde
- OMS (2008) *Guia global: cidade amiga do idoso*, Genebra, Organização Mundial da Saúde
- Palma, P., Marques da Costa, E., & Marques da Costa, N. (2017). Disparidades Regionais no acesso aos serviços de saúde em territórios de baixa densidade: os casos de Alentejo (Portugal) e Navarra (Espanha). *Construindo Cidades Saudáveis Utopias e Práticas*. Assis Editora, Brasil. 453-487
- Parente, C. (2014). *Serviços de Proximidade para a População Idosa (Dissertação de mestrado)*. Instituto Superior Bissaya Barreto. Coimbra

85108

## The aftermath: co-production of social life in post-pandemic public space

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With the management of the COVID crisis, the world population has become familiar with social distancing. Even though the expression has experienced a global reach for the committed behaviour of millions of citizens in response to the pandemic, it is perhaps not by chance that it underlies hideous implications: of increased control (from the part of institutions) and of isolation (with respect to others).

Such implications have, in turn, exasperated an already existing crisis, concerning the production of public space in urban contexts. In spite of the growing interest of local administrations in co-production, the term has become more of a buzzword than an actual strategy by which citizens achieve the means to materially produce the spaces that they use, and to which they attribute meanings and functions. Instead, public space is crossed by a variety of control mechanisms: privatization and commercialization of spaces which gather together only “those who can afford to consume” (Carmona, 2010); surveillance through artificial intelligence for the purposes of data gathering (Zuboff, 2019); ultimately, with the pandemic, social control was overimposed and expressed with the explicit trenching of public squares and the transformation of space into a predetermined itinerary for controlling human flows.

In such a saturated space of conflict, therefore, space is never really co-produced by citizens with their behaviours and their social relations, it is rather re-produced. As space is denied, controlled, distorted by preventive protocols, dwellers produce alternatives that are either grafted onto existing space, or parallel to it.

This mechanism of reproduction of public space entails conflict in unexpected ways, it shifts power balances and opposes urban stakeholders with contrasting needs. In Bologna, these unresolved conflicts are repeated like an historical ritual that has been reinforced in recent times: ranging from the homeless, increased in numbers by the dramatic economic crisis triggered by the pandemic (and who have been pushed afar in an attempt to “make room” for more productive social actors); to restaurateurs, who have claimed for themselves the streets and the squares of the city in an attempt to make up for their recent commercial losses.

Interpreting the way people use (and struggle for) space in the city unravels interconnected needs, unexpected relationships, interactions between the built environment and the way people inhabit it, and eventually contributes to both theory and practice of co-producing cities.

The present contribution aims to produce a photographic inquiry of the signals (Keck 2020) of space reproduction by unusual actors of the urban domain. The city of Bologna is the observatory where to recognise attitudes, traces, alternatives and policy inspiration that could

inspire a broader political change: from control to institutional adaptation, coexistence and governability for the future of post-pandemic cities.

Keywords: public space, urban governance, social control, urban preparedness, contested public space, spatial co-production

#### References

Carmona, M. (2010). Contemporary public space, part two: classification. *Journal of urban design*, 15(2), 157-173.

Keck, F. (2020). Asian tigers and the Chinese dragon: Competition and collaboration between sentinels of pandemics from SARS to COVID-19. *Centaurus*, 62(2), 311-320.

Lakoff, A. (2017). 3. Two Regimes of Global Health. In *Unprepared* (pp. 67-94). University of California Press.

Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Profile books.

85190

## High schools and territorial vulnerabilities in the metropolitan city of Milan (Italy)

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In Italy, while schools of the first degree have a good territorial diffusion, the distribution of secondary schools follows more hierarchical rationality as they mainly concentrate in the few, biggest urban centres. This generates complex and extended mobility networks, as well as forms of educational poverty. High schools distance and travel time can influence school choice and attendance, in particular regarding the most fragile social groups and territories.

Secondary schools thus represent a crucial field of study to evaluate territorial welfare, growth, and mobility policies, at a provincial scale.

Although marginal and in-between areas are the most deprived, even in the well-equipped areas of the country important territorial gaps emerge. For this reason, the research focuses on the metropolitan area of Milan and its 158 high schools.

The study aims to understand how the high school system works for what concerns territorial distribution, the different degrees of accessibility of schools and municipalities, the emergence of socio-spatial inequalities.

Thanks to the collaboration with the Metropolitan City of Milan institution, we processed a big amount of original data about students enrolled in the year 2019/2020. These data concern personal information (gender, age, citizenship), home-municipality, educational institution, and course of study, together with schools' precise geocoding.

We designed a methodology for calculating home-school distance for each student and we developed specific distance indicators both for schools and municipalities.

Information has been integrated with other databases (about educational building stock, territorial infrastructures, and services, demographic and statistical data). The research deals in particular with: a) school choice of students and families; b) mobility practices.

We discovered that students' displacement is higher from municipalities lacking schools and for reaching vocational institutes. Some schools are particularly attractive, especially in Milan and in the first-belt area. While students from Milan tend to stay in their municipality, the city is an important attractive pole, in particular for those territories that are better connected (via underground and railway). Outside Milan, many inter-municipal networks of proximity can be recognized.

The study reveals that, together with familiar and individual background, homeplace can be relevant in defining personal opportunities according to the presence of and the distance to public services. The research also shows the necessity to spatialize schools' data and integrate them with other territorial information (thus creating a kind of permanent monitoring centre), with

multiple scopes: to have a better knowledge of current phenomena (inside school system and local institutions); to develop public policies for addressing inequalities; eventually, to share information with families and students for the promotion of more aware school guidance.

Keywords: high schools; territorial vulnerabilities; socio-spatial inequalities; welfare; accessibility; metropolitan areas.

## References

- Agasisti, T., Longobardi, S. (2014). Inequality in education: can Italian disadvantaged students close the gap? *Journal of Behavioral and Experimental Economics*, 52(1): 8-20. Doi: 10.1016/j.socec.2014.05.002.
- Boterman, W., Musterd, S., Pacchi, C., Ranci, C. (2019). School segregation in contemporary cities: Socio-spatial dynamics, institutional context and urban outcomes. *Urban Studies*, 56(15): 3055-3073. Doi: 10.1177/0042098019868377.
- Gegel, L., Lebedeva, I., Frolova, Y. (2015). Social Inequality in Modern Higher Education. *Procedia - Social and Behavioral Sciences*, 214: 368 – 374. Doi: 10.1016/j.sbspro.2015.11.662.
- Jahnke, H., Kramer, C., Meusburger, P., eds. (2019), *Geographies of Schooling*, Cham, Springer.
- Kallio, J.M., Kauppinen, T.M., Erola, J. (2016). Cumulative Socio-economic Disadvantage and Secondary Education in Finland. *European Sociological Review*, 32(5): 649-661. Doi: 10.1093/esr/jcw021.
- Million, A., Heinrich, A.J, Coelen, T., eds. (2017), *Education, Space and Urban Planning. Education as a Component of the City*, Cham, Springer
- Müller, S., Tscharaktschiew, S., Haase, K. (2007). Travel-to-school mode choice modelling and patterns of school choice in urban areas. *Journal of Transport Geography*, 16: 342–357. Doi: 10.1016/j.jtrangeo.2007.12.004.
- Openpolis (2021). Scelte compromesse. Gli adolescenti in Italia, tra diritto alla scelta e impatto della povertà educativa. Link: [https://www.openpolis.it/wp-content/uploads/2020/12/Scelte\\_compromesse\\_.pdf](https://www.openpolis.it/wp-content/uploads/2020/12/Scelte_compromesse_.pdf) [last access 2022 January 31].

84257

## Beyond global gains and local pains - spatial inequality of hinterland logistics

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Trade infrastructure and logistic activities have long been a source of prosperity as well as nuisance. The benefits and burdens of logistics are not distributed equally in space. Important trade hubs such as Rotterdam have built strong trade institutions and accumulated urban wealth, hereby making a successful trade-off between the global gains of trade and the local pains of congestion and pollution. Since the rise of global supply chains, such hubs have grown beyond their city boundaries and formed logistic hinterlands. These extensive areas appear to represent a less favourable trade-off between benefits and burdens, judging by the increasing criticism and protest against distribution centre developments, which would cause landscape degradation and congestion. In the hinterland of Rotterdam, the building footprint of logistics has increased fourfold since 1980, while congestion and labour shortages have also increased steeply. This paper discusses whether hinterland logistics can be regarded as a spatial justice issue, and how this may be reflected in the local spatial planning debate in The Netherlands. Literature on spatial justice vis-à-vis logistics and local governance suggests that Dutch hinterland communities have the opportunity to meaningfully influence the trade-off between logistic benefits and burdens. In two cases of a local planning debate in 2021, concerning logistic development sites in Tilburg and Horst aan de Maas, I select and analyse local council and media reports that point to issues of spatial justice.

I conclude that spatial justice represents a significant part of the argumentation in the local planning debate regarding hinterland logistics in The Netherlands, attempting to influence the trade-off towards increasing the benefits as well as decreasing the burdens locally. The varying outcomes of the two cases, despite the similar institutional context, can be explained by specific local views on the topic and political path dependence. Local politicians ended up approving the plan in Tilburg with additional quality requirements, and delaying the one in Horst aan de Maas until higher standards are met. While local activism, supported by expert advice, appears to enable a more just local trade-off regarding hinterland logistics, its more radical forms seem to limit the public debate.

Keywords: hinterland logistics, spatial planning, spatial justice, landscape degradation, congestion, trade

### References

- Hall P V. and Hesse M (2012) *Cities Regions and Flows* (P V. Hall and M Hesseeds ). Routledge. DOI: 10.4324/9780203106143.
- Healey P (2006) *Transforming governance: Challenges of institutional adaptation and a new*

politics of space. *European Planning Studies* 14(3). Routledge: 299–320. DOI: 10.1080/09654310500420792.

Michels AMB (2006) Citizen participation and democracy in the Netherlands. *Democratization* 13(2): 323–339. DOI: 10.1080/13510340500524067.

Rocco R and Newton C (eds) (2020) *Cities for All - Manifesto for the Just City*. Delft: TU Delft Open.

Salet W (ed.) (2018) *The Routledge Handbook of Institutions and Planning in Action*. Routledge. DOI: 10.1192/bjp.111.479.1009-a.

Soja E (2010) *Seeking Spatial Justice*. NV-1 onl. Globalization and community series. Minneapolis: University of Minnesota Press.

Teo HC, Lechner AM, Walton GW, et al. (2019) Environmental impacts of infrastructure development under the belt and road initiative. *Environments - MDPI* 6(6). DOI: 10.3390/environments6060072.

Yuan Q (2019) Planning Matters: Institutional Perspectives on Warehousing Development and Mitigating Its Negative Impacts. *Journal of the American Planning Association* 85(4). Routledge: 525–543. DOI: 10.1080/01944363.2019.1645614.

84956

## Activating the commons beyond leftist imaginaries. The case of Paraisópolis.

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This paper addresses the commons as a collective endeavour in informal settlements, and problematises the limits to community organisation and citizens' rights, in light of lack of action by the State. In Paraisópolis, a slum in São Paulo (Brazil) housing over 100.000 inhabitants, the Covid crisis seemed to have less of a death toll (0,0217%) than in other areas of the city (an average of 0,0652% as of May 2020); at least initially. The sense of community in the area is strong, leading to many community initiatives and organisations to rise to the challenge of combating the pandemic with little help from the authorities. The community's initial efficient response to the Covid crisis leaned heavily on self-reliance and self-organization to mobilise common resources. Despite their later failure in containing the virus, the community's response to the pandemic is exemplary of a well-known phenomenon: how communities can mobilise their commons to create general welfare. The commons concept is used in this contribution to help better understand slum governance and the power and limitations of community reliance. At the same time, we aim to refine our understanding of the commons as a contentious category rooted in agonistic relationships, instead of the romanticised leftist social imaginary that views the commons as purely anti-capitalist. Thus, we explicitly argue for a view of the commons and commoning that transcends the narrow "Leftist imaginary" of the commons as egalitarian, inclusive, anti-capitalist, horizontal, and as expressions of sharing (and caring), and instead views the commons as embedded in everyday realities, where commoning practices emerge as practises that support the reproduction of (social) life.

Keywords: commons and commoning; community reliance; Covid-19 responses; grassroots and the state; informal settlements

### References

- Appadurai, A. (2002). Deep democracy: Urban governmentality and the horizon of politics. *Public Culture*, 14(1), 21–47.
- Arabindoo, P. (2011). Rhetoric of the "slum." *City*, 15(6), 636–646.  
<https://doi.org/10.1080/13604813.2011.609002>
- Bentkowska, K. (2021). Formal and informal institutions' changes in the sharing economy development. *European Research Studies Journal*, 24(1), 362–375.  
<https://doi.org/10.35808/ersj/2047>
- Caffentzis, G. (2011). The future of "the commons": Neoliberalism's "plan B" or the original disaccumulation of capital? *New Formations*, 69(69), 23–41.

<https://doi.org/10.3898/newf.69.01.2010>

Gibson-Graham, J. K., Cameron, J., & Healy, S. (2016). Commoning as a postcapitalist politics. In A. Amin & P. Howell (Eds.), *Releasing the commons: Rethinking the futures of the commons* (pp. 192–212). Routledge. <https://doi.org/10.4324/9781315673172-12>

85300

## Public facilities planning: The models of spatial distribution for the sustainable city on the case of Kranj, Slovenia

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Planning of the capacities and spatial distribution of public facilities meant to be an integral part of the wider socio-spatial planning endeavours within the socialist system under the federal state of Yugoslavia. The independence of Slovenia in 1991 and the change to the market-oriented capitalist system brought a more liberal approach and introduced private initiative in many sub-sectors of the public facilities network, e.g. private schools and health facilities were introduced. However the local authorities kept the right and obligation to provide the basic public facilities in their territories. The more forward-looking municipalities monitor the demographic and economic trends and adjust their public-facility-development accordingly. This paper presents the methodology developed for the City municipality of Kranj, the regional capital of Alpine part of Slovenia. Being a strong industrial hub of the ex-socialist state, the city was growing fast until mid 1980s, while the 1990s and later periods were characterised with the processes of deindustrialisation and suburbanisation. Nowadays however Kranj is seeing a stagnation and seeks its future development opportunities. Many new development areas have been proposed. Development plans assume that the pristine Alpine surroundings, good infrastructure, welcoming social policies and not the last the nearness of the international airport will attract new professionals and their families to the city. The city authorities recognised the need to provide adequate public facilities too to assure the anticipated quality of life. To plan the adequate and well distributed public facilities a research work was done focusing on the following three aims: to precisely map and evaluate the existing facilities, to decide the level of foreseen standards of the facilities, and to plan the concrete future network of the facilities in terms of their capacities, locations and urbanistic arrangements. Five major sectors have been considered: kindergartens, schools, primary health care centres, sports centres and elderly-care centres. The analyses were based on the combined statistical and spatial analyses within the GIS environment in a close collaboration of research team and city officials. In the first part the paper presents the methodological framework of the analytical phase. It then explains the process of combining the existing capacities data, demography, future development plans and scenario-speculations to define the ideal state of the art of the planned facilities. In the concluding part it debates the importance of the clear and participatory developed vision of the city. It also debates the need of the supporting policies and tools to achieve the anticipated standard of public facilities in a demographically and economically stagnating city.

### References

Taleai, M., Sliuzas, R., & Flacke, J. (2014). An integrated framework to evaluate the equity of urban public facilities using spatial multi-criteria analysis. *Cities*, 40, 56-69.

Yeh, A. G. O., & Chow, M. H. (1996). An integrated GIS and location-allocation approach to public facilities planning—An example of open space planning. *Computers, Environment and Urban Systems*, 20(4-5), 339-350.

Tahmasbi, B., Mansourianfar, M. H., Haghshenas, H., & Kim, I. (2019). Multimodal accessibility-based equity assessment of urban public facilities distribution. *Sustainable Cities and Society*, 49, 101633.

Tsou, K. W., Hung, Y. T., & Chang, Y. L. (2005). An accessibility-based integrated measure of relative spatial equity in urban public facilities. *Cities*, 22(6), 424-435.

85146

## Who thinks about regional space?

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Population decline, growing geographical disparities and lack of strategic spatial planning are all key factors of shrinkage – a contemporary socio-spatial phenomenon afflicting cities and villages alike (Hospers 2014). Over the past decade, research on urban and rural shrinkage from a planning perspective has prioritised the understanding of localised causes of shrinkage (Sysner 2020) whilst paying attention to situated solutions (Armands 2016, Bartosiewicz 2019).

Urban shrinkage is typically observed in post-industrial cities with transitioning economic structures and forces planners and policymakers to reconsider what drives the development of their city; they need to consider de-growth politics as planning for growth is not well-suited to a state of decline (Armands 2016, Özatağan & Eraydin 2020). Rural shrinkage distinguishes itself as a more gradual process and the result of long-term demographic changes, typically because of continued urbanisation (Bartosiewicz 2019). This results in diminishing resources and the closing of local institutions, leading to further decline.

This means that regional cooperation is necessary when faced with rural shrinkage (Müller & Siedentop 2004, Hospers 2014), as everybody is competing for the same resources and cope with the issues on their own – they can instead attempt to ‘share the pain’ and mitigate their losses through partnerships with local actors (Rutgers-Zoet & Hospers 2018).

The goal of regional shrinkage is to put emphasis on issues of ‘uneven development’ an inherent part of the peripheralisation debate (Fischer-Tahir & Naumann 2013): If urban shrinkage is addressed through continued growth politics, then there is a risk of worsening the conditions of the rural hinterland as it might accelerate the urbanisation process; and if rural shrinkage is only addressed through the establishment of village-to-village partnerships, without the involvement of dominant cities, then there is a considerable risk that only the symptoms are addressed and not the main cause of their decline.

Applying regional shrinkage to the case of Danish planning policy reveals how shrinkage has been addressed on a strategic level over the last 20 years. Moreover, the Danish case is based on a long history of welfare state planning and the lack of a regional authority in strategic planning matters.

Keywords: regional shrinkage; regional planning; rural governance; peripheralisation; framing; planning policy

References

Bartosiewicz, B. & Kwiatek-Sołtys, A. & Kurek, S. (2019), Does the process of shrinking concern also small towns? Lessons from Poland, *Quaestiones Geographicae*, 38:4, 91-105, DOI: 10.2478/quageo-2019-0039

Fischer-Tahir, A. & Naumann, M. (2013), *Peripheralization – The Making of Spatial Dependencies and Social Injustice*, Springer VS. ISBN 978-3-531-19018-1 (eBook)

Hospers, G.-J. (2014), Policy Responses to Urban Shrinkage: From Growth Thinking to Civic Engagement, *European Planning Studies*, 22:7, 1507-1523, DOI: 10.1080/09654313.2013.793655

Müller, B. & Siedentop, S. (2004), Growth and Shrinkage in Germany – Trends, Perspectives and Challenges for Spatial Planning and Development, *German Journal of Urban Studies*, 43:1

Özatağan, G. & Eraydin, A. (2020), Emerging policy responses in shrinking cities: Shifting policy agendas to align with growth machine politics, *Environment and Planning A: Economy and Space*, 53:5, 1096-1114, DOI: 10.1177/0308518X20975032

Pužulis, A. & Kūle, L. (2016), Shrinking of Rural Territories in Latvia, *European Integration Studies*, 10, 90-105, DOI: 10.5755/j01.eis.0.10.14988

Rutgers-Zoet, J. & Hospers, G.-J. (2018), Chapter 6 Regional cooperation in rural areas: the case of the Achterhoek in Hospers, G.-J. (Ed.) & Syssner, J. (Ed.) *Dealing with Urban and Rural Shrinkage: Formal and Informal Strategies* (pp. 87-99). LIT Verlag ISBN: 978-3-643-90822-3

Syssner, J. (2020), *Pathways to Demographic Adaptation – Perspectives on Policy and Planning in Depopulating Areas in Northern Europe*, Springer International Publishing. ISBN: 978-3-030-34046-9 (eBook)

84885

## Diverging conceptualisations of ‘urban voids’ and ‘left-behind places’ in contemporary urban discourse. A comparative study of Eleonas in Athens, Greece and Sacriston in County Durham, UK.

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There is currently a substantial gap in research and a deep cultural misconception in Planning debates of urban voids, left-behind places, and similar liminal spaces. Terms such as ‘void’ and ‘left-behind’ describe places that lack services necessary for the maintenance and growth of local communities and are omitted from development and broader investment strategies. However, they reflect this in a very reductive and generalising manner that fails to acknowledge their value; the richness of their local character; or their importance in people’s sense of belonging. Joining a growing group of scholars, this research argues that these spaces are far from empty, lost or wasted. Instead, they are key for the social, environmental, and economic diversity of cities and regions and are intrinsically linked to the transformation of the urban environment.

Through the comparative analysis of two empirical case studies: Eleonas in Athens, Greece and Sacriston in County Durham, UK this paper aims to highlight the narratives that are created surrounding liminal spaces in post-industrial settings. It aims to critically enrich the ongoing debate by looking at the different ways they are conceptualised. Using a mixed methods approach including the review of policy documents, socio-economic data, mappings, participant observation, and interviews with local actors, residents and policymakers, the paper presents deep descriptions of both areas and the drivers behind their pejorative conceptualisations and related policy responses.

The paper presents the evolution of both cases and delves into their local challenges and how these are handled within official planning discourses. So far, the research has found that the pejorative description of places as ‘voids’ or ‘left-behind’ skews planning decisions towards narratives of ‘filling’ that are often not relevant to local challenges. Instead, current discourse perpetuates a pejorative and subjective understanding of dereliction, deprivation, and neglect resulting to the deterioration of the physical and social infrastructure necessary to the wellbeing of local communities.

Through this comparative study, the paper uncovers that the conceptualisations projected upon these places – within two distinct planning contexts – influence their gradual deterioration and concludes that a reconceptualisation is necessary towards more sustainable, contextual, and relevant answers to local questions.

Keywords: urban voids, left behind places, uneven development, perception, social infrastructure

References

Panayotopoulos-Tsiros, D. (2020). From 'void' to 'voidness': a trans-scalar and relational approach to urban voids in post-industrial cities. UCL.

Tomaney, J., Natarajan, L., & Sutcliffe-Braithwaite, F. (2021). Sacriston: towards a deeper understanding of place.

MacKinnon, D., Kempton, L., O'Brien, P., Ormerod, E., Pike, A., & Tomaney, J. (2021). Reframing urban and regional 'development' for 'left behind' places. *Cambridge Journal of Regions, Economy and Society*. <https://doi.org/10.1093/cjres/rsab034>

Local Trust. (2019). Left behind? Understanding communities on the edge. <https://doi.org/10.1002/9781444361506.wbiems003>

Hwang, S. W., & Lee, S. J. (2020). Unused, underused, and misused: an examination of theories on urban void spaces. *Urban Research and Practice*, 13(5), 540–556. <https://doi.org/10.1080/17535069.2019.1634140>

López-Piñero, S. (2020). A glossary of urban voids. / Sergio Lopez-Pineiro. Berlin : Jovis Verlag GmbH.

Willett, J. (2021). *Affective Assemblages and Local Economies*. Rowman & Littlefield Publishers, Inc.

84403

## [RESHARE] Resource sharing in residential buildings: Innovative approaches to shared, circular mobility and space solutions as a gateway for smart consumption

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There is a clear conflict between how ‘inclusive’ and ‘smart’ cities and mobility solutions are being imagined, designed and projected. This is not to say that ‘inclusive’ cannot be ‘smart’ or vice-versa. But the way technology is currently usurping both funding and imagination around mobility solutions needs to be unpacked, probed and discussed. Discourses on gender, age, disability, life-stage etc. needs to be taken onboard to design future mobilities. This paper will present topics like walking, cycling, gendered travel behaviour, active ageing, methodological and policy gaps to show how the nexus of the lived and imagined world clash and often simple solutions are needed to be truly ‘smart’. The technosolutionism approach needs to continuously probe questions on who (along with, when and where) adopts the emerging new solutions and who are being left behind? It is through such probings that truly smart solutions will emerge with an ability to meet the needs of different demographic groups at different geographic levels. The ever expanding portfolio of smart solutions needs to further pay attention to making the right combinations rather than promoting one off solutions, for example questions like how can shared space and shared mobility be combined for future areal and residential projects can be posed to (re)imagine a future which is both smart and inclusive [1][2]. We will draw examples from the case of Oslo, Norway and discuss how a shared future for this city can be envisioned from a multi-stakeholder perspective [3][4][5]. Preliminary findings indicate that there is lack of understanding on how to combine the concept of shared spaces and shared mobilities. Smart and shared mobility solutions like e-scooters, e-bikes, car sharing etc. tend to facilitate a small group of population comprising young, well-educated, high-income men who also live in the central parts of the city. But a conscious design strategy which can make these smart solutions more accessible to diverse group of people like the older adults, single parent household, low income population etc. through combining shared spaces and shared mobility solutions holds the key for inclusive designing. Data plotting based on combining future population projections and travel behaviour for Oslo will clarify the scope of the propositions being put forth under RESHARE.

### References

1. Chan, J.K.H and and Zhang, Ye (2018), Sharing Space: Urban Sharing, Sharing a Living Space, and Shared Social Spaces, Space and Culture.
2. Batty M., Besussi E., Maat K. and Harts J.J. (2004). Representing Multifunctional Cities: Density and Diversity in Space and Time, Built Environment, 30: 4, 324–337.
3. Julsrud, T, and Farstad, E. 2020. “Car sharing and transformations in households travel patterns: Insights from emerging proto-practices in Norway.” Energy Research & Social Science 66.

4. Priya Uteng T. and Farstad E. (2020) Car sharing, Life Course and Young People's Approach to Daily mobilities: A Dialogue between Qualitative and Quantitative Research Findings, in J. Scheiner and H. Rau (Eds.) *Mobility Across the Life Course. A Dialogue between Qualitative and Quantitative Research Approaches* (Edward Elgar).
5. Priya Uteng, T., Julsrud, T.E., and George, C., 2019. The role of life events and context in type of car share uptake: Comparing users of peer-to-peer and cooperative programs in Oslo, Norway, *Transportation Research Part D* 71, 186–206.

85302

## Towards a 'just' (re)settlement: Interrogating grassroots agency in precarious 'post-disaster' contexts

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This paper draws on the experiences and narratives of urban poor residents who have been resettled to suburban communities due to a devastating typhoon that devastated Cagayan de Oro City (the Philippines) in 2011. Deploying the notion of 'disaster justice' to unpack self-help disaster recovery, the paper interrogates the various ways in which informal livelihoods have enhanced the capacity of urban poor residents to navigate the precarious post-resettlement contexts. A 'disaster justice' lens foregrounds the political in the analyses of environmental crises and embraces its entanglements with the spatial, social, material, and ecological forces that contribute to so-called 'natural' disasters (Douglass and Miller, 2018; (Hewitt, 1983; Bankoff, 2003; Delica-Willison, 2004). Employing a disaster justice prism can advance new conceptual prism that unsettles the usual 'resilience' approach to understanding self-help practices and instead focus on the lived experiences of resilience: how resilience is everyday enacted, negotiated, and contested in highly unequal metropolises. It can also shape public opinion and promote new policy framework that pays attention to the uneven vulnerabilities and opportunities as well as structural constraints to disaster recovery of many urban poor in global South cities.

By highlighting the economic as well as socio-spatial contributions of informal livelihoods to recovery process, the paper centres the often-unseen agency and struggles of resettled urban poor. It also examines how the prospects and limits of these self-help initiatives intersect with the questions of entrenched informality, hidden costs of collective action, spatio-temporal dimensions and political implications of 'post-disaster' livelihoods for urban planning and disaster recovery. The paper draws from document review, community mapping, focus groups discussions and in-depth interviews with state officials and resettled community residents in two relocation areas in the Mindanao Island, Philippines - a country whose exposure to natural hazards is exacerbated by rapid urbanisation, population growth, and socio-economic insecurity, among other influences (World Bank 2005; Warren, 2016).

Keywords: Grassroots agency, disaster justice, informal livelihoods, resettlement, global South, Philippines

### References

Bankoff, G. (2003). *Cultures of disaster: Society and natural hazards in the Philippines*. Psychology Press.

Delica-Willison, Z. and Willison, R. (2004) Vulnerability reduction: A task for the vulnerable people themselves, *Mapping Vulnerability: Disasters, Development and People*. Edited by G. Bankoff and D. Hilhorst. London and Sterling, VA: Earthscan. doi: 10.4324/9781849771924.

Douglass, M., & Miller, M. A. (2018). Disaster justice in Asia's urbanising Anthropocene. *Environment and Planning E: Nature and Space*, 1(3), 271-287.

Warren, J. (2016) 'Typhoons and the Inequalities of Philippine Society and History', *Philippine Studies: Historical and Ethnographic Viewpoints*, 64(3-4), pp. 455-472.

World Bank. (2005). Natural disaster risk management in the Philippines: Reducing vulnerability (Other Rural Study). World Bank. <https://openknowledge.worldbank.org/handle/10986/8754>

84931

## Just data? Hyperscale data centers and their implications for spatial justice.

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Data centers are a direct spatial consequence of increasing global use of the internet and data. Growing digitalization and efficiency developments in server technologies have resulted in the construction of hyperscale data centers. Overall, data centers are highly energy intensive and currently make up about 1% of global electricity consumption (1). Hyperscale data centers, while more energy-efficient than their smaller counterparts, have increasingly high electricity demands due to their size, sometimes up to 1.4 TWh/yr (2). Besides from their impact on electricity usage, hyperscale data centers also have a large spatial impact on their environments, due to their size – often exceeding 150 hectares – and their design – multiple stories of blind walls (2). It is therefore important to have a transparent and inclusive planning procedure to determine how burdens and benefits of data centers are distributed among different stakeholders, including local residents, data center owners, and electricity grid operators (3).

This study conducts a comparative analysis of planning procedures of existing and future hyperscale data centers in the Netherlands. It assesses how procedural and distributive justice (4) are accounted for by local governments during the planning and implementation of data centers. By relating distributive and procedural justice not only to spatial planning, but also to the renewable energy transition, this study connects the concepts of spatial justice (5) and the just transition (6).

Data centers are a modern land use that are bound to become more widespread in coming years. Thus, it is important to use the concept of spatial justice more deliberately in the planning processes and outcomes related to the placement of data centers. While this study shows that the rapid growth in size and numbers of data centers can pose challenges to spatial justice, it also points at opportunities they have to offer when they are planned and implemented in a more just way.

Keywords: data centers; distributive justice; procedural justice; just transition; participatory planning

### References

1. Masanet, E., Shehabi, A., Lei, N., Smith, S., & Koomey, J. (2020). Recalibrating global data center energy-use estimates. *Science*, 367(6481), 984–986.  
<https://doi.org/10.1126/science.aba3758>
2. Persson, M., van Bekkum, D. (15 december 2021). Facebook in de polder: hoe de energieslurper in de watten werd gelegd. *De Volkskrant.nl*.  
<https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:649K-9571->

JBHV-K51G-00000-00&context=1516831.

3. Diguet, C., & Lopez, F. (2020). Digital Territories and energy transition the limits to growth. *Contesti Citta a Territori Progetti*. <https://doi.org/10.13128/contest-11725>

4. Maguire, L. A., & Allan Lind, E. (2003). Public participation in environmental decisions: Stakeholders, authorities and procedural justice. *International Journal of Global Environmental Issues*, 3(2), 133–148. <https://doi.org/10.1504/IJGENVI.2003.003861>

5. Moroni, S. (2020). The just city. Three background issues: Institutional justice and spatial justice, social justice and distributive justice, concept of justice and conceptions of justice. *Planning Theory*, 19(3), 251–267. <https://doi.org/10.1177/1473095219877670>

6. McCauley, D., & Heffron, R. (2018). Just transition: Integrating climate, energy and environmental justice. *Energy Policy*, 119(April), 1–7. <https://doi.org/10.1016/j.enpol.2018.04.014>

85161

## Navigating the (Un)Grounded Tension between Spatial Change and Fixity

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The tension between the forces of change and fixity is central to understanding complex spatial conditions. In recent years, post-foundational thinking has been particularly mobilized to unravel the transformative potential of this tension. Drawing on the fundamental lack of final foundations on which socio-political orders can be grounded, post-foundational thinking provides theoretical grounds for hope, as it conceptually emancipates the future from any deterministic assumption that a given dominant social ground could ever go unchallenged. However, this paper argues that the interface between grounding and ungrounding has remained unexplored in post-foundational debates. Thus, using the method of conceptual diagramming, a framework is developed in order to help planners navigate the possibilities for urban alternatives which emanate from this interface. The (un)grounded interface can be defined as an intermediate zone pregnant with spatio-temporal possibilities, with these possibilities representing hopeful urban alternatives whose signs manifest in situations of everyday life. In particular, this paper focuses on conceptualizing the interface between politicization and depoliticization, between self-organization and control, between dominant spatial orders and informal practices. These generative nexuses reflect the dynamism and fluidity of meanings that characterize urban life. Accommodating this dynamism in the purposeful interventions of city-makers requires a nuanced empirical understanding of the rhythms through which possibilities for change take shape. By delving into the rhythms of emergence, fuzziness, and becoming, this paper supports the visionary capacity of city-makers to enact spatial alternatives by using an analytical toolkit for cultivating signs of potential alternatives in everyday life. The paper concludes with reflections on how the (un)grounded interface offers conceptual and practical opportunities for enriching critical urban research with a nuanced perspective on hope. Conceptually, spatial manifestations of hope are always caught in a negotiation process between forces of domination and emancipation, between grounding and ungrounding, a process imbued with potential stages of unpredictable ruptures and back and forth oscillations between order and self-organization. Practically, this perspective moves the notion of hope from a lopsided position that counts on a return of radical urban ruptures, towards becoming a motivating force for a pragmatically hopeful planning praxis of cultivating spatial alternatives.

Keywords: Public space, socio-spatial proximity, everyday life, COVID-19, virtual spaces, community resilience

### References

Bourdieu, P. (1996). Physical space, social space and habitus. Vilhelm Aubert Memorial Lecture, Report 10, 87–101. <https://doi./10.1177/0038038515596909>. De Backer, M. (2018). Regimes of visibility: Hanging out in Brussels' public spaces. *Space and Culture*, online first. <https://doi./10.1177/1206331218773292>. De Roo, G. (2012). Understanding fuzziness in

planning. In G. De Roo & G. Porter (Eds.), *Fuzzy planning*(pp. 127–142). Routledge.Rajabifard, A., Paez, D., & Foliente, G. (2021). *COVID-19 Pandemic, Geospatial Information, and Community Resilience: Global Applications and Lessons*. Taylor & Francis Group. Tornaghi, C., & Knierbein, S. (2014). *Public space and relational perspectives: New challenges for architecture and planning*. Routledge.

84111

## Adaptability, responsibility and care: reframing planning theories

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Throughout human history, urban planning has changed its trajectory according to the leading narrative, corresponding to the current course of time. We offer a division that differentiates two dominant paradigms of urban theory. The first grasps the city as a problem that needed to be solved; this paradigm is associated with modern thinking, perceiving urban planning as a scientific action, utilizing time- and space-proof principles through a comprehensive process. The second perceives planning as representing the numerous actions of residents, visitors and investors, implicated by their complex interactions and expectations. While the first paradigm is linked to the quantitative-positivist way of thinking, the second represents qualitative-constructivist perspective. Specifically, we contend that the threefold basis for theorizing the second, the qualitative-constructive planning paradigm, includes complexity theory combined with Tronto's (1993) Ethics of Care and Akbar's (1988) Responsibility model. We thus define planning apparatus based on utility, control and reason from methods that promote emergence, reciprocity, responsibility, and attentiveness for needs. We contend that this division can serve as a tool for evaluating types of planning machinery, neighborhood plans and planning discourse.

The paper delineates the numerous links tying complexity theory, admitting the importance of emergence, self-organization, and open-ended planning to Akbar's (1988) responsibility model, which is sensitive to aspects of ownership, use, and control of urban elements. We then add to that mosaic Ethics of Care (Tronto, 1993), highlighting values such as attentiveness for needs and responsiveness to cultural, ethnic, and gender contexts. We show that the three theories are interwoven by bottom-up, emergence, relation-based, and responsiveness dynamics principles. Together, the combination of these viewpoints provides a prism for evaluating planning cultures, and negating them to the principles of the quantitative-positivist approach to planning.

Keywords: Planning Theories, Complexity, Care Ethics, Responsibility, Adaptability, Qualitative methods.

### References

- Akbar, J. (1988). *Crisis in the Built Environment: The Case of the Muslim city*. Leiden: Brill.
- Alfasi, N. (2018). The coding turn in urban planning: Could it remedy the essential drawbacks of planning?. *Planning Theory*, 17(3), 375-395.
- Cozzolino, S. (2020). The (anti) adaptive neighborhoods. Embracing complexity and distribution of design control in the ordinary built environment. *Environment and Planning B: Urban Analytics and City Science*, 47(2), 203-219.

Tronto, J. C. (1993). *Moral Boundaries: A Political Argument for an Ethic of Care*. Psychology Press.

84364

## Design Framework for Neighbourhood Resilience: Combining human and other-than-human perspectives into an integrated approach

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The current Covid-19 pandemic has underlined the importance of urban public spaces in achieving health and social well-being (Dobson, 2021; Poortinga et al., 2021), prompting policymakers and urban planners to rethink their approach to the design of these spaces. They now propagate adapting urban public spaces more directly to human needs (Suurenbroek et al., 2019), often at a neighbourhood level, while also embracing a more-than-human perspective that includes the well-being of the natural ecosystem at large (Maller, 2020; Houston et al., 2018). The latter becomes imperative as other shocks and stressors, such as climate change and biodiversity loss, are impending, straining urban spaces and their residents to show resilience in times of complex challenges. “Learning from Covid-19”, a need emerged for new design approaches for public spaces, contributing both to social and ecological resilience.

This paper presents results from the research project "From Prevention to Resilience". It moves beyond merely responding to the pandemic by designing social and physical barriers in public space to prevent the virus from spreading. Instead, it seizes the opportunity to explore how an integrated design approach to public space could contribute to social and ecological resilience (Boon et al., 2021). The project, funded by the Dutch organization for health research and care innovation, is a collaboration between the chairs of Spatial Urban Transformation and Civic Interaction Design (AUAS) and an international partner consortium.

This paper builds on our compiled database of design strategies addressing the Covid-crisis, expert sessions with a Community of Practitioners, and interviews with Dutch spatial design firms and municipalities. It first introduces a "Design Framework for Neighbourhood Resilience" and its core concepts. Next, it validates this framework through a research-by-design approach. Spatial and social design agencies applied the framework in real-life design cases in Amsterdam and allowed for its empirical grounding and practice-based development. Ultimately, the paper defines a design framework that builds resilience for the well-being of all urban inhabitants and initiates a dialogue between disciplines to address resilience integrally when designing public spaces and forms of civic engagement.

Keywords: Design Framework, Social Resilience, Ecological Resilience, Other-than-human Residents, Well-being, Covid-19 Pandemic

### References

Boon, B., Nirschl, M., Gualtieri, G., Suurenbroek, F., & de Waal, M. (2021). Generating and disseminating intermediate-level knowledge on multiple levels of abstraction: An exploratory

case in media architecture. *Media Architecture Biennale 20*, 189–193.  
<https://doi.org/10.1145/3469410.3469430>

Dobson, J. (2021). Wellbeing and blue-green space in post-pandemic cities: Drivers, debates and departures. *Geography Compass*, 15. <https://doi.org/10.1111/gec3.12593>

Houston, D., Hillier, J., MacCallum, D., Steele, W., & Byrne, J. (2018). Make kin, not cities! Multispecies entanglements and ‘becoming-world’ in planning theory. *Planning Theory*, 17(2), 190–212. <https://doi.org/10.1177/1473095216688042>

Maller, C. (2020). *Healthy Urban Environments: More-than-Human Theories* (1st ed.). Routledge, Taylor & Francis Group. <https://www.routledge.com/Healthy-Urban-Environments-More-than-Human-Theories/Maller/p/book/9780367459031>

Poortinga, W., Bird, N., Hallingberg, B., Phillips, R., & Williams, D. (2021). The role of perceived public and private green space in subjective health and wellbeing during and after the first peak of the COVID-19 outbreak. *Landscape and Urban Planning*, 211, 104092. <https://doi.org/10.1016/j.landurbplan.2021.104092>

Suurenbroek, F., Nio, I., & de Waal, M. (2019). Responsive public spaces: exploring the use of interactive technology in the design of public spaces. Hogeschool van Amsterdam, Urban Technology. <https://research.hva.nl/en/publications/responsive-public-spaces-exploring-the-use-of-interactive-technol-2>

83975

## Beyond planning for the ant: Towards a redefinition of the human species and its implications for planning

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When we are engaged in planning, some commonsensical notions are rarely questioned—particularly the most basic idea of the human species as units of individual rational beings. Given the empirical findings from cognitive science, psychology and anthropology, we are not just “ants” with simply more complexity (Epstein 2015). We continue to plan under the myth of individual thought (Sloman and Fernbach 2017) while we are socially constituted (Lieberman, 2013), simultaneously rational and irrational, logical and emotional (McGilchrist, 2019). However, rather than acknowledging the complexity and contradictions that constitute what humans are, European enlightenment has particularly put forth an idealistic and rational image of the human being, which has become the background of our planning efforts. Therefore, we plan with ‘half a mind’, as Baum had so rightly put (Baum 2015). The issue at hand is not as simple as acknowledging emotional and empathic aspects as part of being human (and how that impacts planning), but rather what does this “being human” is. The anthropological volume by Ingold and Palsson (2013) shed a light by redefining humans as “biosocial becomings”, essentially removing the notion of a static, pre-existing human “being” to plan for. Beyond that, the latest research from cognitive science on species-environment relations shows how humans are extended, embodied into their environment (Chemero 2013, Noë 2009) (hence the boundary of humans don’t end at their skin, but are co-constituted with the environment). Interrogating these two lines in sections 1 and 2, this paper then draws out the implications for planning theory and social justice in section 3. Rather than concrete resolutions, this paper remains an exploratory one in scope. However, in conclusion, it points towards a key direction for planning: planning as collective and situated fabulation.

Keywords: planning theory, biosocial becomings, human species, transdisciplinary survey, collective fabulation

### References

- Baum, H. (2015). Planning with half a mind: Why planners resist emotion. *Planning Theory & Practice*, 16(4), 498-516.
- Chemero, A. (2011). *Radical embodied cognitive science*. MIT press.
- Epstein, B. (2015). *The ant trap: Rebuilding the foundations of the social sciences*. Oxford Studies in Philosophy.
- Ingold, T., & Palsson, G. (Eds.). (2013). *Biosocial becomings: integrating social and biological anthropology*. Cambridge University Press.
- Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. OUP Oxford.
- McGilchrist, I. (2019). *The master and his emissary*. Yale University Press.
- Noë, A. (2009). *Out of our heads: Why you are not your brain, and other lessons from the biology of consciousness*. Macmillan.

Sloman, S. A., & Fernbach, P. (2017). *The knowledge illusion: Why we never think alone*. Penguin.

84996

## Enriching or Violent? Ambivalent Experiences throughout Displacement and Resettlement in South-eastern Turkey.

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Most of the literature on displacement and resettlement due to hydropower dam developments have extensively focused on macro-scale geopolitics, governance, impoverishments, the socio-economic costs, and loss. However, rethinking the ordinary people as the main geopolitical actors in the local development together with local conflicts has been neglected in the critical geography of displacement and resettlement. To this end, in the presence of Turkey's Kurdish question within the contested territory of South-eastern Turkey, the paper aims at analysing personal embodied experiences, socio-spatial injustices, struggles and vulnerabilities of forcibly displaced and resettled Kurds and Arabs in the wake of the construction of Ilisu dam. Drawing on the theoretical frameworks of affective and postcolonial geopolitics, the paper examines how people experience and embody development-induced territorial contestations (dam, displacement, and resettlement) through their identities, and existing ethno-territorial contestations and imaginaries. By reflecting the positions of the displaced and resettled communities, the paper questions: what are the embodied, affective, and imaginative ramifications of Turkey's Kurdish question underneath the implementation of mega infrastructural development that accompanies forced displacement and resettlement? A qualitative empirical case study was carried out in Hasankeyf town, Batman city before the submergence in 2020 and after in the resettlement of Hasankeyf 2021. Experiences are felt and embodied through housing, compensations, evictions, place attachment to cultural and historical entities, and unintended cohabitation of different hybrid cultures (Arabs and Kurds) in the resettlement of Hasankeyf. Embodied and affective ambivalent experiences revealed that the built infrastructures (the dam and resettlement) accelerated socio-spatial injustices regarding Turkey's Kurdish question and socio-spatial discrimination of Kurds from the urban resettlement. On the other hand, post-urban resettlement process has enabled to solve socio-spatial injustices and discrimination towards Kurds informally when Arabs and Kurds started to live together unintentionally. The paper argues that different forms of territorial contestations and imaginaries (due to hydropower development, resettlement and ethno-territorial) are interwoven, and they are both nurturingenriching and violentexclusionary. This interwoven relationship engenders the ambivalent experiences. The paper contributes and extend ongoing debates on critical geography of displacement and resettlement.

Keywords: ambivalence; affect; displacement; resettlement; Kurdish question; socio-spatial injustices; Ilisu dam

### References

- Cernea, M. M. (1997). Hydropower dams and social impacts: a sociological perspective. The World Bank.
- Gambetti, Z., & Jongerden, J. (Eds.). (2015). The Kurdish issue in Turkey: A spatial

perspective. Routledge.

-Harris, L. M. (2002). Water and conflict geographies of the Southeastern Anatolia Project. *Society & Natural Resources*, 15(8), 743-759.

-Hommes, L., Boelens, R., & Maat, H. (2016). Contested hydrosocial territories and disputed water governance: Struggles and competing claims over the Ilisu Dam development in southeastern Turkey. *Geoforum*, 71, 9-20.

-Rogers, S., & Wilmsen, B. (2020). Towards a critical geography of resettlement. *Progress in Human Geography*, 44(2), 256-275.

-Ruez, D., & Cockayne, D. (2021). Feeling otherwise: ambivalent affects and the politics of critique in geography. *Dialogues in Human Geography*, 11(1), 88-107.

-Yenneti, K., Day, R., & Golubchikov, O. (2016). Spatial justice and the land politics of renewables: Dispossessing vulnerable communities through solar energy mega-projects. *Geoforum*, 76, 90-99.

84382

## [Un]making Spatial Injustice Through Gender Exclusion

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The built environment is a representation of the embedded power dynamics and social relations within the cities. Modern cities were historically planned to differentiate between and thus segregate multiple aspects of daily life as unfolded in the spaces of rest, leisure and work. This division is further escalated and led to the creation of gendered environments that suit the needs of men and heteronormative families. Within these complex power relations, a strong division between the private space of the home and the public space of the city becomes evident, which affects the everyday spaces and daily practices of women. While the socio-spatial boundaries that separate the space of work from leisure and rest are solid and tangible for men, the distinction between the place of work and leisure is much less clear for women. The trio of (1) women's economic injustice in labour and market, (2) their underrepresentation in political, leadership and decision-making roles and (3) the widespread violence against women have created the assumption that since women have more power and control over the private space of their home and are safer there, therefore their place is in the home. This results in the formation of a universal pattern of spatial injustice and exclusion, massively affecting the women's perception of and relationship with the built environment of their cities.

Through a discourse analysis of the notions of 'gender equality' and 'right to the city' within the urban planning landscape of post-revolutionary Tehran, this paper elaborates on the ways through which urban policy deepens socio-spatial divisions and engender gender-based spatial exclusion. Like many other metropolises, women in Tehran are struggling to find and claim their place within the public space of the city. However, in some cases, the state response to this demand results in the creation of gender-segregated heterospaces. This paper focuses on these gender-segregated spaces such as women parks, universities, police stations, etc., as alternative spaces and sites of spatial exclusion of women from the everyday space of the city. Additionally, and through a feminist lens, this research investigates women's mobility and accessibility within the urban space and the role of planning policy to support these processes.

Keywords: Spatial Justice, Spatial Exclusion, Right to the city, Gendered Space, Border

### References

1. Hooks, Bell. *Feminist theory: From margin to center*. Pluto Press, 2000.
2. Irigaray, Luce. *This sex which is not one*. Cornell university press, 1985.
3. Lefebvre, Henri, and Donald Nicholson-Smith. *The production of space*. Vol. 142. Blackwell: Oxford, 1991.
4. Borden, Iain, et al., eds. *The unknown city: Contesting architecture and social space*. Mit Press, 2002.
5. Hayden, Dolores. "What would a non-sexist city be like? Speculations on housing, urban design, and human work." *Signs: Journal of Women in Culture and Society* 5.S3 (1980): S170-

S187.

6. Beebeejaun, Yasminah. "Gender, urban space, and the right to everyday life." *Journal of Urban Affairs* 39.3 (2017): 323-334.

85334

## Inclusive planning: expert claims, citizens' expectations, and implementation challenges to socio-spatial justice

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Since the late 20th century planning theory and practice have increasingly focused on developing collaborative and communicative approaches to address the complex nature of urban space and cope with emerging conflicts and uncertainties of the urban process. The inclusive planning concept has been recently gaining increasing popularity. Based on action research, the paper presents a co-creation process initiated by EC funded URBiNAT project (2018-ongoing) and its development in the city of Sofia. The project addresses socially vulnerable communities in spatially segregated areas in several European cities in search for context-sensitive ways to promote nature-based solutions (NBS) and implement inclusive planning approaches to reduce urban inequalities. A set of several prefabricated housing estates in Nadezhda district at the urban periphery of the city, was chosen as Sofia Living Lab. The estates planned in mid-20th century according to a modernist paradigm, claiming to provide equity of access to abundant public greenery. Under a changing societal context after 1990s, public space in the estates has been shrinking and undergoing numerous functional and ownership transformations. After identifying local cultural practices and existing inequalities and conflicts in public space, the project conceptualizes and tests innovative planning tools - roundtables, workshops, an Advisory Board, aimed to deal with the estimated socio-spatial injustices. The claimed needs and demands of various stakeholders have been integrated into the spatial concept and the design brief of a Healthy corridor linking two large urban parks through the public space of the estates. The paper outlines the emerging socio-spatial conflicts and inequities and discusses the potential effectiveness of the procedures and interventions addressing them through the preliminary urban plan. Conclusions are drawn about the relevance and limitations of the developed planning approach under the peculiar socio-spatial context, the expectations raised among the variety of involved actors, and the emerging challenges to socio-spatial justice in the implementation process.

Keywords: socio-spatial justice, inclusive planning, right to the city, public space, prefabricated housing estates, Sofia

### References

- Andrzej Zieleniec, 2018. Lefebvre's Politics of Space: Planning the Urban as Oeuvre  
Andrzej Zieleniec, In *Urban Planning*, Volume 3, Issue 3, Pages 5–15  
DOI: 10.17645/up.v3i3.1343
- Guido Ferilli, Pier Luigi Sacco, Giorgio Tavano Blessi (2016). Beyond the rhetoric of participation: New challenges and prospects for inclusive urban regeneration. In *City, Culture and Society*, Volume 7, Issue 2, pp. 95-100,  
<https://doi.org/10.1016/j.ccs.2015.09.001>.  
<http://dx.doi.org/10.1016/j.ccs.2015.09.001>
- Sofia Municipality, Architecture and Planning Directorate (2021). Sofia Municipal Council

adopted an urban concept for inclusive regeneration developed within URBiNAT project (in Bulgarian). <https://nag.sofia.bg/Pages/SinglePublication/-Crm22b8OPk=>

Henri Lefebvre (1991) *The Production of Space*. Translated by Donald Nicholson-Smith, 1st edition. Wiley.

Judith E. Innes, David E. Booher, 2018. *Planning with Complexity. An Introduction to Collaborative Rationality for Public Policy*. 2nd Edition. Routledge.

URBiNAT NBS Catalogue. <https://urbinat.eu/nbs-catalogue/>

84985

## Tale from Tigris River. River Right as Human right: The Cases of Hasankeyf and Hevsel Gardens, Turkey

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The preservation of cultural heritage comprises physical sites as well as human rights in terms of social justice and well-being. Today, cultural heritage sites face major human interventions that cause severe damage. Dam projects on river beds can destroy ecosystems and, in particular cases, cultural heritage formed by rivers for decades. Tigris River, particularly the predicament of the old settlement of Hasankeyf, which faced the construction of The Ilisu Dam project, is a recent and telling example to be explored.

This paper aims to explore the role of the Tigris river in determining both the flourishing and destruction of the old settlement of Hasankeyf in Turkey. With 400 km of riverine habitat, Tigris river is a fundamental natural infrastructure for agriculture and the formation of millions of lives' habitats. Among these, dating back to 300,000 years ago, human beings found a favorable natural shelter in the caves, becoming part of the canyon ecosystem. Today, these places represent one of the most valuable legacies of humanity, which is highly vulnerable in terms of conservation of cultural heritage, natural biodiversity, and human rights discourse mainly because of the most recent massive interventions aimed at complete exploitation of its resources.

The role of the Tigris river is investigated in twofold perspective: its beneficial aspects as natural infrastructure for the life of a multitude of species and the negative impact it undergoes once severely modified by human intervention. A comparative analysis of the case of Hasankeyf town to the close site of Diyarbakir Hevsel gardens will be carried out by mapping physical displacements, diverse settlement forms in relation to the river, and the surrounding environment. Following discussion will reconstruct a diagrammatic map of stakeholders and issues involved during these processes.

In conclusion, the intention is to discuss social inequalities in terms of ecological and cultural preservation of living environments, opening the reflection on the struggle between communities, economic interests, and institutions, such as UNESCO. The paper recognizes the safeguarding of cultural heritage right as the possibility for communities to participate in practice on-site, fulfill their capabilities and find protection toward conflicting interests.

Keywords: cultural heritage, cultural heritage right, biodiversity, ecosystem, social justice, displacement

## References

Aykaç Leidholm, P., & Kaya, B. (2020). Hasankeyf'te sona yaklaşırken: korumada insan odaklı yaklaşımlar ve insan hakkı olarak kültürel miras.

Doğa Derneği, 2015, "Hasankeyf Yok Olmasın", [dogadernegi.org/wp-content/uploads/2015/09/](http://dogadernegi.org/wp-content/uploads/2015/09/)

Fincham, D. (2012). Justice and the cultural heritage movement: Using environmental justice to appraise art and antiquities disputes. *Va. J. Soc. Pol'y & L.*, 20, 43.

Hodder, I. (2010). Cultural heritage rights: From ownership and descent to justice and well-being. *Anthropological Quarterly*, 83(4), 861-882.

ICOMOS (International Council on Monuments and Sites). (2014). The Florence Declaration on Heritage and Landscape as Human Values.

Warner, J. (2012). The struggle over Turkey's Ilisu Dam: domestic and international security linkages. *International Environmental Agreements: Politics, Law and Economics*, 12(3), 231-250.

85314

## Blue infrastructure study in Warsaw. Typology and perception.

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Blue infrastructure (rivers, lakes, channels) is not only an inseparable part of many urban areas, which were often located next to them but also an important part of modern cities. In recent years, water is not only treated from its aesthetic, economic, and ecological side but also how it is related to human health and well-being (Blue Health Horizon 2020, Grellier et al. 2017) as well as recreational aspects such as education and enjoyment (Kati and Jari 2016). For a long time, many of the blue areas in the city has been forgotten and abandoned. However, in recent years, we can see a big shift in the importance which is paid to blue spaces. Flag example is the Cheonggyecheon river (Lee and Chad David, 2013) which once was buried under the ground, and nowadays after revitalization is an integral and important part of the city, enjoyed by humans and nature. Following those trends, we have studied 427 blue spaces in Warsaw, assessing them and clustering them into three main types: regularly managed areas, areas without defined functions, and abandoned and forgotten places. Following that, we have conducted the geo-questionnaire, asking for favorite and least favorite blue spaces in Warsaw and their perception. We have collected 527 full answers and over 800 places marked which were analyzed showing spatial patterns and values which our respondents underlined in their answers. We claim that this study is an important base for future blue infrastructure development in Warsaw, which often is forgotten, contaminated, unsustainable, and moreover, doesn't meet the needs of users.

Keywords: Blue infrastructure, landscape perception, PPGIS, Warsaw

### References

Blue Health Horizon 2020 project: <http://bluehealth2020.eu/>

Grellier, J., White, M.P., Albin, M., Bell, S., Elliott, L.R., Gascón, M., Gualdi, S., Mancini, L., Nieuwenhuijsen, M.J., Sarigiannis, D.A., van den Bosch, M., Wolf, T., Wuijts, S., Fleming, L.E., 2017. BlueHealth: a study programme protocol for mapping and quantifying the potential benefits to public health and well-being from Europe's blue spaces. *BMJ Open* 7, e016188. <https://doi.org/10.1136/bmjopen-2017-016188>

Kati, V., & Jari, N. 2016. Bottom-up thinking-Identifying socio-cultural values of ecosystem services in local blue-green infrastructure planning in Helsinki, Finland. *Land Use Policy*, 50, 537-547.

Lee, J.Y., Chad David, A., 2013. The Restored Cheonggyecheon and the Quality of Life in Seoul. *J. Urban Technol.* 4, 3–22.

## TRACK 10: EDUCATION

84962

### Education for the planning we need.

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This contribution starts from the premise that contemporary planning practices - and therefore the planning education that we require - differ from previous technocratic and managerial ones. In the context of urgent sustainability transitions, planning has gained a broader scope. Practices need to contribute to solving more various, contentious and complex socio-spatial challenges, and to focus on more fundamental questions that are more firmly grounded in normative values. They are required to not only support but also to proactively steer transitions towards inclusive, fair, healthy, resilient and sustainable spatial futures. As many scholars reiterate, contemporary planning is thus to be understood as a process of co-design; one that enables visions and strategies not for but with society.

Despite a growing interest in design-led spatial planning approaches and a broader ambition to include co-creation and place considerations into planning, only few planning and architecture schools integrate spatial design and planning education in one programme. TU Delft's MSc Urbanism programme aims to do just that. Building upon interdisciplinary and comparative research, the interrelation between these disciplines is a unique feature of the department's curricula.

In this paper, we present the department's MSc Urbanism graduation studio 'Planning Complex Cities' as an environment where this engaged planning approach has been developed over recent years. To assess how education in the studio has reflected shifting needs for planning, we start from Ozawa and Seltzer's framework of essential skills and competencies for planners (1999) and Alexander's critique (2001) hereof. We first discuss this framework in relation to current planning theory. Based on this discussion, we present an updated framework for the evaluation of the studio approach and use this as a baseline for a stacked bibliometric and textual analysis of all graduation projects (200+) developed in the studio since 2008. The research will look into project themes and geographical locations, the presence of students' knowledge of planning theory and practice, their planning and design skills and – most prominently - methods used for the combined application of these skills. The paper will present results of the empirical analysis and critically discuss these in the context of a changing landscape of planning theory and practice and educational reform that reflects these changes.

Keywords: planning education, studio pedagogy

#### References

Alexander, E. R. (2001). What Do Planners Need to Know? *Journal of Planning Education and Research*, 20(3), 376–380. <https://doi.org/10.1177/0739456X0102000309>

- Balz, V., & Zonneveld, W. (2020). The Institutionalisation of a Creative Practice: Changing Roles of Regional Design in Dutch National Planning. In V. Lingua, & V. Balz (Eds.), *Shaping Regional Futures: Designing and Visioning in Governance Rescaling* (pp. 27-42). Springer. [https://doi.org/10.1007/978-3-030-23573-4\\_3](https://doi.org/10.1007/978-3-030-23573-4_3)
- Gilliard, L., Rooij, R., Alaily-Mattar, N., Zonneveld, W., & Thierstein, A. (2021). Interdisciplinary pedagogies for regional development challenges: The re-coupling of planning, design, and the social sciences. In M. Neuman, & W. Zonneveld (Eds.), *The Routledge Handbook of Regional Design* (pp. 377-393). Taylor & Francis. <https://doi.org/10.4324/9780429290268-26>
- Lipietz, B., & Newton, C. (2016). Pedagogy for “real change”: The DPU/ACHR partnership. In A. Deboulet (Ed.), *Rethinking Precarious Neighborhoods* (pp. 233–244). Agence Française de développement.
- Ozawa, C. P., & Seltzer, E. P. (1999). Taking our bearings: Mapping a relationship among planning practice, theory, and education. *Journal of Planning Education and Research*, 18(3), 257–266. <https://doi.org/10.1177/0739456X9901800307>

84934

## Training urban and regional planners, for which career? Evidence from Italy

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20 years after its statutory introduction, the spatial planning education and profession in Italy is still widely disputed. On the one hand, academic circles and practitioner associations stand for its societal relevance [De Luca & Rallo, 2018], also endorsed by the UN's New Urban Agenda [UN-Habitat, 2016a; Stiffler, 2021]. On the other hand, some recent law reforms, and reform proposals (i.e., the introduction of the 'qualifying degrees', the restructuring of the professional order, etc.) have been adding elements of uncertainty to the Italian planner status. A status which is relatively weak and precarious if compared to other cognate professionals.

Drawing on an original collection and analysis of data [Bonavero & Cassatella, 2022 forthcoming], the research explores current Italian planners' situation in the light of the wider international context [Frank et al, 2014; Stiffler et al., 2009; UN-Habitat, 2016b]. By doing this it addresses several issues relevant to planning students, graduates, and professionals such as decreasing or fluctuating enrolments, diversifying backgrounds and career prospects, study to job transition, 'planning capacity', professional recognition, and social perception.

The case of Politecnico di Torino, School of Planning and Design is used to showcase how curricula and courses were recently redesigned to cope with some of these challenges in general, and with interdisciplinarity and internationalization in particular.

Findings confirm a situation of light and shadows, the development of a distinctive professional identity remaining key to ensure future relevancy for the Italian planner [Bonavero & Cassatella, 2022 forthcoming]. What is uncertain and complex today – and will be more and more in the future – is not only the scope of planner's practice, but the planner's figure itself, caught in a continuous tension between interdisciplinarity and specialization, international outlook and professional localism. A complex and enduring issue [Wildavsky, 1973; Manley & Parnaby, 2000] that seems intrinsically tied to the planning discipline.

Keywords: Urban and regional planner; Planning education; Career prospects; Internationalization of higher education; New Urban Agenda; Italy

### References

- Bonavero, F., & Cassatella, C. (2022 forthcoming). The Italian Planner: Insights from 20 Years of Planning Education and Practice in Italy. *Planning Practice and Research*.  
<https://doi.org/10.1080/02697459.2022.2034284>.
- De Luca, G., & Rallo, D. (2018). *Cosa pensano gli urbanisti 2006-2016* (Roma: INU Edizioni).
- Frank, A. I., Mironowicz, I., Lourenco, J., Franchini, T., Ache, P., Finka, M., Scholl, B., & Grams, A. (2014). *Educating planners in Europe: a review of 21st century study programmes*.

Progress in Planning, 91, pp. 30-94. <https://doi.org/10.1016/j.progress.2013.05.001>.

Manley, S., & Parnaby, R. (2000). The return of the Architect-Planner? Planning Practice and Research, 15(3), pp. 269-277. <https://doi.org/10.1080/713691896>.

Stiftel, B., Demerutis, J., Frank, A.I., Harper, T., Kweku Baah Inkoom, D., Lee, L-M., Lima, J.J., Memon, A., Milstead, T., Mironowicz, I., Nnkya, T., Paris, D., Silver, C., & Sipe, N.G. (2009). Chapter 10: Planning Education, in: UN-Habitat, Planning Sustainable Cities: Global Report on Human Settlements 2009 (London: Earthscan), pp. 185-198.

Stiftel, B. (2021). Planners and the New Urban Agenda: will we lead the Agenda, or will the Agenda lead us? Town Planning Review, 92(4), pp. 421-441. <https://doi.org/10.3828/tpr.2021.13>.

UN-Habitat (2016a). Habitat III - New Urban Agenda. Quito Declaration on Sustainable Cities and Human Settlements for All (Quito: UN-Habitat).

UN-Habitat (2016b). A city that plans: reinventing urban planning, in: World Cities Report 2016: urbanization and development. Emerging futures (Nairobi: UN- Habitat), pp. 121-140.

Wildavsky, A. (1973). If planning is everything, maybe it's nothing. Policy Sciences, 4, pp. 127-153. <https://doi.org/10.1007/BF01405729>.

84088

## Outside the ivory tower: the role and the impacts of service-learning in urban studies education, research and university third mission

Francesca Bragaglia, Rossignolo Cristiana

In recent years, the social role of universities has been increasingly discussed. This is not only at the core of a significant part of the so-called university third mission, but it is also central to many research methodologies claiming that academia has to 'give something back' to communities. Moreover, bringing universities closer to communities is also paramount to prepare graduates with the uncertainties and the complexities of the contemporary scenario and develop their ethical responsibility and professional identity. This is even more important for academic institutions involved in education and research in the field of spatial planning, as the confrontation with the 'real world' and its challenges is imperative.

This research intends to investigate service-learning as a promising methodological and theoretical teaching approach in planning. As some authors have acknowledged, research and teaching are often seen as two separate parts of the academic dimension, whereas service-learning allows these two dimensions to be united (Colbeck, 1998; Pain, 2009; Grabbatin and Fickey, 2012). Furthermore, it connects teaching with research and action by crossing university-community boundaries (Butin, 2010). The case study used to investigate the role and impacts of service-learning in responding simultaneously to an improvement in academia's teaching, research, and social action is that of the AuroraLAB project in Turin (Italy), which the authors of the paper follow at first hand since its start in 2018. It is an action-research project focused on urban regeneration in the Aurora neighbourhood, a vulnerable area filled with latent resources. In doing so, AuroraLAB involves several students and researchers from the Interuniversity Department of Regional and Urban Studies and Planning of the Politecnico di Torino and the University of Turin in a joint effort to do research and teaching outside the traditional 'ivory tower' of academia.

Politecnico di Torino

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Keywords: planning education; service-learning; third mission; action-research

#### References

Butin, D. (2010). *Service-learning in theory and practice: The future of community engagement in higher education*. Springer.

Colbeck, C. L. (1998). Merging in a seamless blend: How faculty integrate teaching and research. *The journal of higher education*, 69(6), 647-671.

Grabbatin, B., and Fickey, A. (2012). Service-learning: Critical traditions and geographic pedagogy. *Journal of Geography*, 111(6), 254-260.

Pain, R. 2009. Commentary: Working across distant spaces: Connecting participatory action research and teaching. *Journal of Geography in Higher Education* 33 (1): 81–87.

84916

## Towards an Atlas of Italian school infrastructure. Educational networks, proximity, and urbanity in low-density territories

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The paper presents the results of an ongoing nationally funded research program on Italian education infrastructure, seen as a driver for territorial regeneration and local (educational) development. The research focuses on low-density and polycentric urbanizations, characterized by small and medium-sized urban settlements, where 64% of Italy's population lives. During the last thirty years, these territories have been often overlooked from the national political agenda, and they suffered incremental polarization processes on social, health, and school services systems.

The paper stems from two primary considerations and two main hypotheses. The first consideration is that schools represent a diffuse infrastructure that punctuates Italian territories in a pervasive way, albeit showing a plurality of spatial conditions and local specificities. As far as the relationship between schools and their surroundings is concerned, these contexts pose different issues about proximity, which are strictly connected, among the others, to school size, accessibility, educational offer, and the identification of an enlarged educational community. The second consideration is that available data on school infrastructure and educational networks are widely fragmented and only partially spatialized.

The two main hypotheses propose looking at the Italian school system from a theoretical and an operative perspective. The first one considers schools a crucial resource for social cohesion and inclusion in different territorial contexts, where local educational landscape suffers from poverty in cultural services provision: here, schools provide a social and civic corner-stone for a vast territory. The second hypothesis regards the urban role of school infrastructures in a more comprehensive and strategical vision: educational infrastructure can serve as a tool to forge new notions of urbanity, especially in low-density urbanization patterns.

A series of original cartographies and datasets will provide evidence of the Italian multi-level educational infrastructure, articulated in school buildings and institutional networks, education facilities, and their territorial connections (actual and potential). The maps will offer a comparative analysis, interweaving national, regional, and local scales. As a part of a wider atlas, they will support a deeper and territorial-based discussion on the urban role of schools, dealing with the strengthening the relationship between schools and territories and addressing the concept of proximity.

Keywords: educational infrastructure, schools, proximity, low-density urbanization, territorial regeneration, data mapping

## References

Foundational Economy Collective (2018), *Foundational Economy: The Infrastructure of Everyday Life*, Manchester, Manchester University Press.

Jahnke H., Kramer C., Meusbürger P., eds. (2019), *Geographies of Schooling*, Cham, Springer.

Klinenberg E. (2018), *Palaces for the people. How infrastructure can help fight inequality, polarization, and the decline of civic life*, New York, Crown.

Million A., Heinrich. A.J, Coelen T., eds. (2017), *Education, Space and Urban Planning. Education as a Component of the City*, Cham, Springer

Renzoni C., Savoldi P. (2019), "Starting from schools: urban spaces of transition and learning", *Urbanistica*, n° 163, pp. 140- 147.

Symaco L.P., Brock C., eds. (2016), *Space, place and scale in the study of education*, Routledge, London.

85038

## Roundtable: A systems view of social learning in planning - is all learning desirable?

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Planning is an inherently collaborative process in which differing knowledges and potentially conflicting values emerge and change over time. Much learning in the context of planning unfolds in the interactions of multiple actors who are bound by various institutional and relational roles. Thus, the nature of learning in planning is inherently social, and challenged by the networked and dynamic multi-level settings in which much of the needed knowledges are found outside of the planning organizations themselves.

The planning discipline has a long tradition of studying the collaborative context of planning practice, as well as knowledge and learning in this context. However, discussion of the social nature of learning and its systemic context have received less attention. To initiate discussion of a systems view of social learning dynamics in planning, this roundtable invites discussants on the potentials of transdisciplinary perspectives of social learning: How can other fields (e.g., psychology, philosophy, complexity theory, organizational studies) support the understanding of a systemic view of social learning in planning? What are the factors affecting social learning, and what are its possible societal impacts over time? Between whom is social learning in planning taking place, and whose views are conceptualized in planning processes? How are the systemic interrelations between various views formed, and how do they influence each other? And, finally, how is this affecting inclusion and spatial justice in planning?

Based on these themes, the roundtable aims to promote interdisciplinary understanding by critically reflecting on how social learning can lead to both justice and injustice, and how such a dilemma can be transcended. To discuss the topic, the roundtable synthesizes the above themes into three poignant, practice-oriented questions for discussion: Is any kind of social learning desirable? What kind of an impact should a planner have on the learning process? And (when, how and with whom) should social learning be deliberately encouraged in planning?

Keywords: social learning, planning practice, spatial justice

85216

## Towards inquiry-based learning in spatial development: a workshop at Corviale, Rome

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Under the pressure of subsequent crises, the focus on the co-evolutionary dimension of urban and architectural spaces has become a crucial component to address the multiple regimes of the city's uncertainty and complexity. When dealing with (cultural) heritage assets, temporal factors become particularly important. Over time, the changing of meanings, (re)uses, values reflect the complexity of "situated contingencies", underlining the urgency of an adaptive approach to heritage planning and management. Furthermore, the multi-perspectiveness of diverse actors are increasingly relevant at the intersection between heritage conservation and urban planning. For this process to develop, being embedded with the transforming site has been increasingly emerging as prerequisite to conduct more fair and collaborative process of development. However, in planning and architecture schools, educational activities have still rare opportunities to be conducted on site.

Moving from a joint collaboration between Roma Tre University (Rome) and Humboldt University (Berlin), the paper presents some reflections on the potential of community-based and inquiry-based learning in the context of citizens' science. The hypothesis of this contribution is that educational programs for architecture, planning, and conservation could significantly benefit of "real-life" or "immersive" approaches to the territory. Going beyond specific set of tools, and relying on students' independence, novelty values, and on the wholeness of the process, this approach presents fruitful didactic principles to cope with both urban unpredictability and interrelatedness.

By reflecting on and systemizing the results of a workshop held between September and November 2021 in Venice and Rome, and particularly in the well-known housing complex, the Corviale, first evidences show that educational activities which stem from clear research questions and "embedded" ways of learning offer remarkable opportunities for students as much as teachers, increasing their ability to navigate into fragile presents and futures.

Keywords: cultural heritage; inquiry-based learning; spatial planning; community-based learning; citizens' science

### References

Erek, A. et al. (eds), Heritage requires citizens' knowledge: The COST place-making action and responsible research, in: H.A. Mieg (eds) The responsibility of science. Cham: Springer.

Forthcoming (2022).

Mieg, H.A. (eds) (2019) *Inquiry-Based Learning – Undergraduate Research: The German Multidisciplinary Experience*. Springer.

Rodney Harrison et al. (eds) (2020) *Heritage Futures: Comparative Approaches to Natural and Cultural Heritage Practices*. London: UCL Press.

Stegmeijer, E. and Veldpaus, L. (eds) (2021) *A Research Agenda for Heritage Planning: Perspectives from Europe*. Cheltenham; Northampton: Edward Elgar Publishing.

van Knippenberg, K., Boonstra, B. and Boelens, L. (2021) 'Communities, Heritage and Planning: Towards a Co-Evolutionary Heritage Approach', *Planning Theory & Practice*, 0(0), pp. 1–17. doi:10.1080/14649357.2021.1998584.

85169

## Student-led learning through serious board games

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Serious games are useful in creating immersive environments where students can explore ideas and concepts, further their knowledge and expertise in a topic, and test their ideas in set scenarios. Their use in teaching has been identified in various countries and contexts as supporting student learning. Serious games are games that have more than entertainment value and can explore aims such as learning, reflection, as well as preparing players for future roles in their careers (Abt, 1970; Ampatzidou et al., 2018; Flood et al., 2018). However, these are often games that have been developed by educators and experts which are then applied to students in a formal environment. The game is often already designed and developed with students then ‘playing’ their role.

This presentation focuses on a novel and creative approach that flips the use of serious gaming in teaching. This approach sees MSc students develop their own games on the subject topic, pilot them, iteratively develop them, and then play them with academics and students. Students play an active role and lead the construction and development of their game. Furthermore, students are tasked with developing aims for their games based on the academic literature. They develop a strategy to evaluate their game in achieving its aims by selecting appropriate data collection approaches. This approach is applied to a module teaching flood adaptation and mitigation. This module sits within the wider flood resilience paradigm shift that recognises the importance of spatial planning in managing flooding (Forrest, Trelle and Woltjer, 2019).

The presentation explores challenges of recognising this in formal module assessment, developing important ‘soft’ skills of facilitation and teamworking, and of support students’ critical reflection and iterative development of their work. This creative teaching approach using serious gaming led to immersive environments being created by the students who were able to shape them, iteratively redevelop them and their independent research skills in a format that was done both in the classroom (2021/22) and online (2020/21).

Keywords: Flooding; Education; Serious Games; Spatial Planning

### References

Abt, C. C. (1970) *Serious Games*. New York: Viking. doi: 10.1177/000276427001400113.

Ampatzidou, C. et al. (2018) ‘All work and no play? Facilitating serious games and gamified applications in participatory urban planning and governance’, *Urban Planning*, 3(1), pp. 34–46. doi: 10.17645/up.v3i1.1261.

Flood, S. et al. (2018) ‘Adaptive and interactive climate futures: systematic review of “serious

games” for engagement and decision-making’, *Environmental Research Letters*, 13(6), pp. 1–20. doi: 10.1088/1748-9326/aac1c6.

Forrest, S., Trelle, E. M. and Woltjer, J. (2019) ‘Civil society contributions to local level flood resilience: Before, during and after the 2015 Boxing Day floods in the Upper Calder Valley’, *Transactions of the Institute of British Geographers*, 44(2), pp. 422–436. doi: 10.1111/tran.12279.

84048

## “You can imagine it a bit like a Bazaar”: How organisational practices shape primary school segregation

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School segregation is closely linked to residential segregation and is thus a central planning policy issue. Studies have demonstrated that school segregation is often even higher than that of neighbourhoods (Boterman et al. 2019; Wilson/Bridge 2019). As a result, the potential of schools as places of encounter for students and parents from different economic or ethnic backgrounds is increasingly being called into question. In order to tackle school segregation, it is important to know more about the different factors influencing school segregation. Various studies point to parental school choice shaping school composition (e.g. Ramos Lobato 2019), while organisational routines and practices are less explored (Karakayalı 2018). Therefore, our paper focuses on the role of school principals as well as municipal stakeholders and their guiding principles in dealing with segregation, their different routines and local practices.

The proposed presentation is based on a mixed-methods research on school segregation in the German city Dusseldorf. While the chosen case-study neighbourhood is economically and ethnically mixed, the five schools located in the neighbourhood are characterized by (varying degrees of) segregation. The empirical study consists of a qualitative and quantitative research including parents from all five schools, as well as interviews with different school experts. The study explores the ways in which guiding principles and organisational practices (such as the admission process or decisions to increase/decrease the capacities of certain schools) regulate different social groups' access to primary schools. The findings show that educational institutions have substantial discretion in shaping the school's social composition, for example by applying school specific selection criteria as well as through their communication strategies and public self-portrayal. At the same time, there is a lack of shared understanding on how to deal with school segregation. The current organisational strategies and practices tend to focus on individual school application numbers while neglecting cross-school perspectives that encompass the neighbourhood's entire educational infrastructure. Thus, school segregation is perpetuated rather than mitigated.

Keywords: educational infrastructure, primary schools, segregation, access to education, organisational practices

References

Boterman WR (2019) The role of geography in school segregation in the free parental choice context of Dutch cities. *Urban Studies* 56(15): 3074–3094.

Karakayalı J (2018) (K)eine Frage der Wahl: Segregation und Grundschule in der Perspektive des institutionellen Rassismus. *Migration und Soziale Arbeit* 2/2018: 131–138.

Ramos Lobato I (2019) Free primary school choice, parental networks, and their impact on educational strategies and segregation. Dissertation.

Wilson D & Bridge G (2019) School choice and the city: Geographies of allocation and segregation. *Urban Studies* 56(15): 3198–3215.

85224

## Coping with the unknown future in planning education. Didactic possibilities for utilizing scenario thinking.

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The rise of statistical and geo-referenced data systems and related surveys have provided planners with an abundance of information, but at the same time this development has narrowed our view on knowledge (e.g. Davoudi, 2012; Flyvbjerg, 2004). However, in planning, the hegemony of such evidence-based knowledge is problematic, as planning is largely about coping with the yet unknown future; that of which we cannot have evidence. Myers&Kitsuse (2000) argue, that planners ought to encourage and give shape to alternative viewpoints on the future. According to Albrechts (2005), planning needs creativity to imagine and construct (structurally) different futures.

This paper discusses didactic possibilities to encourage the development of capabilities that enable students as well as planning professionals to imagine, create and critically judge a variety of futures. More precisely it is concentrating on a future methodology of scenario thinking, discussing its history, typologies and relationship with strategic spatial planning. Didactic possibilities of applying scenario thinking, such as intuitive logics' methodology, are reviewed by the example of studio courses and workshops held in Finland and Estonia from 2016 to 2022, concentrating on a variety of spatial issues and scales as well as directed at different professions (planning, architecture, urban studies, and landscape architecture). These experiences from higher education are then compared with the case of scenario thinking used in continued further education in the context of drafting the future chapter of Estonian Human Development reports of 2019 and 2021 (Grišakov, 2020).

The aim of the paper is to start a discussion over the possibilities of utilizing scenario thinking when educating both young and more experienced planning professionals, as scenario methodologies have been rarely adapted to the specific use of (spatial) planning profession. The paper argues that the capability to explore various scenarios without prior judgment is a key benefit that scenario thinking can offer to strategic urban planning and planning education. In the format of rhetorically strong stories (both verbally and visually), the scenarios, as a medium, can be easily accessible beyond disciplinary and cultural boundaries, inviting broad political dialogue. Thus, they have potential for widening perspectives, revealing mutual interdependencies, and generating joint momentum towards an envisioned future.

Keywords: knowledge, scenarios, evidence, uncertainty, strategic spatial planning

### References

Albrechts, L. (2005). Creativity as a drive for change. *Planning Theory*, 4(3), 247-269.  
doi:10.1177/1473095205058496

- Myers, D. & Kitsuse, A. Constructing the Future in Planning: A Survey of Theories and Tools. *Journal of Planning Education and Research* 19(3), 221-231.
- Davoudi, S. (2012). The legacy of positivism and the emergence of interpretive tradition in spatial planning. *Regional Studies*, 46(4), 429-441. doi:10.1080/00343404.2011.618120
- Flyvbjerg, B. (2004). Phronetic planning research: Theoretical and methodological reflections. *Planning Theory and Practice*, 5(3), 283-306.
- Grišakov, K. (2020). Eesti Elukeskkond aastal 2050. Sooväli-Sepping, H. (Toim.). Eesti inimarengu aruanne: Linnastunud ühiskonna ruumilised valikud/ Estonian Human Development Report: Spatial Choices for an Urbanised Society (252–267). SA Eesti Koostöö Kogu.

85343

## Distance Education during the Pandemic: Experiences from Urban Design and Planning Studio Courses in Greek Universities

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The outbreak of the COVID-19 pandemic and the lockdown measures implemented in March 2020 instigated unprecedented changes in teaching and learning, as educators around the globe had only days to move their classes online. Amidst the technical difficulties, for everyone involved in higher education, this transition also provoked heightened personal reflection on and peer-to-peer discussion about teaching, related both to content and to methodology. From the individual to the institutional level, rethinking about these past experiences is invaluable in order to figure out what was learnt and how to move forward, in the personal and in the institutional level, as part of reflective practice.

The ubiquitous and indeed universal transition to remote teaching has been by no means a uniform experience for individuals or for institutions around the world. Significant differences have emerged, depending on geography, personal life conditions, and academic discipline. Teachers of disciplines that require hands-on learning had much greater difficulties to achieve their objectives than theoretical ones. Even within the same discipline, theoretical subjects, usually delivered in lecture halls, were far easier to move online than practical or laboratory-based ones. That is the case of planning education, too. Planning is space-based and requires real-life experience, and existing virtual teaching platforms can hardly re-create the studio atmosphere.

This paper focuses on how instructors of urban design and planning studios, in particular, adjusted their courses to remote delivery, on top of necessary adjustments common to all university teachers. An empirical study in Greek universities was conducted, via surveys and interviews, on how instructors and students assess the online teaching experience. Findings are organized in three rubrics. The first, Resilience, sums up the research results on coping strategies: how teachers adapted their courses to overcome the challenges and reach the learning objectives of their courses. The second rubric, Interaction, delves into the issues of communication and interpersonal relationships, and how online teaching affected both. Finally, in Surprises, the unexpected outcomes from remote teaching are presented, of which some could be carried post-pandemic. Should a hybrid form of university teaching continue –as it seems highly probable– it is imperative for urban design and planning pedagogy to safeguard design studio courses as problem-based and related to current challenges, through maintaining the direct exposure of students to physical space and incorporating active learning experiences.

Keywords: Distance education; COVID-19 pandemic; Urban Design & Planning; Studio Courses; Greece

## References

- Lawhon, Larry Lloyd. 2003. "Do Distance Learning Efforts in Urban Planning Education Cut Short the Educational Experience?" *Journal of Planning Education and Research* 23 (2): 202–5. <https://doi.org/10.1177/0739456X03258949>.
- Milovanović, Aleksandra, Miloš Kostić, Ana Zorić, Aleksandra Dordević, Mladen Pešić, Jovana Bugarski, Dejan Todorović, Neda Sokolović, and Andrej Josifovski. 2020. "Transferring COVID-19 Challenges into Learning Potentials: Online Workshops in Architectural Education." *Sustainability (Switzerland)* 12 (17). <https://doi.org/10.3390/su12177024>.
- Mironowicz, Izabela, Stefan Netsch, and Anna Geppert. 2021. "Space and Spatial Practices in Times of Confinement. Evidence from Three European Countries: Austria, France and Poland." *URBAN DESIGN International*, March. <https://doi.org/10.1057/s41289-021-00158-6>.
- Mironowicz, Izabela, and Martina Schretzenmayr. 2020. "Is This Distance Teaching Planning That Bad?" *DISP* 56 (4): 107–21. <https://doi.org/10.1080/02513625.2020.1906064>.
- Miyagawa, Shigeru, and Meghan Perdue. 2021. "A Survey of Faculty on the Way the Pandemic Has Permanently Transformed Teaching (Opinion)." *Chronicle of Higher Education*. June 9, 2021. <https://www.insidehighered.com/advice/2021/06/09/survey-faculty-way-pandemic-has-permanently-transformed-teaching-opinion>.
- Rooij, Remon, Kristel Aalbers, Birgit Hausleitner, Caroline Newton, and Roberto Rocco. 2020. "Education for the Resilient City – Teaching and Learning Urban Design and Planning in Covid-19 Times." *Proceedings of the Institution of Civil Engineers - Urban Design and Planning* 173 (4). <https://doi.org/10.1680/jurdp.20.00052>.
- Sadler, Simon, Patricia Morton, Richard J. Williams, Fred Scharmen, Clare Lyster, Marshall Brown, Jeffrey Hou, et al. 2020. "Field Notes on Pandemic Teaching: 2." *Places Journal*, no. 2020 (April). <https://doi.org/10.22269/200415>.

84528

## A Collaborative Teaching and Learning Experience between Germany & Turkey: Hybrid Learning for Participatory Processes in Urban Development

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In a globally connected world, intercultural, transdisciplinary and digital working skills present themselves as the key competencies for urban planners. Accordingly, the teaching approaches in urban planning adopt digital methods and collaborative, diversity-sensitive, transdisciplinary principles of teaching and learning.

Authors of this paper aim to discuss challenges and potentials of virtual international collaborations based on their experiences in a series of joint hybrid courses conducted since February 2021.

At the beginning of 2021 Faculty of Architecture, Urban Planning and Landscape Planning at the University of Kassel and Faculty of Architecture at the Mersin University entered into an academic cooperation aiming to offer joint courses as well as academic and technical exchange. Since the beginning, the pandemic crisis forced both lecturers and students to expand their capabilities in the fields of digital learning and working. Despite some challenges the first joint virtual course revealed that using digital learning tools holds a real opportunity to conduct international virtual collaborations. Therefore, lectures from both universities explore further teaching methods and continue and strengthen their international virtual collaboration under the DAAD German Academic Exchange Program called IVAC - International Virtual Academic Collaboration.

Two consecutive courses with a focus on participatory processes in urban development handle theoretical aspects of participatory planning and offer a practical application in the case of Çiğli, İzmir in Turkey. The courses are organized to include different digital learning tools. The didactic approach promotes interactive and application-oriented learning. Students analyze different perspectives by various stakeholders in planning processes and explore digital tools for collaboration and communication among them. They will be equipped with intercultural, interdisciplinary and digital competencies and capabilities in elaborating planning solutions for sustainable, inclusive and socio-spatially equitable urban development. Parallel to the courses, hybrid teaching and learning experiences are documented and evaluated. This paper discusses these results and opens up a discussion within the community of practice of planners and academics. These discussions would contribute to the future of virtual collaboration in urban planning education.

Keywords: Virtual collaboration, digital learning, participatory processes

#### References

- Batty, M., (2021), “Planning Education in the Digital Age”, *Environment and Planning B: Urban Analytics and City Science*, 207-211.
- Evans-Cowley J.S., (2018), “Planning Education with and Through Technologies”. In: Frank A., Silver C. (eds) *Urban Planning Education. The Urban Book Series*. Springer, Cham.
- Mironowicz, I. and Schretzenmayr, M., (2021), “Is This Distance Teaching Planning That Bad?”, *disP - The Planning Review*, 56(4): 107-121.
- Rooij, R., Aalbers, K., Hausleitner, B., Newton, C. and Rocco, R., (2020), “Education for the resilient city – teaching and learning urban design and planning in Covid-19 times”, *Proceedings of the Institution of Civil Engineers – Urban Design and Planning* 173(4): 119–124.
- Wallin, S., Horelli, L., Saad-Sulonen, J., (2010), *Digital Tools in Participatory Planning*, Centre for Urban and Regional Studies Publications, Espoo, Finland.

85234

## On the Multiple Senses of Ludic Urban Spaces

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Play is an important but largely neglected part of both everyday practices and pedagogies. In the conventional sense, play is considered “unfunctional” and economically inefficient in terms of time and energy expenditures. Playful behaviours hence are often excluded from the designed spaces and educational programs. However, playful practices can potentially express needs, desires and tensions that are often masked by the obsession to order, fixity, determinism and rational decision-making. Play can be as creative and critical as the participation, challenge and negotiation with established plans and systems. In pedagogy, playful behaviours have long been considered crucial in early education but are still understudied at higher or professional levels. However, one could argue that for design-based disciplines such as architecture and urban studies, the integration of playfulness associated with creativity, openness and critical thinking would benefit the educational programmes.

On the ongoing Digital Turn, playful behaviours have been extended beyond physical spaces. The boundaries between playing in physical and digital worlds have been increasingly blurred with ever-updating social media and state-of-the-art VR/AR technologies. Compelled by COVID-19, contemporary urban pedagogies have begun to embrace online learning at large and inevitably will continue to be influenced by it. As such, it is urgent to bring the discourse of playful practices in and for everyday urban life in contact with urban pedagogies while attempting to grasp the changes in the digital sense-making of urban spaces without neglecting the complexity of urban life itself. To do so, it is necessary to adopt a transdisciplinary approach that resonates with both assemblage thinking and critical urbanism. Embracing assemblage theory, this article focuses on the playful behaviours in physical and digital urban spaces in converging, adapting, and contesting the as-built and as-planned urban spaces while speculating on the future of urban life. Ranging from deviant playful practices in everyday urban spaces to memes on social media that promote critical thinking and other practices of gamification that enhance forms of communal engagement, this article aims to shed light on the role of playfulness in the digital sense-making of the urban while exploring its role in future design pedagogies.

Keywords: playfulness, urban pedagogy, digital age, everyday life, assemblage thinking, transdisciplinarity

### References

- [1] BRAIDOTTI, R. 2013. *The posthuman*, Cambridge, UK ; Malden, MA, USA, Polity Press.
- [2] CERTEAU, M. D. 1984. *The practice of everyday life*, Berkeley, University of California

Press.

[3] GALLOWAY, A. R. 2004. Playing the code-Allegories of control in Civilization. *Radical Philosophy*, 128, 33-40.

[4] MASNÝ, D. 2013. Multiple Literacies Theory: Exploring Spaces. In: MASNÝ, D. & SEMETSKY, I. (eds.) *Deleuze and Education*. Edinburgh University Press.

[5] MCFARLANE, C. 2011. Assemblage and critical urbanism. *City*, 15, 204-224.

[6] PETERS, B. 2016. *Digital keywords: a vocabulary of information society and culture*, Princeton, Princeton University Press.

[7] STEVENS, Q. 2007. *The Ludic city : exploring the potential of public spaces*, London ; New York, Routledge, Taylor & Francis.

84254

## Degree Apprenticeships - a new pathway in spatial planning education

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Learning in and from practice in educating students in the field of spatial planning has been a traditional element in many degree programmes over the decades. The standing of the element of work-based learning has varied in length (from 4-6 weeks to a full year in practice) and whether it is a core part of the degree programme, optional or even extracurricular. Scholarly debate has emphasized the added value of work-based, experiential learning for budding planners complementing academic theoretical knowledge acquisition (Brooks et al 2002; Freestone et al 2006; Rosier 1999; Baldwin and Rosier 2017) although some have also warned of the pitfalls of work-based learning in Higher Education programmes (Friedmann, 1996).

This paper critically examines initial experiences from a new education pathway – the Chartered Town Planner Degree Apprenticeship – to educate spatial planners which commenced at selected English planning schools in 2019/2020. In contrast to more conventional part-time study programme - this scheme has universities and employers form a partnership and support apprentices to work and study at the same time. A key component of the apprenticeship is a requirement for 20% off-the-job learning which includes academic study. This pathway leads to a professionally accredited degree and Chartership of the national professional body (Royal Town Planning Institute) in 3-4 years. This innovative structure raises critical questions about the theory-practice balance in professional education.

As our first cohort moves into the final stages of the scheme we will present views from participating students, employers and education providers comparing professional and personal development of candidates to those on other pathways. We ask amongst other things what are potential implications on inclusivity and access to the profession, what are the synergies and opportunities presented by work-based and experiential learning, and how are critical capacities managed and requirements of the pathway adhered to?

Keywords: Planning Education, Degree Apprenticeship, reflection, inclusivity, practice-led, work-integrated learning

### References

Baldwin, C. and Rosier, J (2017) Growing Future Planners: A Framework for integrating experiential learning into tertiary planning programs. *Journal of Planning Education and Research* 37 (1): 43-55.

Brooks, K. R., Nocks, B.C., Farris, J.T and Cunningham, M.G (2002). Teaching for practice:

Implementing a process to integrate work experience in an MCRP curriculum. *Journal of Planning Education and Research* 22 (2): 188-200.

Freestone, R., Thompson, S., Williams, P. (2006) Student experience of Work-based Learning in Planning Education. *Journal of Planning Education and Research* 26(2): 237-249.

Friedmann, J. (1996) The Core Curriculum in Planning Revisited. *Journal of Planning Education and Research* 15(2): 89-104.

Rosier, D.J.,. (1999). The three-year undergraduate planning program and . . . practice! practice! practice! *Australian Planner* 36 (3): 142-45.

84492

## Are Urban Planning Schools in the Global South Prepared for Current Challenges of Climate Change and Disaster Risks?

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This presentation undertakes an analysis of current urban planning programs at universities with a focus on sub-Saharan English-speaking African (SSA) and Southeast Asian countries (SEA) as comparison cases. The aim is to identify, as an important part of sustainability, the existence and share of climate change and disaster related courses in the curricula, and to understand to what extent these topics are already integrated into current urban planning programs at the university level and thus shape the knowledge and skills of future urban planners.

The local academic and professional environments in which the programs are based are taken into account by a review of the historical development of the programs. The analysis in mid-2020 took only those universities and programs into account that have curricula and course titles available online. The data were analysed both quantitatively and qualitatively. The second part of the research deals with the discussion of how these courses can be best integrated into the existing curricula and thus serve the adequate education of urban planners by providing some concrete ideas.

Keywords: higher urban planning education; curricula development; climate change; disaster risks; Sub-Saharan Africa; Southeast Asia

### References

Scholz, W.; Stober, T.; Sassen, H. Are Urban Planning Schools in the Global South Prepared for Current Challenges of Climate Change and Disaster Risks?. *Sustainability* 2021, 13, 1064. <https://doi.org/10.3390/su13031064>

Preston-Jones, A. The Importance of Climate Change Education in Urban Planning: A Review of Planning Courses at UK Universities. In *Climate Change, Hazards and Adaptation Options, Climate Change Management*; Leal Filho, W., Nagy, G., Borga, M., Chávez Muñoz, P., Magnuszewski, A., Eds.; Springer: Cham, Switzerland, 2020.

Greiving, S. Disaster response and spatial planning—Key challenges and strategies. In *Spatial Planning and Resilience Following Disasters. International and Comparative Perspectives*; Greiving, S., Ubaura, M., Tešliar, J., Eds.; Policy Press: Bristol, UK; Chicago, IL, USA, 2016; pp. 1–16.

Birkmann, J.; McMillan, J. *Spatial Planning & Climate Change Adaptation. A Guide for Spatial Planners in Thailand*; Routledge: New York, NY, USA, 2019.

Odendaal, N. Reality check: Planning education in the African urban century. *J. Cities* 2012, 29, 174–182.

Watson, V. The Case for a Southern Perspective in Planning Theory. *Int. J. E-Plan. Res.* 2016, 3, 23–37.

84450

## Parents' perceptions of residential segregation within the school district in Suzhou, China

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Recently, a growing number of studies have attempted to explain the negative effects of segregated neighbourhoods and schools on students' cognitive outcomes, non-cognitive abilities and psychological well-being through a lens of neighbourhood effects and peer effects (O'Sullivan, 2009; Seaton & Yip, 2009; Wang, 2020). Students demonstrated low educational achievements, lower satisfaction and place attachment due to the environment of segregation. These are critical in children's cognitive development at their young age. Meanwhile, it is found that segregation by race and income among households with school-age children is about 20% higher than the households without children in the US (Owens, 2017; Owens, 2020). The underlying reasons are that parents with children have stronger preferences and perceptions concerning schools than childless families when making a residential choice. These factors interact with various parents' socio-economic backgrounds to exacerbate segregation in cities, especially between the hukous and non-hukous.

While prior research found a consistent relationship between residential segregation, perception, and educational outcomes, respectively, the role of both school and neighbourhood context is not clear. Parents who determine the children's schools and living locations are necessary to explore their perception of segregation and its effects on their intention to move. Thus, this study aims to examine how school segregation and neighbourhood segregation influence the parents' perceptions and to explore whether the school and neighbourhood segregation level moderate the relationship between parents' perception of segregation and intention to move or stay. We argue that the perception of school and neighbourhood segregation is highly correlated with intention to move, deepen or alleviate residential segregation in the future.

To address the research aims, this study conducts a survey to explore the four types of parents living in different residential segregated school districts and analyze the effects of segregation on parents' perception of schools and neighbourhood through place attachment, sense of community, social network, and satisfaction. Focusing on Suzhou as a study area, we apply the multi-level multinomial regression model and the interaction term for perception with the school/neighbourhood segregation level when comparing different groups of families. Our findings will benefit policymakers concerned about social inequality and mobility.

Keywords: China, parents' perception, school and neighborhood segregation

### References

Ann Owens. (2017). Racial Residential Segregation of School-Age Children and Adults: The Role of Schooling as a Segregating Force. RSF: The Russell Sage Foundation Journal of the

Social Sciences, 3(2), 63–80.

Ann Owens. (2020). Segregation by Household Composition and Income across Multiple Spatial Scales. Handbook on Urban Segregation, edited by Sako Musterd. Cheltenham, UK: Edward

Liu, Lin & Huang, Youqin & Zhang, Wenhong. (2017). Residential segregation and perceptions of social integration in Shanghai, China. Urban Studies.

Seaton, E. K., & Yip, T. (2009). School and neighborhood contexts, perceptions of racial discrimination, and psychological well-being among African American adolescents. Journal of youth and adolescence, 38(2), 153-163.

O'sullivan, A. (2009). Urban economics (Vol. 7). Chicago: Irwin. Chapter 8: neighborhood choice.

Wang, Junpeng. (2020). A Study on Residential Segregation in the Context of Urban Regeneration: Based on the Perspective of Social Mobility. Published by Wuhan University. 王军鹏 (2020) 城市更新背景下的居住隔离问题研究——基于社会流动的视角. 武汉大学出版社.

85294

## Learning by playing games: involving and educating the younger inhabitants to the awareness and imagination of the city

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The difficulty of inhabiting the contemporary cities defines boundaries and impacts especially on the weaker sections of the population, of which children have the least strong decision-making and communicative power. Finding effective methodologies of involvement is important to educate the inhabitants from the earliest autonomous understanding and experimentation of the city, to build a deep-rooted sense of respect and awareness towards the commons. It is also a fundamental requirement to adapt top-down projects to truly inclusive models for the needs of all inhabitants.

The proposal reflects on the role of playing games to involve and educate the younger inhabitants in the awareness of the urban space. Starting from the experience with IMMOI collective, the research refers to the processes of investigation and education about the design of urban spaces and possible uses of abandoned spaces, involving children between 6 and 12 years old.

Therefore, different games were designed starting from innovative pedagogical methods and trying different approaches depending on the age and the learning mechanisms of the children involved.

The methodologies have been tested with groups of children of three intermediate cities of southern Italy, inside schools, libraries and underused public spaces. The scale of these towns makes them meaningful for research since they present poor urbanity and peculiar social dynamics, which are produced by the “in-between” condition that weakens the cultural and intergenerational relations.

Educating children to the right to the city is a fundamental asset to improve public space and playing is an effective method to imagine the city.

Keywords: learning, playing, schools, southern Italy, urban space, temporary use

### References

- Dewey J. (1963) *Esperienza ed educazione*. (ed. or 1938) *Experience and Education*. Firenze : La nuova Italia
- Lefavre L., De Roode I. (2002) *Aldo van Eyck: the playgrounds and the city*. Amsterdam: Stedelijk Museum
- Lefebvre H. (1970) *Il diritto alla città*. (ed. or. 1968) *Le droit à la ville*. Venezia: Marsilio Editori
- Lynch K. (2006) *L'immagine della città*. (ed. or. 1960) *The image of the city*. Venezia: Marsilio Editori
- Munari B. (2017) *Fantasia*. Laterza Bari: Laterza

Rodari G. (1973). *Grammatica della fantasia*. Torino: Einaudi Editore  
Ward C. (1978) *The child and the city*. New York: Pantheon Books

85326

## SHEDDING LIGHT ON THE COMPETENCE AND LIMITATIONS OF CITY AND REGIONAL PLANNING EDUCATION IN TURKEY

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Urban planning has been brought to the agenda of Turkey with modernization. Still, it continues to be affected by not only the developments in the field of industry and technology in the world but also various paradigms in the field. Over time, urban planning has been institutionalized and related legislations have been made. These actions resulted in the transformation of the settlements. Planning in Turkey has been formed by processes such as rapid urbanization, industrialization, and migration. At the beginning of the 1960s, city and regional planning became a major and later specialized into various subfields such as city planning, regional planning, urban design, urban policy, urban conservation planning. However, currently, planning education in Turkey faces some bottlenecks that are mainly related to the policies of the Council of Higher Education in Turkey, leading to an enormous increase of university programs and student quotas (SPO, 2019). Accordingly, city and regional planning programs with inadequate infrastructure (i.e. staff, physical conditions) increase unemployment and damage the respectability of the discipline (TUPOB, 2011). On this basis, this research aims to discuss the competence and limitations of city and regional planning education in Turkey in the context of meeting global and local requirements. The first part of the research contains compiles of undergraduate planning curricula from the world compared to Turkey in the light of theoretical developments. In the second part, results of in-depth interviews conducted with planners actively working in the specialized subfields are presented in order to explore the competence and limitations of planning education. In the conclusion part, some policy recommendations for city and regional planning education in Turkey are proposed in the light of the theoretical development, curricula examples from the world, and the interviews conducted throughout this research.

Keywords: planning education, planning curricula, Turkey, specialization, planning skills, education policy

### References

1. SPO (Union of Chambers of Turkish Engineers and Architects Chamber of City Planners). 2019. Şehir ve Bölge Planlama Bölümlerinde İstihdam, Akademik Kadro, Öğrenci Kapasiteleri, Fiziki Altyapı ve Donanım Olanakları. Retrieved 31.01.2022 accessed from [https://www.spo.org.tr/resimler/ekler/0cd9258dd166263\\_ek.pdf?tipi=4&turu=H&sube=0](https://www.spo.org.tr/resimler/ekler/0cd9258dd166263_ek.pdf?tipi=4&turu=H&sube=0)
2. TUPOB (The Association of Planning Schools of Turkey).2011. Lisans Düzeyinde Açılacak

Şehir ve Bölge Planlama Bölümleri İçin Gerekli Asgari Ölçütler. Retrieved 31.01.2022 accessed from [https://www.spo.org.tr/resimler/ekler/bfe5ba2ce3309f5\\_ek.pdf?tipi=56&turu=H&sube=0](https://www.spo.org.tr/resimler/ekler/bfe5ba2ce3309f5_ek.pdf?tipi=56&turu=H&sube=0)

## TRACK 11: RESOURCES

84093

### An ecosystem services-based model for the reclassification of urban destinations in urban plans for the purpose of minimizing land consumption

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This contribution concerns the development of a decisional support model for the reclassification of land use.

Essentially, soil is a limited and non-renewable resource. It provides essential ecosystem services for human activities.

In Italy, land consumption continues to grow, as confirmed by the data provided by observers on the subject. This phenomenon is favored too by urban plans, which provide for the transformation of areas in quantities that are not strictly proportionate to the actual needs of the settled communities. In fact, in the absence of transfers of state resources, municipalities are increasingly using urban planning as a fiscal tool to support their budgets and provide public services. Over time, this has led to the emergence of building landowner's committees that demand their land to be declassified.

A model is proposed for the reclassification of land use, considering the value of soils, based on their ability to provide ecosystem services.

Within the model, additional urban planning criteria are considered, such as contiguity to pre-existing urban fabrics, proximity to technological networks and infrastructural nodes, in compliance with the framework of environmental and historical-cultural constraints.

It is observed that the reclassification leads to a reduction of the sectors which goes in the direction of a densification of the existing urban fabrics, which is one of the urban planning criteria that are adopted for the purpose of reducing land consumption.

The model, intended as a decision support system in urban planning matters, is applied to a case study whose results allow to highlight critical issues and development potentials.

Keywords: urban plans; land consumption; ecosystem services; decision support system.

#### References

- European Commission (2018) Strategic Environmental Assessment (SEA) Environment. Available at: <http://ec.europa.eu/environment/eia/sea-legalcontext.htm> (accessed 12 April 2018).
- Reimer M, Getimis P, Blotevogel H (eds) (2014) Spatial planning systems and practices in Europe: A comparative perspective on continuity and changes. London and New York: Routledge.
- Nadin V, Shaw D, Westlake T (1995) The compendium of European spatial planning systems.

European Planning Studies 3(3): 390-5.

EEA (2017b), Soil resource efficiency in urbanised areas. Analytical framework and implications for governance. Report n. 7/2016.

Commissione Europea (2016), Future Brief: No net land take by 2050? April 2016.

Maes J, Zulian G, Thijssen M, et al. (2016). Mapping and Assessment of Ecosystems and their Services. Urban Ecosystems. Publications office of the European Union, Luxembourg.

Haines-Young R. e Potschin M., 2010. The links between biodiversity, ecosystem services and human well-being. *Ecosystem Ecology: a new synthesis* 110–139.

85301

## Planning for Protecting Healing Waters

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The healing properties of mineral and thermal waters have been known since antiquity. At the turn of the 19th and 20th centuries, a specific spa culture was created based on these waters, particularly visible in central Europe where a number of famous SPA-resorts have developed. Even today, the therapeutic properties of some mineral and hot waters provide relief to a large number of patients and are important drivers of local and regional economies in health care, wellness, and tourism sectors. However, healing water resources are the subject of various threats and pressures related to economic and urban development, mass tourism, and careless sector policies. At the EU level there is no common regulation protecting this unique public good as are healing waters, many individual national regulations are fragmented and non-coherent. There is also little evidence-based knowledge to the risks on healing properties of waters produced by particular planning decisions under specific hydrogeological conditions. This paper aims at discussing specific challenge as is planning for the areas with the healing waters deposits with a special focus on threats related to the land use. As the basis for the discussion will serve the selected results of the international project ‘Healing Places’ conducted within the framework of Interreg Central Europe in the years 2019-2022 in the partnership of seven countries. Then, the specific situation of mountain spa resorts in the Lower Silesia region in Poland will be presented, where conflicting and non-precise planning regulations, lack of knowledge and risk awareness at the municipal level, and economic pressure can cause serious threats to unique healing waters deposits. The presentation will introduce some possible new approaches to planning in sensitive areas of healing waters to improve their sustainable use and mitigate hazards.

Keywords: Healing waters, mineral waters, water deposit, spa, land use, Lower Silesia

### References

1. Burri, N., Weatherl, R., Moeck, Ch., Schirmer, M. (2019). A review of threats to groundwater quality in the anthropocene, *Science of The Total Environment*, vol 684, 136-1542.  
Ciężkowski, W., (1990). Study of hydrogeochemistry of therapeutic waters in the Polish Sudety (in Polish), *Instytut Geotechnologii, Wrocław University of Science and Technology*, vol 60, Wrocław.3.  
Ciężkowski W., et al., (2010). Mineral and thermal waters of Poland. *Przegląd Geologiczny*, vol. 58 (9/1), 762-773.4.  
Fricke, M. (1993). Natural mineral waters, curative-medical waters and their protection. *Environmental Geology*, 22(2), 153-161.5.  
Gałaś, S. (2017). Assessment of implementation of protection of mineral deposits in spatial planning in Poland, *Land Use Policy*, vol 67. 584-5966. Healing Places, Interreg Central Europe, CE1308 – internal materials (<https://www.interreg-central.eu/Content.Node/HealingPlaces.html>)

85107

## Design-led resilience planning for transformative change: a comparison of Rebuild by Design and Water as Leverage.

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Climate change is expected to increase coastal areas' vulnerability to sea-level rise and storm surges. Yet, how these changes will manifest is still widely unknown. Therefore, strategies are needed for increasing capacity for dealing with uncertainty and change. Design-led resilience planning is a possible way of dealing with the problems of climate change in coastal areas. This is because design embraces ambiguity and uncertainty while change is the core driver in design activities. However, design-led resilience planning practices for increasing coastal climate resilience have been understudied, and the characteristics of such practices are unexplored. Therefore, this paper aims to present what design-led resilience planning entails and its potential to contribute to transformative change.

The study will develop a conceptual framework for resilience by design and its potential for coastal resilience and transformative change. Design uses abductive reasoning and creates solutions based on new framing. This ties in with social-ecological resilience which needs elements such as diversity, collective memory, framed creativity, and aligns with an evolutionary perspective on spatial planning: planning-as-design.

The study will develop a conceptual framework of critical aspects in transformative spatial design(-ing): Iterative, innovative, integral thinking, systems thinking, multi-perspectives, multidimensionality, multi-scalar, and intertemporal. The study will use the case studies of Rebuild by Design (RbD) in the U.S. and the Water as Leverage (WaL) in Asia, which both unique cases of design-led resilience planning. The data collection comprises document study and semi-structured interviews with key people involved in the formation of the programs, academics, designers, decision-makers, and local stakeholders through snowball sampling. The documents for this study are academic articles, policy documents, reports about the cases, and articles in newspaper and in professional magazines.

The findings of this paper will give insight into the operationalization of design-led resilience planning in RbD and WaL case studies and in the way how design-led resilience planning intends to affect policy choices that shape the intended transformation. The paper will also highlight the key differences and commonalities between the RbD and WaL approaches, and present what we can learn from these cases for future design-led resilience planning practice and research.

Keywords: design thinking, climate resilience, coastal planning, innovative design, transformative change

## References

- Brown, C., Boltz, F., Freeman, S., Tront, J., & Rodriguez, D. (2020). Resilience by design: A deep uncertainty approach for water systems in a changing world. *Water Security*, 9, 100051.
- Lochhead, H. (2017). Resilience by design: can innovative processes deliver more?. *Procedia Engineering*, 180, 7-15.
- Pelling, M., O'Brien, K., & Matyas, D. (2015). Adaptation and transformation. *Climatic Change* 133, 113-127. <https://doi.org/10.1007/s10584-014-1303-0>
- Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy sciences*, 4(2), 155-169.
- von Thienen, J., Meinel, C., & Nicolai, C. (2014). How design thinking tools help to solve wicked problems. In *Design thinking research* (pp. 97-102). Springer, Cham.

84340

## Towards flood resiliency among small and medium-sized enterprises (SMEs): how to trigger adaptive behavior?

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To reduce the impact of extreme precipitation events, in Flanders (Belgium citizens are ), more and more expected to participate in flood risk governance. They can for example reduce damage using flood protection measures, or by moving away from flood-prone areas. Local governments in Flanders experiment with a wide range of strategies to trigger adaptive behavior among residents. However, specific groups, such as small and medium sized enterprises (SMEs) seem not to be a specific target audience in Flanders.

This paper compares risk behavior of SMEs with the risk behavior of residents. Do they have specific needs to trigger adaptive behavior? And how should local governments tailor their strategies towards more flood-resiliency.

This research was carried out in three Flemish municipalities that have dealt with several floods in the past. This research is based on an extensive literature review on risk perception and behavior, 156 short telephone surveys and 14 in-depth semi-structured interviews with SMEs, and 13 interviews with homeowners. Contact was also made with municipal water managers to find out whether the current policy involves SMEs in flood risk management. The research shows both similarities and differences in how SMEs and residents deal with floods. SMEs in these cities also have flood experience, and also keep the government responsible for the damage. However, the research also shows that SMEs struggle with other questions on flood risk, and make different considerations when deciding on adaptive behavior. Therefore SMEs need a tailored approach on adaptive behavior, which the three municipalities currently do not offer.

Keywords: SMEs, flood proofing, tailored advice, Flanders, Belgium

### References

- Adedeji, T. J., Proverbs, D. G., Xiao, H., & Oladokun, V. O. (2018). Towards a conceptual framework for property level flood resilience. *International Journal of Safety and Security Engineering*, 8(4), 493-504.
- Attems, M., Thaler, T., Genovese, E., & Fuchs, S. (2020). Implementation of property-level flood risk adaptation (PLFRA) measures: Choices and decisions. *Wiley Interdisciplinary Reviews: Water*, 7(1).
- Forrest, S. A. (2020). *The Rise of Civil Society in Governing Flood Resilience*. Groningen.

Ingirige, B., & Wedawatta, G. (2018). SMEs defending their businesses from flood risk: Contributing to the theoretical discourse on resilience. In *The Routledge Companion to Risk, Crisis and Security in Business* (pp. 224-236): Routledge.

McClymont, K., Morrison, D., Beevers, L., & Carmen, E. (2019). Flood resilience: a systematic review. *Journal of Environmental Planning and Management*, 1-26.

85335

## Local sustainable energy and climate action plans in building the culture of integrated urban planning. The case of Sofia

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University of Architecture, Civil Engineering and Geodesy

The urgency of climate action and the important role of local communities in the process has been globally acknowledged. Regional and global networks built for mutual support in facing climate challenges, recommend local sustainable energy and climate action plans as key operational instruments of municipal policies to address climate-related risks and energy efficiency imperatives. The capacity of urban planning to contribute to strengthening local resilience has been repeatedly tested and proved in the plans implemented under varying spatial and societal context. By joining the Compact of Mayors in 2011, Sofia municipality committed itself to developing and implementing such a plan, which was supposed to take into consideration local climate- and energy-related risks alongside the current institutional, expert, and overall societal capacity to face them. A multidisciplinary expert team was commissioned to develop the plan draft following EC/JRC recommendations and the additional requirements set by the municipal experts. Urban heat islands and pluvial floods were estimated as the key risks to the urban system and required action was structured around five types of adaptation measures. Based on action research and the content analysis of the policy document already adopted in December 2021, the authors aim to outline the context-specific challenges and opportunities for overcoming sector-based approach and the progress made for developing a culture of holistic thinking. The paper outlines the lessons learned by the urban planning experts involved in the process concerning: (a) the multidisciplinary expert dialogue in structuring an integrated planning approach; and (b) the resulting draft recommendations on climate- and energy-related action to the local level discussed with the municipal decision-making bodies. Conclusions are drawn about (a) needed steps for the operationalization of climate-related action regarding expert and institutional capacity, funding resources and public involvement; (b) the potential of analytical instruments implemented by spatial planning to visualize the integral outcomes of planned and undertaken action in urban space.

Keywords: municipal action plan, energy, climate change adaptation, risk preparedness, institutional capacity, integrated planning

### References

- European Commission, Directorate General Climate Action, Ricardo-AEA Ltd., 2013. Adaptation Strategies for European Cities” Final Report. <https://climate-adapt.eea.europa.eu/repository/11156095.pdf/view>
- European Commission, Joint Research Centre, Rivas, S., Melica, G., Dallemand, J., et al., Guidebook 'How to develop a Sustainable Energy and Climate Action Plan (SECAP)' . Part 1,

The SECAP process, step-by-step towards low carbon and climate resilient cities by 2030, Bertoldi, P. (editor), Publications Office, 2018, <https://data.europa.eu/doi/10.2760/68327>  
Global Covenant of Mayors for Climate & Energy, <https://www.globalcovenantofmayors.org/>  
Sofia municipality, 2021. Action Plan on sustainable energy and climate 2021-203. (in Bulgarian).

<https://www.sofia.bg/documents/20182/14034739/%D0%94%D0%BE%D0%BA%D0%BB%D0%B0%D0%B4+%D0%A1%D0%9E%D0%9021-%D0%92%D0%9A66-8087.pdf/143d1f2f-8aac-4189-84dd-67b423d2cf8f>

84549

## Risk mitigation protocol. A proposal for optimising fragmentary Italian risk mitigation

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The last two decades have seen a growing interest in risk mitigation both at the national and international levels. This, coupled with the issue of sustainability and resilience, has become a topic of first concern globally. The solutions to address this complex question are multiple, including diverse disciplines as well as different levels of governance and stakeholders.

Consequently, there is an urgent need for conscious and strategic territorial planning, which must acknowledge the complexity of the issue and respond with proper instruments.

Taking into consideration what was stated above, the current work describes the design and implementation of a protocol of risk mitigation planning applied on a selection of Italian minor urban centers. It was developed in the framework of a still-in-progress research led by the Architecture Department of Roma Tre University, aimed at defining a pilot protocol of risk mitigation and sustainable intervention for Latium Inner Areas. This protocol is conceived as a useful and agile working instrument to systemize the information and optimize procedures, in order to simplify the planning process without losing its intrinsic complexity.

The research managed to highlight some of the structural gaps that exist in the Italian territorial and urban planning system and its – missing - integration with risk mitigation policies. Among other topics, it addresses the lack of integrated and multidisciplinary territorial knowledge as well as the difficulties for the smallest municipalities to comply with the complex requirements of risk mitigation design and implementation.

The present contribution will describe thoroughly the development of the protocol and its relation with all the different administrative and technical levels, professionals and stakeholders. The main criticalities encountered and the solution adopted will be highlighted, as they perfectly represent the principal structural gaps of the Italian planning system in relation to risk mitigation practices. By highlighting those criticalities, it will be possible to start a reflection on the current state of risk mitigation policies and instruments in Italy, focusing on current changes and future expectations in a desirable post COVID Era.

Keywords: risk mitigation, protocol, territorial planning, multi-risk approach, territorial knowledge

### References

Cerasoli M., Eusebio A., Spadafora G., (2020), La mitigazione dei rischi naturali attraverso la costruzione di un protocollo pilota per l'attivazione di interventi sostenibili. In: Francini M., Palermo A., Viapiana M.F. (editors), Il piano di emergenza nell'uso e nella gestione del

territorio, pp. 401-409, Franco Angeli, Milano, ISBN 9788891790972

Ioannilli, M. (2020), Sicurezza territoriale, governo del territorio e protezione civile, In: Francini M., Palermo A., Viapiana M.F. (editors), Il piano di emergenza nell'uso e nella gestione del territorio, pp 36-48, Franco Angeli, Milano, ISBN 9788891790972

Menoni, S., Molinari, D., Parker, D., Ballio, F., & Tapsell, S. (2012). Assessing multifaceted vulnerability and resilience in order to design risk-mitigation strategies. *Natural Hazards*, 64(3), ISSN 2057–2082. <https://doi.org/10.1007/s11069-012-0134-4>

Menoni, S. (2020), Per un approccio territoriali ai piani di emergenza, In: Francini M., Palermo A., Viapiana M.F. (editors), Il piano di emergenza nell'uso e nella gestione del territorio, pp 17-33, Franco Angeli, Milano, ISBN 9788891790972

MISRAR (2012), Handbook: mitigating spatial relevant risks in European regions and towns, MISRAR Project

Neuvel, J., & Brink, A. (2010). The Consideration of Emergency Management Issues in Spatial Planning Practices. *Environment and Planning C: Government and Policy*, 28, 37–53. <https://doi.org/10.1068/c08130>

Poljansek, K., Marin Ferrer, M., De Groeve, T. and Clark, I., editor(s), (2017). Science for disaster risk management 2017: knowing better and losing less. Executive Summary. EUR 28034 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-79-69673-2, doi:10.2760/451402, JRC102482

85181

## Flood Resilience in Unequal Places: Learning to live with floods in Hull

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Flooding is an urgent societal issue that is predicted to worsen due to climate change, urbanisation and urban growth. The increasing flood risk and associated uncertainty, as well as more frequent and extreme flood events, has led to a recognition that not all floods can be prevented and a shift towards flood resilience (McClymont et al., 2020). This paradigm shift from ‘keeping water out’ to ‘living with water’ and a growing awareness of the importance of social and spatial measures in flood risk management (FRM). However, in this shift to flood resilience there are also issues of fairness and justice with unequal distributions of capacities leading to differences between those who can ‘survive and thrive’ and those that are unable to do so (O’Hare and White, 2017; Forrest, Trelle and Woltjer, 2020).

This contribution focuses on Hull as it is both the second most flood risk place in the UK and because it is a relatively deprived city with embedded inequalities (Ramsden, 2021). Two significant flood events affecting Hull in 2007 and 2013 have led to a greater emphasis being placed on societal engagement and spatial approaches to FRM. This contribution uses semi-structured interviews and policy document analysis, combined with secondary quantitative data of neighbourhoods, to explore how FRM has changed in the city and efforts to foster greater flood resilience in areas with differing levels of embedded inequalities.

Analysis of FRM approaches shows a shift towards governance approaches beyond ‘traditional’ actors with a wider mobilisation of actors through the creation of the ‘Living with Water’ partnership. Furthermore, there have been efforts to reshape the relationship between residents and water through events such as ‘Hullathon’ that engaged residents with everyday city spaces that have been temporarily re-designed to focus on water. However, there are signs of low FRM engagement and low uptake rates of flood warnings with neighbourhood differences being identified. The findings highlight inequalities that emerge in the shift to flood resilience as well as providing an insight into how cities can grapple with these embedded inequalities and develop strategies to combine FRM with embedded inequalities.

Keywords: Flood Resilience, Disasters, Inequality, Hull, Justice

### References

- Forrest, S. A., Trelle, E.-M. and Woltjer, J. (2020) ‘Socio-spatial inequalities in flood resilience: Rainfall flooding in the city of Arnhem’, *Cities*, 105, p. 102843. doi: 10.1016/j.cities.2020.102843.
- McClymont, K. et al. (2020) ‘Flood resilience: a systematic review’, *Journal of Environmental*

Planning and Management. Routledge, pp. 1151–1176. doi: 10.1080/09640568.2019.1641474.

O’Hare, P. and White, I. (2017) ‘Beyond “just” flood risk management: the potential for—and limits to—alleviating flood disadvantage’, *Regional Environmental Change* 2017 18:2, 18(2), pp. 385–396. doi: 10.1007/S10113-017-1216-3.

Ramsden, S. (2021) *Living with Water: Hull Household Flood Survey Autumn 2018*. University of Hull, UK.

85250

## Territorial Planning Laboratory for Fostering Cross-border Cooperation

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Fostering cross-border cooperation to support regional convergence and overcoming the obstacles of border regions had been on the EU agenda for several decades. This topic is particularly important in smaller CE countries in which most regions are positioned on national borders, which is the case of Slovakia and Hungary. Management of spatial development in these regions brings additional challenges stemming from the border location, such as data consolidation and harmonization, various data collection methodologies etc., and therefore improvement of information services for cross-border regions helps to tackle the problems of substantial economic growth and an intensive agglomeration process while trying to protect natural, cultural and landscape values that are taking place in Slovak-Hungarian cross-border areas. The aim of the paper is to demonstrate implementation of Slovak-Hungarian cross-border information system based on GIS and establishment of living labs on Slovak and Hungarian side as local information and training centres to test, monitor and evaluate the GIS data system, recommend improvements for the web services and educate local and regional authorities and other stakeholders on how to use these tools. These activities should facilitate more efficient coordination of cross-border institutional cooperation and public services, decision-making processes and the open, up-to-date and widespread use of data and information. Improved access to data has a potential to reduce agglomeration pressure, improve urban and rural environmental quality, ensure sustainable utilization of natural resources and balanced territorial development and further facilitate the proper choice of best places for different developments in the region.

Keywords: cross-border cooperation, spatial planning, GIS, information system, sustainable regional planning

### References

• Finka, M., Ondrejčka, V., Husár, M., Huba, M., Li, J. et al. (2021). Guidelines on How to Use Spatial Planning Tools in Integrative Management of ecological corridors. Danube Transnational Programme ConnectGREEN Project “Restoring and managing ecological corridors in mountains as the green infrastructure in the Danube basin”. SPEKTRUM STU Publishing, Bratislava, 75 pp

Rousseaux, V. (2013). GIS for regional planning in a cross-border context: the case of Geneva. In *Integration of Spatial Decision Support Systems and Evidence Based Modelling in National/Regional Policy Applications and Regulatory Systems: Scientific and Policy Challenges*.

Repetto, M. P., Burlando, M., Solari, G., De Gaetano, P., Pizzo, M., & Tizzi, M. (2018). A web-

based GIS platform for the safe management and risk assessment of complex structural and infrastructural systems exposed to wind. *Advances in Engineering Software*, 117, 29-45.

Peyrony, J., & Denert, O. (2012). Planning for cross-border territories: The role played by spatial information. *Raumforschung und Raumordnung*, 70(3), 229-240.

84065

## Framework conditions of growing flood damage potential in areas with residual risk ('levee effect') – a case study of Austria

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Flood damage is increasing, which is connected to socioeconomic changes, such as population growth and settlement development (Barredo, 2009; Löschner et al., 2017). Flood damage potential is especially increasing in areas with lower hazard or behind structural flood protection measures due to settlement expansion (Nachtnebel & Apperl, 2015). This phenomenon of increasing damage potential in areas behind structural flood protection measures is referred to as 'levee effect' or 'safe development paradox' (Di Baldassarre et al., 2018). It is often described as a direct result of structural flood protection measures. However, this view excludes the responsibility of spatial planning in risk-reducing land development. Within this research we look at the framework conditions that can lead to the development of areas with residual risk in Austria and present spatial planning approaches to address the 'levee effect'.

As part of the research project PoCo-Flood (Integrated Flood Risk Management in Mountain Areas: Assessing Sectoral Interdependencies, Conflicts and Options for Policy Coordination), the authors conducted 21 semi-structured interviews with 24 experts. The interview partners included federal and state stakeholders in spatial planning and water management. A qualitative analysis was conducted, using MAXQDA to categorize the interview transcripts.

The results show that it is the interaction of water management and spatial planning that affects settlement development in areas with residual risk. With the construction of structural flood protection measures, the extension of flood run-off areas changes. This leads to the revision of hazard maps by the Austrian Service for Torrent and Avalanche Control and the Federal Water Engineering Administration, which are the two institutions responsible for flood hazard mapping in Austria. These revisions are conducted in a different way depending on the institution that implemented the hazard map. Furthermore, this entails different consequences for spatial planning, depending on the federal state. The consequences vary from unrestricted use of areas with residual risk in some federal states to a zoning ban for building land behind levees. In general, it is the coordination between spatial planning and water management authorities that impacts the development of areas with residual risk.

Keywords: flood risk management, residual risk, coordination

### References

Barredo, J. I. (2009). Normalised flood losses in Europe: 1970-2006. *Nat. Hazards Earth Syst. Sci.*, 97–104.

Di Baldassarre, G., Kreibich, H., Vorogushyn, S., Aerts, J., Arnbjerg-Nielsen, K., Barendrecht, M., Bates, P., Borga, M., Botzen, W., Bubeck, P., Marchi, B. de, Llasat, C., Mazzoleni, M., Molinari, D., Mondino, E., Mård, J., Petrucci, O., Scolobig, A., Viglione, A., & Ward, P. J. (2018). Hess Opinions: An interdisciplinary research agenda to explore the unintended consequences of structural flood protection. *Hydrology and Earth System Sciences*, 22, 5629–5637.

Löschner, L., Herrnegger, M., Apperl, B., Senoner, T., Seher, W., & Nachtnebel, H. P. (2017). Flood risk, climate change and settlements development: a micro-scale assessment of Austria municipalities. *Reg Environ Change*, 311–322.

Nachtnebel, H. P., & Apperl, B. (2015). Beurteilung des Hochwasser-Schadenspotenzials unter dynamischen Bedingungen. *Österreichische Wasser- und Abfallwirtschaft*, 67, 120–130.

84871

## Why do projects for renewable energy facilities encounter opposition from local communities? The case of Greece.

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Decarbonizing economy by producing energy from renewable sources as a replacement for fossil fuels, in order to mitigate climate change, is not an easy task. Such a transition critically affects the socioeconomic conditions and becomes a highly complex process, dominated by the difficulty in reaching consensus among different levels of stakeholders or actors. There are many cases where local communities oppose plans of implementation of renewable energy facilities and this is proving to be a major factor in delaying this necessary transition. Social acceptance seems to be crucial parameter for a successful switching to net-zero emissions energy systems. Typical examples in Greece are the frequent reactions of local communities, groups or organizations across the country against development projects in the field of wind energy. This is evidenced by the dozens of cases where this issue has preoccupied the councils of local authorities in the areas where the establishment of such facilities is at stake. This paper aims to investigate the main opposition reasons put forward by certain local actors in the public debate. For a theoretical approach to the problem, the authors conduct a critical review of the international relevant literature to investigate which actors/stakeholders, at what level, for what reasons oppose what kind of projects for the installation of renewable energy facilities. Additionally, for an empirical approach to the problem, the authors delve into the proceedings of the municipal council meetings, to address the argumentations put forward by the councilors, civil society organizations and other participating agencies. What is their knowledge and perception of wind farms? Do they look at the issue from the environmental, economic or social perspective? Do they perceive it as a purely local issue undermining local private or collective interests? Do they grasp the climatic, ecological and social benefits of wind farms at all relevant scales (regional, national, global)? The authors aspire to conclusions that will feed the central and local government spatial plans and communication policies to achieve local consensus over ambitious projects for renewable energy establishments.

Keywords: Renewable Energy, Social Acceptance, Local Communities, Net-zero Emissions Energy Systems, Climate Change

### References

Levenda, A., Behrsin, I., & Disano, F. (2021, January). Renewable energy for whom? A global systematic review of the environmental justice implications of renewable energy technologies. *Energy Research & Social Science*, p. 101837.

Maruyama, Y., Nishikido, M., & Iida, T. (2007, February 2). The rise of community wind power

in Japan: Enhanced acceptance through social innovation. *Energy Policy* (35), pp. 2761–2769.

Pasqualetti, M. (2011, April). Social Barriers to Renewable Energy Landscapes. *Geographical Review* (101), pp. 101-123.

Sapountzaki, K., & Wassenhoven, L. (2005, December). Consensus Building and Sustainability: Some Lessons From an Adverse Local Experience in Greece. *Environment, Development and Sustainability* (7), pp. 433–452.

Segreto, M., Principe, L., Desormeaux, A., Torre, M., Tomassetti, L., Tratzi, P., et al. (2020, December 8). Trends in Social Acceptance of Renewable Energy Across Europe - A Literature Review. *International Journal of Environmental Research and Public Health* (17), p. 9161.

Stigka, E. K., Paravantis, J. A., & Mihalakakou, G. K. (2014, January 25). Social acceptance of renewable energy sources: A review of contingent valuation applications. *Renewable and Sustainable Energy Reviews* (32), pp. 100–106.

Wolsink, M. (2010, February 2). Contested environmental policy infrastructure: Socio-political acceptance of renewable energy, water, and waste facilities. *Environmental Impact Assessment Review* (30), pp. 302-311.

Wüstenhagen, R., Wolsink, M., & Bürer, M. J. (2007, February 26). Social Acceptance of Renewable Energy Innovation: An Introduction to the Concept. *Energy Policy* (35), pp. 2683-2691.

84614

## Multi-hazard-risk Assessment of Coastal Megacities: A Case Study of Shanghai

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As global temperatures continue to rise, climate change has become one of the most significant, persistent, and highly dynamic challenges facing worldwide society (Birchall & Bonnett, 2021). Cities are already seen as part of the climate change issues, not only because they are a potential climate vulnerability point, but also the possible solving path (Betsill & Bulkeley, 2003). Coastal megacities in developing countries share the same vulnerability as such cities in developed countries (Hoorweg et al., 2010). In China, more than 78 million people live in vulnerable low elevation cities, especially the megacities like Shanghai (McGranahan et al., 2007). Although lots of literature assessing the impact of a specific hazard, few focus on the multiple sorts of climate risks from the local lens. Therefore, we plan to answer the research question: How to conduct the comprehensive assessment for multi-hazard-risk for coastal megacities? Firstly, the risk assessment measures four factors (hazard, vulnerability, exposure, and adaptation) (Gotangco & Perez, 2010). Secondly, we build up the index by considering the indicators (buffer zones, population density, neighborhood evacuation plans, etc.) particularly typical in Shanghai (Adger & Agnew, 2004). Finally, by overlapping the maps of main hazards that Shanghai faces, and the spatial data of the indicators, we identify the hot spots of multiple hazards and assess the risks of different zones. Our findings suggest the magnificent spatial differences in risk assessment. The central area demonstrates high risks due to the concentration of population and buildings. While the satellite towns differ from each other. The northern and eastern towns suffer more density of risks than others. The findings in this study can identify the top-priority zones that need to enhance their adaptation to climate risks. Meanwhile, the methodology in this research will provide a decision-making tool for risk mitigation of coastal megacities.

Keywords: Climate change, Risk assessment, Natural hazards, Vulnerability, Adaptation

### References

- Adger, W. N., & Agnew, M. (2004). New indicators of vulnerability and adaptive capacity (Vol. 122). Norwich: Tyndall Centre for Climate Change Research.
- Betsill, M., & Bulkeley, H. (2003). Cities and climate change (Vol. 4). Routledge.
- Birchall, S. J., & Bonnett, N. (2021). Climate change adaptation policy and practice: The role of agents, institutions, and systems. *Cities*, 108, 103001.
- Gotangco, K., & Perez, R. (2010). Understanding vulnerability and risk: the CCA-DRM nexus. Klima Climate Change Center, Manila.
- Hoorweg, D., Bhada, P., Freire, M., Trejos, C., & Sugar, L. (2010). Cities and climate change: An urgent agenda. The World Bank, Washington, DC.

McGranahan, G., Balk, D., & Anderson, B. (2007). The rising tide: assessing the risks of climate change and human settlements in low elevation coastal zones. *Environment and urbanization*, 19(1), 17-37.

84474

## Collecting and sharing risk-knowledge to support metropolitan spatial and strategic plans

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One of the important goals for effective risk-informed spatial planning is the capacity of knowing and communicating disaster risk. Also, the Sendai Framework for Disaster Risk Reduction (SFDRR) remarks the need for promoting the dissemination of knowledge and good practices to integrate disaster risk management (DRM) in current urban development strategies and policies through the first priority “understanding disaster risk”.

Nowadays, the availability of geographic data and information is growing, as well as the capacity of users to manage them thanks to IT tools. In the modern era, institutions and private companies hold a huge amount of spatial information, not only those provided by smart city sensors and devices but also the historical series. However, holding data does not mean having effective knowledge, but only a potential for the information (Murgante et al. 2009). While the scientific debate is focused on the application of methods and tools for collecting and processing Big Data in smart cities, some issues still constrain the transition from data to knowledge.

This “unknowledge” results in overlap of layers of limitations and constraints, without investigating the urban features as risk-component. The success of risk-informed spatial planning mostly depends on the capability of the involved actors to work on common data, information, and knowledge in shared environments. To this aim, the contribution focuses on the idea to develop a Web-GIS platform to collect available risk-knowledge as a support for developing spatial plans and policies (Frigerio and van Westen 2010; Repette et al. 2021). The platform is a support for all involved actors in spatial and strategic planning at the metropolitan scale. As a multi-access open platform, it can also be explored by citizens through simplified interfaces useful for informing and raising risk awareness in society. Because risk-informed spatial planning has to be tailored to different risk data and information, the contents of the Web-GIS platform will be collected and processed in different ways according to different purposes (Galderisi and Limongi 2021). Following the guiding principles stated by the SDRR for a better understanding of disaster risk, the contribution identifies the specific requirements to be operatively met through the design of the Web-GIS platform and the application to the test case of the Metropolitan City of Naples (ITALY).

Keywords: disaster risk, risk-knowledge, Web-GIS, knowledge platforms, planning support systems

### References

Frigerio, S., & van Westen, C. J. (2010). RiskCity and WebRiskCity: Data collection, display, and dissemination in a multi-risk training package. *Cartography and geographic information*

science, 37(2), 119-135.

Galderisi, A., & Limongi, G. (2021). A Comprehensive Assessment of Exposure and Vulnerabilities in Multi-Hazard Urban Environments: A Key Tool for Risk-Informed Planning Strategies. *Sustainability*, 13(16), 9055.

Murgante, B., Borruso, G., & Lapucci, A. (2009). Geocomputation and urban planning. In *Geocomputation and urban planning* (pp. 1-17). Springer, Berlin, Heidelberg.

Repette, P., Sabatini-Marques, J., Yigitcanlar, T., Sell, D., & Costa, E. (2021). The Evolution of City-as-a-Platform: Smart Urban Development Governance with Collective Knowledge-Based Platform Urbanism. *Land*, 10(1), 33.

85375

## TOWARDS THE ADRIATIC CLIMATE TRANSITION. A METHODOLOGICAL FRAMEWORK FOR SPATIAL PLANNING PROCESSES FOR ADAPTATION IN THE ADRIATIC REGION.

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It is widely recognised that climate change (CC) will have an increasing impact on ecosystems, adversely affecting the conservation of natural areas, worsening human living conditions, limiting the resilience of the social system and the ability of cities to cope with extreme events. A real transformation of society is needed with large-scale and integrated measures for adaptation (AD). In this context, the local level should play an important role in transforming society into a more resilient system. However, at this level the main obstacles of the AD process are encountered, in particular the limited financial capacity, the lack of technical and scientific knowledge, the lack of skills and tools and the limited integration with higher levels.

The Adriadapt project has led to the drafting of guidelines for the AD with the aim of providing a method for decision-making and political support for local and regional communities in the Adriatic, and capitalise on the results of different project activities and, in particular, the results of the pilot actions implemented by the local partners. A progressive and adaptive five-step approach has been developed (and applied) to guide and support local and sub-national authorities on their way to the AD.

Specifically, this contribution highlights the effectiveness of the process in the pilot areas, while operating at different scales of application: the Union of Municipalities of the Savio Valley (large scale), the Municipality of Udine (intermediate scale) and the Municipality of Cervia (small scale). AD planning is not linear, but requires a circular process that leads to continuous improvement. A city or region may initially focus on a specific measure, but a global integrated AD plan is essential to address the complex nature of the CC and its effects. This can achieve maximum benefits with minimal costs, taking into account the resilience to CC (adaptation), the reduction of a city or region's contribution to the problem (mitigation) and a wide range of additional benefits (e.g. health, safety, opportunities, habitat conservation and biodiversity, etc.).

Keywords: Adriadapt, climate change, adaptation, local level, planning, different scale

### References

IPCC, 2014. AR5 Climate Change 2014: Impacts, Adaptation, and Vulnerability; chapter 14

Magni F., 2019. Climate proof planning: L'adattamento in Italia tra sperimentazioni e

innovazioni.  
FrancoAngeli, Milano.

Ministero dell’Ambiente e della Tutela del Territorio e del Mare (MATTM), 2020. Piano Nazionale di adattamento ai cambiamenti climatici. Rapporto Preliminare ambientale. Predisposto ai sensi del D. Lgs 152/2006 e s.m.i., Articolo 13 comma 1.

Musco F., 2014. Decarbonizing and climate proof planning: dalla pianificazione alla bassa emissione all’adattamento in Musco F., Zanchini E., (a cura di), Il clima cambia le città: Strategie di adattamento e mitigazione nella pianificazione urbanistica, FrancoAngeli, Milano.

Musco F., Zanchini E. (managed by), 2014. Il clima cambia le città: Strategie di adattamento e mitigazione nella pianificazione urbanistica, FrancoAngeli, Milano.

SNAC, 2015. Strategia Nazionale di Adattamento ai Cambiamenti Climatici.

84292

## How to create a more effective dialogue between emergency planning and spatial planning tools

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The Italian territory is characterized by a remarkable landscape value. However, it is strongly conditioned by multiple hazards whose effects are often altered by the interaction with the anthropic elements.

The landscape, as the territory as a whole, represents an asset regardless of its intrinsic value. It deserves to be protected and enhanced in all its dimensions, even if degraded, fragile or lacking in qualities (Priore, 2015; Voghera & La Riccia, 2016).

Although the centrality of the role of the landscape is widely recognized, it is difficult to integrate valorization strategies proposed by the landscape plans and disaster risk reduction. The issue of risk is intrinsically addressed by the spatial planning tools as well as treated by the emergency plans (Alexander, 2015).

Moreover, there is the need to overcome administrative limits through coordinated actions by taking into account the systemic dimension and the complexity of disasters.

In particular, the second generation of landscape plans in Italy deals with risk issues, even without a clear explanation of these aspects. Therefore, the contribution aims at relating the contents of the landscape plans to the different phases of the disaster risk management cycle and to the different risk components (hazard, elements-at-risk, vulnerability, coping capacity) (UN, 2016).

Looking for a more effective dialogue between emergency planning and spatial planning, a double opportunity is recognized in regional landscape planning: firstly, the potential ability to intervene on the territory as a whole taking into account all the risk components; secondly, the possibility of overcoming administrative limits and defining coordinated actions for spatial planning and emergency planning at different scales.

The potentiality of regional landscape plans as strategic tools will be highlighted through a comparative study between the Regional Landscape Plans of Tuscany and Puglia regions (Italy) (Barbanente, 2018; Vettori, 2017), in order to enhance dialogue between emergency planning and spatial planning at different levels.

Keywords: Landscape planning; Emergency plans; Risk management; Disaster Risk Reduction

### References

1. Alexander D. (2015) Disaster and Emergency Planning for Preparedness, Response, and Recovery, Oxford Research Encyclopedia of Natural Hazard Science, Oxford University Press, Oxford, 2015, pp. 1–20, <https://doi.org/10.1093/acrefore/9780199389407.013.12>.
2. Barbanente A. (2018) La pianificazione del paesaggio come pratica di riappropriazione sociale del territorio. Il PPTR della Puglia. In: Atti dell'VIII Convegno internazionale sulla civiltà

rupestre “Dalle chiese in grotta alle aree della civiltà rupestre: gli strumenti di pianificazione territoriale.

3. Priore R. (2005) Verso l'applicazione della Convenzione europea del paesaggio in Italia. Il Mulino. doi:10.7390/20810.

4. United Nations (UN) (2016) Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction.

5. Vettori N. (2017) Il piano paesaggistico alla prova. I modelli della Toscana e della Puglia. Aedon, doi: 10.7390/86381, ISSN 1127-1345.

6. Voghera A, La Riccia L. (2016) La Convenzione Europea del Paesaggio alla prova dell'operatività locale. Sperimentalismi disciplinari e problemi aperti. La Convenzione Europea del Paesaggio alla prova dell'operatività locale. Sper Discip e Probl aperti. 14: 10–23.

doi:10.13128/RV-18263.

85077

## Giving a systemic dimension to heavy rainfall risk mitigation in local planning

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In the frame of risk-based planning, there is a need to address climate change impacts in a systemic way that goes beyond sectoral logic. The management of heavy rainfall in urban areas requires exploiting every planning opportunity to compensate for vulnerabilities caused by intervention practices linked to previous planning seasons.

In this context, and in line with the broader process of adaptation to climate change that led the Municipality of Padua to elaborate a European award-winning SECAP, a guiding document has been elaborated to promote and give a local operational dimension - both technical and policy - to sustainable urban drainage techniques (SUDS).

This document provides indications and principles of intervention to include these approaches in the planning and design system, targeting those policymakers, technicians and practitioners that can steer the physical modification of urban space and soil.

The contextualisation of the SUDS approaches in the particular local dimension is ensured by the definition of regulatory frameworks, identification of recurrent climate events, and characterisation of typologies of local urban spaces. The research methods used include analysis of the local planning corpus, survey and evaluation of available techniques, and the definition of a hierarchy of principles for intervention.

Overall, the document provides all the tools to operationalise SUDS approaches in land policies, practices and projects, giving water management a systemic dimension. Combining these approaches with existing management – based on sewerage systems, conveyance and the principle of hydraulic invariance – also allows pursuing hydrogeological invariance, mitigation of other climate change impacts, and maximising co-benefits for urban space.

**Keywords:** Spatial planning; Urban design; Sustainable urban drainage systems; Adaptation; Risk-based planning

### References

Pasi R., Negretto V., & Musco F. (2019). Diversi approcci al drenaggio urbano sostenibile: un confronto tra il contesto normativo inglese e quello italiano. *Archivio Di Studi Urbani E Regionali*, (125), 120–140. <https://doi.org/10.3280/asur2019-125006>

Portugali J. (2012). Complexity Theories of Cities: Implications to Urban Planning. In J. Portugali, H. Meyer, E. Stolk, & E. Tan (Eds.), *Complexity Theories of Cities Have Come of Age*. Springer. <https://doi.org/10.1007/978-3-642-24544-2>

Welsh Government. (2018). *Statutory standards for sustainable drainage systems – designing, constructing, operating and maintaining surface water drainage systems*. Cardiff.

Woods-Ballard B., Wilson S., Udele-Clark H., Illman S., Ashley R. & Kellagher R. (2015). *The SuDS manual*. Report C753, second ed. Construction Industry Research & Information Association (CIRIA), London, UK. ISBN: 978-0-86017- 760-923

85295

## The susceptibility of urban areas in Europe to vector-borne diseases spread by the Asian Tiger mosquito

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The Asian Tiger mosquito (*Aedes albopictus*) has arrived in Europe in 1979 (Gossner et al., 2018) and has spread widely, being currently established in more than 20 countries. As such, these countries need to consider the spread of vector-borne diseases in their planning policies, to prevent outbreaks of diseases such as dengue, Zika and Chikungunya. Urban areas are particularly vulnerable, due to the availability of potential hosts and the dynamics of pendular movements between neighbouring areas (Sanna et al., 2017). We evaluated the suitability of 65 large urban areas to the establishment of the mosquito, based on the level of consensus between existing models of the potential distribution of the species, for both present-day and future conditions with climatic projections for 2050 (Oliveira et al., 2021). Besides environmental suitability, the potential presence of the mosquito in a given country depends on trade and mobility patterns. At the international level, the trade of tyres and live plants, and the strong connectivity between countries, is pointed out as a major cause for mosquito spread (Hulme, 2021). Currently, 60% of the cities analysed are suitable to the mosquito, 8% are unsuitable and 32% show high uncertainty. Traded tyres arriving in Europe, for example in The Netherlands and Germany, are imported from Southeast Asian countries, where the mosquito originates, and subsequently are traded to other countries like Portugal and Spain. Live plants are imported from countries as Costa Rica and Egypt, where vectors are also present. The antiquity of *Aedes albopictus* establishment in each country, in combination with the trade network relationships established, are used to score the possibility of vector dissemination via trade flows, and subsequently the exposure of urban areas to vector-borne diseases. In the future, 87% will be suitable and none will be unsuitable, including cities in northwestern Europe, the British Isles and Scandinavia, which will have to adapt their public health and urban planning policies to emerging risks.

Keywords: urban areas; vector-borne diseases; international trade; susceptibility

### References

Gossner, C. M., Ducheyne, E. & Schaffner, F. Increased risk for autochthonous vector-borne infections transmitted by *Aedes albopictus* in continental Europe. *Eurosurveillance* 23, 2–7 (2018)

P.E. Hulme, Unwelcome exchange: International trade as a direct and indirect driver of biological invasions worldwide, *One Earth* 4 (5) (2021) 666–679

Oliveira S, Rocha J, Sousa CA, Capinha C. Wide and increasing suitability for *Aedes albopictus* in Europe is congruent across distribution models. *Scientific reports*, 11(1) (2021), 1-9

Sanna, M. & Hsieh, Y. H. Ascertaining the impact of public rapid transit system on spread of dengue in urban settings. *Sci. Total Environ.* 598 (2017) 1151–1159

85312

## Disaster and refund. Unanswered questions on planning accountability in socio-natural disasters: the Sarno landslide

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Although the Treaty of Lisbon foresees the right of all citizens to equal civil protection from natural hazards, an enquiry-based analysis of the heterogeneous legislations across 21 European countries that regulate the integration of landslide hazard into urban planning shows that almost half of them have no legal guidance in the National Land Bill. The occurrence of a disastrous event sped up the Italian law-making process in this regard. On 5 May 1998 in the villages of Sarno, Siano, Bracigliano and Quindici in Southern Italy, more than 140 landslides (mainly hillslope debris flows) caused 159 fatalities, 178 destroyed and 450 damaged houses. Even if a final sentence (2021) blamed the ex-major as the only guilty, “Sarno” is actually a prime example for the plurality and complexity of responsibilities in the production of risk. Natural causes (lack of trees, prolonged rains, soil instability and composition) tied up in a very involved way with man-made causes (intentional forest fires, unauthorized construction development) and problematic institutional and regulatory practices of the past (6,386 amnesty requests for illegal buildings - out of 31,000 inhabitants in the municipality of Sarno; the full-blown negligence of the local government; the legislative void at the time). Spatial development (both planned and spontaneous) played a role in disaster risk production but the debate on who should be accountable for damages is still far from being answered, here as anywhere else. The paper aims to compare further advancement in acknowledging the sources of disaster with the planning and recovery choices made after. Results that are expected from the review of: relevant literature, Regulatory Plans, geotechnical assessments, trial evidences will help to shed light upon those choices; whether they successfully remove the causes of risk or instead remove responsibility (and awareness, preparedness, empowerment, resilience) from the affected community. Presented case study is chosen for its vivid display of a cutting conflict between the development culture that seems dominant and the reasons of disaster risk reduction, the struggle between public interest and individual interests and, last but not least, contradiction between unquestioning properties’ refund and accountability for the widespread faulty behaviour.

Keywords: disaster; risk; landslide;

### References

Mateos M. R. (2020) “Integration of landslide hazard into urban planning across Europe” *Landscape and Urban Planning*, Volume 196, 103740, <https://doi.org/10.1016/j.landurbplan.2019.103740>

Guzzetti F. (2021) “Invited perspectives: Landslide populations – can they be predicted?” *Natural Hazards Earth System Science*, Volume 21, 1467–1471, <https://doi.org/10.5194/nhess-21-1467-2021>

Chiavazzo G. et al. (2018) Fango – il modello Sarno vent’anni dopo.

<https://legambiente.campania.it/wp-content/uploads/2018/05/dossier-Sarno-20-anni-dopo.pdf>

84309

## A System Dynamics approach of urban decentralized energy systems integration into the current energy market

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The energy market is changing. Many changes like access to new renewable energy sources, improved data quality, cheapening effective storage systems, and overall decentralization of the grid make energy systems much more complex from one side but much more flexible and adaptable from the other. The main benefit of these changes and opportunities is that they address the climate crisis's pressure and create a brand-new energy industry appearance that helps communities cut pollution and advance environmental justice (Guerrero et al. 2010). The alternative to the traditional energy grid is decentralized energy systems (DES) which include modular and more flexible technologies located close to the consumer.

This paper explores the consequences of the transition from massive, centralized power systems to smaller distributed sources. Social science in general and urban planning, in particular, are just beginning to investigate the potential role of actors involved in the new paradigm of decentralized urban energy systems. Therefore, the main aim of this study is to analyze and evaluate the potential impact of different strategies related to the transitioning to DES for all stakeholders: utilities, policymakers, and consumers enhanced by a data-driven modeling framework.

A stock and flow diagram is at the core of the model; it consists of the process of quantification of the components of Causal Loop Diagrams over time (Ford 1999), which were used to observe an electricity-development nexus and identify the dynamic complexities. The model investigates the relationships between the policy, environmental, and economic side of the DES in the urban environment expanding the existing knowledge that mainly focused on the traditional energy systems. Since System Dynamics is widely used as a decision support method in the energy sector (Aslani et al. 2014; Momodu et al. 2017; Riva et al. 2018), different aspects of the interrelations between energy and urban systems from a unique perspective by adding decentralized energy components to the existing systems were studied. The paper concludes with a discussion on how new energy components affect policies and planning strategies in urban areas and how small-scale (neighborhood level) factors are connected to the large-scale (regional and power grid level) aspects.

Keywords: system dynamics, complex systems, energy planning, environmental justice, climate change mitigation

### References

1. Aslani, Alireza, Petri Helo, and Marja Naaranoja. 2014. Role of renewable energy policies in energy dependency in Finland: System dynamics approach. *Applied Energy* 113: 758-65.
2. Ford, F.A., 1999. *Modeling the environment: an introduction to system dynamics models of*

environmental systems. Island Press, Washington, DC.

3. Guerrero, J. M., F. Blaabjerg, T. Zhelev, K. Hemmes, E. Monmasson, S. Jemei, M. P. Comech, R. Granadino, and J. I. Frau. 2010. Distributed generation: Toward a new energy paradigm. *IEEE Industrial Electronics Magazine* 4 (1): 52-64.

4. Momodu, Abiodun Suleiman, Ahmad Addo, John-Felix Kayode Akinbami, and Yacob Mulugetta. 2017. Low-carbon development strategy for the West African electricity system: Preliminary assessment using system dynamics approach. *Energy, Sustainability and Society* 7 (1): 11.

5. Riva, Fabio, Helene Ahlborg, Elias Hartvigsson, Shonali Pachauri, and Emanuela Colombo. 2018. Electricity access and rural development: Review of complex socio-economic dynamics and causal diagrams for more appropriate energy modelling. *Energy for Sustainable Development* 43: 203-23.

85065

## A multi-level Thermal Comfort Assessment (TCA) to identify and mitigate heat stress risks in urban areas

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The liveability of cities worldwide is under threat by the predicted increase in intensity and frequency of heatwaves and the absence of a clear spatial overview of where action to address this. Heat stress impairs vital urban functions (Böcker and Thorsson 2014), hits the local economy (Evers et al. 2020), and brings risks for citizens' health (Ebi et al. 2021). The ongoing densification of cities may escalate the negative consequences of heat, while rising climate adaptation ambitions require new pathways to (re)design public places for a warmer climate. Currently, policy makers and urban planners rely on remote sensing and modelling to identify potential heat stress locations, but thermal comfort models alone fail to consider socio-environmental vulnerabilities and are often not applicable in different countries (Elnabawi and Hamza 2020).

In the Cool Towns Interreg project, researchers collaborated with municipalities and regions to model urban heat stress in nine North-Western European cities, to find vulnerabilities and to measure on the ground (see Spanjar et al. 2020 for methodology) the thermal comfort of residents and the effectiveness of implemented nature-based solutions. Using the Physiological Equivalent Temperature (PET) index, several meteorological scenarios were developed to show the urban areas under threat. The PET maps are complemented by heat vulnerability maps showing key social and environmental indicators. Coupled with local urban planning agendas, the maps allowed partner cities to prioritize neighbourhoods for further investigation. To this end, community amenities and slow traffic routes were mapped on top of the PET maps to identify potential focus areas.

A comparative analysis of the collated maps indicates certain spatial typologies, where vital urban activities are often influenced by heat stress, such as shopping areas, mobility hubs, principal bicycle and pedestrian routes. This project has resulted in the development of a multi-level Thermal Comfort Assessment (TCA), highlighting locations where vulnerable user groups are exposed to high temperatures. Standardized for European cities, it is a powerful tool for policy makers and urban planners to strategically identify heat stress risks and prioritize locations for adapting to a changing climate using the appropriate nature-based solutions.

Keywords: Heat Stress, Climate Change Adaptation, Physiological Equivalent Temperature (PET), Heat Vulnerabilities, Nature-Based Solutions

References

Böcker, L. and Thorsson, S. (2014). Integrated Weather Effects on Cycling Shares, Frequencies, and Durations in Rotterdam, The Netherlands. 6, (4), 468-481. doi: 10.1175/WCAS-D-13-00066.1

Ebi, K.L. et al. (2021). Hot Weather and Heat Extremes: Health risks. *The Lancet*, 398, (10301), 698-708. doi: 10.1016/S0140-6736(21)-1208-3

Elnabawi, M. H., & Hamza, N. (2020). Behavioural Perspectives of Outdoor Thermal Comfort in Urban Areas: A Critical Review. *Atmosphere*, 11(1), 51. doi: 10.3390/atmos11010051

Evers, D., Slob, G., Content, J. and Dongen, F. (2020). *Veerkracht Op De Proef Gesteld: Een verkenning van de impact van corona op binnensteden*. Den Haag: Planbureau voor de Leefomgeving.

Spanjar, G., van Zandbrink, L., Bartlett D. and Kluck, J. (2020). *Cool Towns Heat Stress Measurement Protocol: Thermal comfort assessment at street-level scale*. Amsterdam: Amsterdam University of Applied Sciences. <https://www.cooltowns.eu>

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## Regional Climate Impact Analyses for NRW - an Innovative Knowledge Transfer for Climate Adaptation

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The objective of the Evolving Regions project (ER) is to develop regional climate adaptation strategies for seven counties in NRW. Regional climate impact analyses (CIA) are prepared and used in the process of ER to identify spatial priorities for climate adaptation actions according to the guidelines of the Federal Environment Agency. The substantive objectives of the CIA are to determine the climate impacts on the smallest possible scale for the present and future scenarios according to the parallel modelling approach for the climatic influences heat, drought, heavy rainfall and flooding. Structural objectives of the CIA are a high and innovative preparation and accessibility to the results, a high transparency of the methodological approach and the deduction of a transferable and scalable approach for regional CIA in NRW.

The methodical approach can be structured in the following steps: a) scientific research regarding approaches and intentional specifications on regional CIA as well as regarding existing data; b) definition of the objectives of the CIA; c) implementation of workshops with experts, institutions and the planning practice to identify opportunities and requirements; d) implementation of geographic analyses; e) provision of the results through an interactive tool and geodata; f) conduction of workshops with the planning practice regarding the use of the results and the new tool.

Seven regional CIA were created, containing 13 identified climate impacts. The data was provided as geospatial data; in addition, interactive dashboards were created to provide the deepest possible level of information to non-GIS-affiliated users and to present the results in a structured and practical format. The CIA allows a comparative ranking of climate impacts through a spatially and scenario overlapping normalisation of the various indicators, which in turn allows a prioritisation of areas for action for climate adaptation. The CIA can be used in particular for the following areas: a) integration into formal and informal planning processes; b) support of disaster management; c) awareness raising among politicians, administrators and the public. A particular challenge is a balance between providing the deepest possible level of information and an understandable and clear data preparation for planning practice.

Keywords: risk communication, climate impact analysis, climate change adaptation, interactive tools, GIS

### References

Greiving, Stefan; Arens, Sophie; Becker, Dennis; Fleischhauer, Mark 2018: Improving the Assessment of Potential and Actual Impacts of Climate Change and Extreme Events Through a Parallel Modeling of Climatic and Societal Changes at Different Scales. *Journal of Extreme Events*. Vol. 04, No. 04

Hanger, Susanne, Stefan Pfenninger, Magali Dreyfus, and Anthony Patt. 2013. 'Knowledge and Information Needs of Adaptation Policy-Makers: A European Study'. *Regional Environmental Change* 13(1):91–101. DOI: 10.1007/s10113-012-0317-2

Neset, Tina-Simone, Tomasz Opach, Peter Lion, Anna Lilja, Jimmy Johansson. 2016. Map-Based Web Tools Supporting Climate Change Adaptation. In: *The Professional Geographer* 68 (1), S. 103–114. DOI: 10.1080/00330124.2015.1033670

UBA 2015: Vulnerabilität Deutschlands gegenüber dem Klimawandel  
(<https://www.umweltbundesamt.de/publikationen/vulnerabilitaet-deutschlands-gegenueber-dem>)

Wright, Juliane, Johannes Flacke, Jörg Peter Schmitt, Jürgen Schutze, Stefan Greiving 2021: Comparing Climate Impact Assessments for Rural Adaptation Planning in Germany and the Netherlands. In: *Urban Planning* Vol 6, No 3, p. 309-320. *Smart Urban Governance for Climate Change Adaptation*. DOI: 10.17645/up.v6i3.4269

85299

## Public participation as key for Transition

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In course of the ongoing transdisciplinary research project (RLC 2040) in the Römerland Carnuntum region (Lower Austria) 5 essential fields of action were defined regarding regional development. One of these fields dealt intensively with the challenges regarding climate, energy and mobility on a regional level. On this basis a participation process was set of to develop project ideas with people from the region regarding this future-relevant topic.

The background to this is that traditional instruments of spatial planning and regional development show deficits regarding control and innovation in the face of multidimensional challenges. Therefore, new forms of cooperation and processes of self-organization have to be initiated and institutionalized in order to support sustainability in planning, with the aim of a broad involvement of interested people in development processes of planning.

Based on a climate and energy relevant system analysis the TU Wien, Institute of Spatial Planning initiated an innovative and not methodical standardized participation process to develop project ideas in the context of “Sustainability Transitions” together with interested and committed people from the region. The participation process consisted 3 workshops and was conducted in an online format with about 15 people.

In the first workshop a target image was developed based on a thematic introduction to the field of action, in which a first consensual focus was set. The second round dealt with the path for the implementation of the project ideas to be developed, as well as their impact to support the achievement of the regional vision 2040 in context of sustainability. A first selection of committed project moderators was made and ideas on possible measures and projects were collected as well as voted on the 4 most relevant outputs for the region. Until the third workshop, the elected project moderators had time to concretize their project ideas in order to present them in the following plenary session. The main topics of the selected projects are: bike lane basic network for everyday life; folding bicycles for commuters; energy communities; collection and visualization of data bases regarding particulate matter, carbon dioxide, heat islands, and noise pollution.

Keywords: Sustainability Transition, Participation, Climate Change

### References

DENTONI, D., BITZER, V., 2015. The role(s) of universities in dealing with global wicked problems through multi-stakeholder initiatives. *Journal of Cleaner Production* 106, 68–78. URL: <https://doi.org/10.1016/j.jclepro.2014.09.050>

KLEIN, J.T., GROSSENBACHER-MANSUY, W., HÄBERLI, R., BILL, A., SCHOLZ, R.W., WELTI, M. (2001): *Transdisciplinarity: Joint problem solving among science, technology, and society: An effective way for managing complexity*. Springer Science & Business Media.

Koller, N. (2015): *Erneuerbare Energie – Gemeindeporträts für die Klima- und Energiemodellregion Römerland Carnuntum*.

Regionalentwicklungsverein Römerland Carnuntum (2021a): Infos und Themenreporte zu 5 Handlungsfeldern im Rahmen des Forschungsprojektes RLC2040. Online, URL: <https://rlc2040.at/handlungsfelder/>.

Regionalentwicklungsverein Römerland Carnuntum (2021b): Klima, EnergieMobilität. Online, URL: <https://rlc2040.at/handlungsfelder/handlungsfeld-3/>.

SCHÄPKE, N. (2018): Linking Transitions to Sustainability: Individual Agency, Normativity and Transdisciplinary Collaborations in Transition Management (PhD Thesis). Leuphana Universität, Lüneburg.

## TRACK 12: ECOLOGIES

84236

### Designing resilient urban climates with ecological shifts

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Green infrastructure, and within it trees, are vital components of urban climate resilience through providing multiple climate-regulation ecosystem services (Cortinovis et al., 2021; Cortesão & Copeland, 2022). However, climate change is leading to ecological shifts (Mooney et al., 2009) that can affect how plants are employed in climate-responsive spatial design (CRD). This calls for understanding how the impacts of climate change on tree species, and the climate-regulation urban ecosystem services (UES) they provide, can be incorporated in CRD. The objective of this presentation is to share preliminary considerations of our literature study on this topic. This literature review is guided by two questions: (1) What are the main effects of climate change on the UES provided by trees of relevance to CRD? (2) How can CRD incorporate these effects? We observe that the effects of climate change on UES involve the potential demise of species such as the European yew (*Taxus baccata*), and changes to the distribution, type and persistence of other species such as Norway spruce (*Picea abies*), which impacts UES provision (Mooney et al., 2009; Runtig et al., 2017). CRD can incorporate these effects by employing species resilient to climatic extremes, and/or allowing the smooth transition in urban ecosystems from non-built to densely built areas. The former possibility implies choosing the most adaptable tree species based on criteria such as evaporative cooling potential or tolerance to drought (Hiemstra, 2018). This short-term strategy is controversial regarding the appropriateness of native and non-native species (Alizadeh & Hitchmough, 2019). The latter deals with re-thinking the urban form, density and land uses, to support the natural shift in the geographic distribution of native species caused by climate change (Hellmann et al., 2008). This is a long-term strategy fostering the city-landscape-biodiversity interactions occurring between urban, peri-urban, and rural contexts (Haase et al., 2014).

These possibilities call for further research and stimulate innovation in CRD. The cooperation between CRD and UES experts is crucial here. Neglecting this discussion may lead to inappropriate and ill-argued approaches to urban climate resilience both in the present and in the near future.

Keywords: Climate change; Urban climate resilience; Climate-responsive design; Urban ecosystem services

#### References

Alizadeh, Behdad, and James Hitchmough. 2019. "A Review of Urban Landscape Adaptation to the Challenge of Climate Change." *International Journal of Climate Change Strategies and Management* 11 (2): 178–94. <https://doi.org/10.1108/IJCCSM-10-2017-0179>.

Cortesão, João, and Samantha Copeland. 2022. "Urban Climate Resilience." *The Palgrave Encyclopedia of Urban and Regional Futures*, 1–6. [https://doi.org/10.1007/978-3-030-51812-7\\_205-1](https://doi.org/10.1007/978-3-030-51812-7_205-1).

- Cortinovis, Chiara, Davide Geneletti, and Katarina Hedlund. 2021. "Synthesizing Multiple Ecosystem Service Assessments for Urban Planning: A Review of Approaches, and Recommendations." *Landscape and Urban Planning* 213 (November 2020): 104129. <https://doi.org/10.1016/j.landurbplan.2021.104129>.
- Haase, Dagmar, Neele Larondelle, Erik Andersson, Martina Artmann, Sara Borgström, Jürgen Breuste, Erik Gomez-Baggethun, et al. 2014. "A Quantitative Review of Urban Ecosystem Service Assessments: Concepts, Models, and Implementation." *AMBIO* 43: 413–33. <https://doi.org/10.1007/s13280-01>.
- Hellmann, Jessica J., James E. Byers, Britta G. Bierwagen, and Jeffrey S. Dukes. 2008. "Five Potential Consequences of Climate Change for Invasive Species." *Conservation Biology* 22 (3): 534–43. <https://doi.org/10.1111/j.1523-1739.2008.00951.x>.
- Hiemstra, J.A. 2018. *Groen in de Stad: Soortentabel*. Wageningen: Wageningen University & Research, Topsector Tuinbouw en Uitgangsmaterialen, VHG, Royal Flora Holland, De Groene Stad, gemeente Den Haag. <http://edepot>.
- Mooney, Harold, Anne Larigauderie, Manuel Cesario, Thomas Elmquist, Ove Hoegh-Guldberg, Sandra Lavorel, Georgina M. Mace, Margaret Palmer, Robert Scholes, and Tetsukazu Yahara. 2009. "Biodiversity, Climate Change, and Ecosystem Services." *Current Opinion in Environmental Sustainability* 1 (1): 46–54. <https://doi.org/10.1016/j.cosust.2009.07.006>.
- Runting, Rebecca K., Brett A. Bryan, Laura E. Dee, Fleur J.F. Maseyk, Lisa Mandle, Perrine Hamel, Kerrie A. Wilson, Kathleen Yetka, Hugh P. Possingham, and Jonathan R. Rhodes. 2017. "Incorporating Climate Change into Ecosystem Service Assessments and Decisions: A Review." *Global Change Biology* 23 (1): 28–41. <https://doi.org/10.1111/gcb.13457>.

84135

## THE EMSCHER CONVERSION AS A WINDOW OF OPPORTUNITY FOR A TRANSFORMATIVE APPROACH TO CLIMATE CHANGE ADAPTATION IN THE RUHR METROPOLIS

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The Emschergenossenschaft and Lippeverband is one of Germany's largest water boards and endorses the role of a public service provider around the water cycle. One of our main goals consists in strengthening the blue and green infrastructure in the Ruhr Metropolis, a region inhabited by more than 5 million people and composed of 53 municipalities. In this case, The Emscher-Conversion can be considered as a window of opportunity for the development of blue and green infrastructure. The demise of the mining industry in the region has made it possible to drain wastewater in closed underground sewers, and step by step to transform the river and its subsidiary waterways into near-natural bodies of water. From the end of 2021 on, the Emscher and its tributaries are free of wastewater. Channelling wastewater into an underground canal has opened new spaces for innovation above ground. In this context, a wide range of different community based projects, targeting the areas of education, community involvement, residential improvement, culture and ecology, have been implemented. For example, the Phoenix Lake in Dortmund has a positive impact on sustainable urban development and housing, and at the same time, serves flood protection by allowing 100,000 m<sup>3</sup> of water to be discharged into the lake.

Beyond this watercourse-based cross community approach to urban development, we engaged in a deeper dialogue with climate change adaptation in the city, by creating the project "Future Initiative Water in the Cities of Tomorrow" in 2014. With an initial budget of 250 million Euros funded by the Ministry of Environment its main goal consists in implementing different measures of climate change adaptation in the Ruhr metropolis area, such as green roofs and facades, in order to achieve 25% less Stormwater runoff to wastewater treatment plants and a 10% increase in evaporation in the whole region until 2030.

Our project stresses the importance of inter-community cooperation and urges to reflect about a holistic and regional approach to climate change in the city, particularly when taking into consideration the highly heterogeneous and poly-centric structure of the Ruhr Metropolis, with different local actors, public administrations and interests.

Keywords: Emscher-Conversion; Ruhr Metropolis; Climate Change Adaptation; Regional Governance

### References

Paetzel, U.; Giga, A.; Treuke, S.: Emscher-Lippe-Gebiet: Klimaresiliente Region mit internationaler Strahlkraft, Wasserwirtschaft Wassertechnik 11-12/2020.

Treuke, S.; Kroos, A.: Wassersensible und klimagerechte Stadt- und Regionalentwicklung im Ruhrgebiet, Wasser und Abfall, 11, 2021

Grün, E., Becker, M., Schumacher, R.: Schafft besseres Klima: integrale urbane Wasserwirtschaft, Transforming Cities 1/2017.

Grün, E., Best, H.-J., Spengler, B.: Die Zukunftsinitiative „Wasser in der Stadt von morgen“ – Der Maßnahmenplan 2020+, Korrespondenz Wasser 2019 (12)/5.

Grün, E.; Teichgräber, B.; Giga, A.; Pfister, A.: Stadtentwicklung in Zeiten des Klimawandels – der Phoenix See in Dortmund, Transforming Cities

85211

## Trade-offs in the implementation of nature-based solutions to curb urban heat islands: green gentrification in ‘Red Vienna’?

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Questions about social (in)justices regarding access to, as well as benefits and usage of, nature-based solutions (NbS) have become more prominent not only regarding the current SARS-CoV-2 pandemic, but also regarding the implementation of climate policies. Much of the debate focuses on the positive impacts of NbS to regenerate and renature urban areas, while critical studies point to trade-offs and ambiguities. The latter range from the unequally distributed access to, and usage of, urban green and blue spaces such as parks, green roofs and facades, street trees, hedges, rivers, canals, and ponds (Li & Liu 2016; Arnberger et al. 2017) to gentrification processes as (un-)intended consequences fuelled by greening measures contextualised by other trends and policy areas, such as housing (Anguelovski 2016, Rigolon & Nemeth 2019). Building on this literature, this presentation aims to reflect on past, current and future developments in relation to the governance and management of current and new green(ed) spaces in the city of Vienna. It focuses on two main questions: First, how the City's aim of improving access to green spaces has been articulated and justified in its strategic urban planning in recent years. Second, what are the dominant social-spatial dynamics regarding (un-)even access to green spaces and how do they relate to policy and contextual developments. Building upon a mixed-method approach that integrates policy and social-spatial analysis we investigate social trade-offs and the potential threat of green gentrification in Vienna. Preliminary results show that Vienna strategically adopts and implements various NbS measures with the aim of combating urban heat islands and improving the quality of life of its citizens. Yet, socio-temporal dynamics hint at the risk of green gentrification, particularly for low-income households in areas where private, historic rental housing predominates. While the City of Vienna shows little awareness of green gentrification, we conclude that potential trade-offs need to be considered in planning, with planners and other key advocates pushing harder to adapt already existing (housing and social) policy instruments at different policy levels to foster socially just NbS implementation and management.

Keywords: nature-based solutions, greening, green gentrification, social justice

### References

Anguelovski, I. (2016): From toxic sites to parks as (green) LULUs? New challenges of inequity, privilege, gentrification, and exclusion for urban environmental justice. *Journal of Planning Literature* 31(1):23-36.

Arnberger, A.; Allex, B.; Eder, R. et al. (2017): Elderly resident's uses of and preferences for urban green spaces during heat periods. *Urban Forestry & Urban Greening* 21:102-115.

Li, H.; Liu, Y. (2016): Neighborhood socioeconomic disadvantage and urban public green spaces availability: A localized modeling approach to inform land use policy. *Land Use Policy* 57:470-478.

Rigolon, A.; Németh, J. (2019): Toward a socioecological model of gentrification: How people, place, and policy shape neighborhood change. *Journal of Urban Affairs* 41(7):887-909.

85310

## Dutch farmers' preferences for the application of circular agriculture: organic matter as a soil conditioner: A choice experiment.

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Soil health and quality play a crucial role in plant nutrition, quality and growth, and water retention, therefore sustaining global food production and food security, as well as climate change mitigation (Lal et al., 2007; Komatsuzaki & Ohta, 2007).

While soil conditioners based on organic residuals can greatly contribute to ensuring soil health, their adoption is possibly thwarted not only by farmers' skepticism, but also weak or adverse policy frameworks (Prager et al., 2012; Ronchi et al., 2019; Thorsøe et al., 2019). ...)

This study aims to understand exogenous influences on farmers' decisions in a way that helps gain an overview of supportive policy scenarios. This is summarized by the following research question: which policy attributes or properties are favourable for the uptake of soil conditioners based on organic residuals?

A Choice Experiment (see e.g. Kjaer, 2005) was developed to test farmers' sensitivity to regulations, logistical aspects, quality, safety, cost and availability of subsidies for four types of soil conditioners based on organic residuals (unprocessed roadside mowing residuals, ditch mowing residuals, green waste from agriculture and compost). The Choice Experiment was part of a survey sent out through agrarian collectives and cooperatives to around 400 intensive producers (dairy, arable and mixed) in the Netherlands. The talk will provide an overview about the preliminary results of the choice experiment and discuss how these can support policy-making.

Keywords: Sustainable soil management practices, Circular Agriculture, Choice Experiment, Stated Preference Method

### References

- Lal, R., Follett, R. F., Stewart, B. A., & Kimble, J. M. (2007). Soil carbon sequestration to mitigate climate change and advance food security. *Soil science*, 172(12), 943-956.
- Kjaer, T. (2005). A review of the discrete choice experiment-with emphasis on its application in health care.
- Komatsuzaki, M., & Ohta, H. (2007). Soil management practices for sustainable agro-ecosystems. *Sustainability Science*, 2(1), 103-120.
- Ronchi, S., Salata, S., Arcidiacono, A., Piroli, E., & Montanarella, L. (2019). Policy instruments for soil protection among the EU member states: A comparative analysis. *Land Use Policy*, 82, 763-780.
- Prager, K., Prazan, J., & Penov, I. (2012). Soil conservation in transition countries: the role of institutions. *Environmental Policy and Governance*, 22(1), 55-73.

Thorsøe, M. H., Noe, E. B., Lamandé, M., Freluh-Larsen, A., Kjeldsen, C., Zandersen, M., & Schjøning, P. (2019). Sustainable soil management-Farmers' perspectives on subsoil compaction and the opportunities and barriers for intervention. *Land Use Policy*, 86, 427-437.

84117

## Adaptation strategies for drought in rural areas

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Strong climate change potentially leads to a sevenfold increase in drought occurrence in western Europe (Hari et al. 2020). Drought-related challenges are currently only little discussed in German society which is problematic because of the increasing and widespread appearances of draughts, their creeping tendency of occurrence and little chance in mitigation. Rural areas are highly affected by drought, as forestry and agriculture occupy large areas of land use and are heavily dependent on water availability (Deutscher Bundestag 2019). Therefore, the question of how rural communities can address drought-related challenges must be answered.

The project objective is to identify and implement requirements and options to act on drought and its impacts in the case study of the rural town of Olfen (Western Germany). Thus, it is necessary to assess the consequences of drought in a holistic, model-based manner through climate impact analysis to describe how current and future climatic conditions impact current and future (spatial) sensitivities (Greiving 2018, UBA 2017). Based on the analysis adaptation strategies and measures can be derived.

In the fields of agriculture, forestry, urban development and water management different climate challenges occur that require further consideration based on their relevance for the population. Those actions need to be strategically coordinated so that all measures complement the goal to minimise the negative effects of drought on the population. To be in accordance with the adaptation needs, strategies must be pursued in coordination with all concerned parties to evoke commitment as well as prioritise action to interdisciplinary address the challenges.

Concluding the project, a module-based guideline on dealing with drought at the municipal level is going to be developed based on the experience gained in the town of Olfen.

Keywords: Drought, Climate change, Climate adaption, Germany, Rural municipality

### References

Deutscher Bundestag (2019): Bericht zur Risikoanalyse im Bevölkerungsschutz 2018. Drucksache 19/9521.

Greiving, S., Arens, S., Becker, D., & Fleischhauer, M. (2018) Improving the Assessment of Potential and Actual Impacts of Climate Change and Extreme Events Through a Parallel Modeling of Climatic and Societal Changes at Different Scales. *Journal of Extreme Events*, 4(4). <https://doi.org/10.1142/S2345737618500033>

Hari, Vittal; Rakovec, Oldrich; Markonis, Yannis; Hanel, Martin; Kumar, Rohini (2020): Increased future occurrences of the exceptional 2018-2019 Central European drought under

global warming. In: Scientific reports 10 (1), S. 12207. DOI: 10.1038/s41598-020-68872-9.

Umweltbundesamt (UBA 2017): Leitfaden für Klimawirkungs- und Vulnerabilitätsanalysen: Empfehlungen der Interministeriellen Arbeitsgruppe Anpassung an den Klimawandel der Bundesregierung

84567

## Relationship between urban compactness and air pollution: a case study of the main urban area of Chongqing

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Air pollution affects people's health. How to reduce air pollution and let people live in an environment with high air quality has always been a very important research topic. Previous studies have shown that there is an inverted U-shaped correlation between urban compactness and air pollution, indicating that compact cities can reduce air pollution to a certain extent, but too compact will aggravate air pollution. However, at present, a unified evaluation standard has not been formed for the appropriate compactness of the city. Therefore, taking the main urban area of Chongqing as the research area, this paper comprehensively evaluates the urban compactness from the four aspects of population, land, economy and transportation through the statistical data of recent 10 years, and evaluates the air pollution degree in the area through the air quality index. The Moran index is further used to determine whether the air quality index of the main urban area of Chongqing has spatial correlation in spatial distribution, and the geographical weighted regression model is introduced to determine the influencing factors of urban air pollution from the four aspects of population, land use, economy and transportation. The results show that: (1) urban compactness and spatial pollution degree have significantly different characteristics in spatial distribution. (2) The improvement of urban compactness can reduce air pollution to a certain extent. (3) A reasonable layout of population, land, economy and transportation will help to reduce air pollution. Finally, based on this, this paper puts forward the corresponding urban compactness control strategy. The study will help the city to reasonably control the development intensity and guide a healthy urban development model.

Keywords: Air Pollution; Compact Cities; GWR Model; Chongqing

### References

- WHO (2011). Air quality and health. WHO Media Centre, 313.
- Zhang, N., Yu, K., Chen, Z., (2017). How does urbanization affect carbon dioxide emissions? A cross-country panel data analysis. *Energy Policy* 107, 678–687.
- Miao, L., (2017). Examining the impact factors of urban residential energy consumption and CO<sub>2</sub> emissions in China evidence from city-level data. *Ecology Indicator*. 73, 29e37.
- Gordon, P., & Richardson, H. (1997). Are compact cities a desirable planning goal? *Journal of the American Planning Association*, 63, 95–107.
- Hu, J., Huang, Y., Du, J. (2021). The Impact of Urban Development Intensity on Ecological Carrying Capacity: A Case Study of Ecologically Fragile Areas. *Int. J. Environ. Res. Public Health* 2021, 18,7094.

84423

## Integrating ecosystem knowledge into spatial planning: insights from Slovenia

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Humanity influenced the environment and the ecosystems within it by creating cultural landscapes through cultivation and construction of landscape elements in various contexts and structural patterns. A meaningful integration of the ecosystem knowledge into spatial planning has been highlighted as necessary, with an emphasis on the importance of the landscape elements or other biophysical structures for provision of ecosystem services. Establishing this connection represents a possible integration of ecosystem knowledge into decision making on future spatial planning and land use as an important contribution to the efficiency of spatial planning. The landscape, compared to the ecosystem, represents a more applicable framework in the planning and implementation processes, since the general public, professional practitioners and other stakeholders identify easier with the landscape as their living and working environment rather than with an ecosystem.

Landscape elements with their ecosystem services potential are in focus of the study in order to secure the role of human activity as an integral part of the environment and to broaden the treatment of ecosystem services beyond evaluation of disturbances in the ecological balance. Moreover, landscape elements are selected as basic units instead of LULC types since they are critiqued as too coarse for supporting planning, conservation and decision-making processes especially on the local level as well as not accurate enough to cover spatial heterogeneity within different ecosystem conditions and different landscape types. The selection of landscape elements that deliver ecosystem functions derives from the findings of previous studies and from conservation normatives within Slovenian legislation, supported by verification through field surveys on representative landscape character types in Slovenia based on the landform type (topography), dominant landcover and land use.

The purpose of this study is to analyse the role of landscape elements through their functions supporting ecosystem services and to create a comprehensive insight into their conservation, its shortcomings and potentials. The analysis includes a review of the legislation in the field of spatial planning, landscape guidelines within spatial planning documents, project documentation and management plans for protected nature areas. The analysis is made in order to determine the characteristics of landscape within the spatial planning system, understand the problems, key shortcomings of the landscape elements conservation within spatial planning and search for possible links between mechanisms in the field of spatial planning.

Keywords: landscape elements, spatial planning, landscape conservation, ecosystem services, policy analysis

### References

Bastian, O., Grunewald, K., Syrbe, R.-U., Walz, U., & Wende, W. (2014). Landscape services: The concept and its practical relevance. *Landscape Ecology*, 29(9), 1463–1479.

<https://doi.org/10.1007/s10980-014-0064-5>

Blaschke, T. (2006). The role of the spatial dimension within the framework of sustainable landscapes and natural capital. *Landscape and Urban Planning*, 75(3), 198–226.  
<https://doi.org/10.1016/j.landurbplan.2005.02.013>

Englund, O., Berndes, G., & Cederberg, C. (2017). How to analyse ecosystem services in landscapes—A systematic review. *Ecological Indicators*, 73, 492–504.  
<https://doi.org/10.1016/j.ecolind.2016.10.009>

Schmidt, K., Martín-López, B., Phillips, P. M., Julius, E., Maman, N., & Walz, A. (2019). Key landscape features in the provision of ecosystem services: Insights for management. *Land Use Policy*, 82, 353–366. <https://doi.org/10.1016/j.landusepol.2018.12.022>

Vallés-Planells, M., Galiana, F., & Van Eetvelde, V. (2014). A classification of landscape services to support local landscape planning. *Ecology and Society*, 19(1).  
<https://doi.org/10.5751/ES-06251-190144>

84461

## The Food Atlas of Monsampolo del Tronto: leveraging local government action to improve the sustainability of local food systems

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Agriculture and food supply chains are inextricably linked to the issue of climate change. Experts estimate that about a quarter of the greenhouse gas emissions come from the agri-food sector. Unsustainable agri-food practices, such as the use of chemical pesticides in agriculture, do contribute to soil, water and air pollution, harm biodiversity, and deteriorate soil fertility. While the transition towards more sustainable food systems requires an effective coordination between different policy sectors, planning action can itself contribute in a relevant way to greener and healthier food chains. For instance, adequate planning policies can shape specific land-use regulations oriented to protect the most versatile agricultural land, or can require new urban developments to incorporate agriculture in dedicated areas, thus giving local communities the opportunity to grow their own food.

Within this framework, this contribution wants to explore the role of planning policies in improving the sustainability of local food systems by presenting the results of a research project titled “The Food Atlas of Monsampolo del Tronto” (2020-21), promoted and funded by the University of Camerino, the CARISAP Foundation and the Municipality of Monsampolo del Tronto, Italy. The project has the objective of investigating the local food system in the Tronto Valley – a territorial context in Marche region, central Italy – by focusing on one of its typical municipalities (Monsampolo del Tronto) as the case-study of the research. The Tronto Valley is a long linear city stretching from the town of Ascoli Piceno all the way eastward to the Adriatic coast. It is a context characterized by a strong interdependence between urban and rural uses and by the reliance of local economy on conventional food market. The research has the ambition of guiding the local government to elaborate a Food Plan, interpreted as a policy tool that can ensure adequate levels of coordination between the various actors of the agri-food sector, and outline the strategies and the concrete actions needed to shape a more sustainable local food system.

Keywords: food, sustainable food system, food atlas, food plan, agriculture, food supply chain

### References

- Cinciripini, D., Lazzarini, L., Marchionni, S., Sargolini, M., Stimilli, F. (2021, eds), *Atlante del cibo. Monsampolo e la valle del Tronto*, Firenze: Altralinea;
- Dansero, E., Marino, D., Mazzocchi, G., Nicolarea, Y. (2020, eds), *Lo spazio delle politiche locali del cibo: temi, esperienze e prospettive*, Torino: Celid;
- European Commission (2020), *Farm to Fork Strategy. For a fair, healthy and environmentally-friendly food System*, available online at [https://ec.europa.eu/food/farm2fork\\_en](https://ec.europa.eu/food/farm2fork_en);
- Galli, M., Lardon, S., Marraccini, E., Bonari, E. (2010, eds), *Agricultural management in peri-urban areas. The experience of an international workshop*, Pisa: Felici editore;

Marino, D. & Mazzocchi, G. (2019), La pianificazione alimentare: casi studio, Working paper: novembre 2019, Rete Rurale Nazionale 2014-2020;

Morgan, K. (2009), Feeding the city: the challenge of urban food planning, *International Planning Studies* 14: 341-348;

Pothukuchi K. & Kaufman J. (1999), Placing the food system on the urban agenda: The role of municipal institutions in food systems planning, *Agriculture and Human Values* 16: 213-224;

Viljoen, A. & Wiskerke, J. (2012, eds.), *Sustainable Food Planning: evolving theory and practice*, Wageningen: Wageningen Academic Publisher.

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## Comparative analysis of urban microclimate data using S·DoT and LANDSAT 8 and analysis of difference in Heat Island Intensity in Seoul

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Seoul, Korea, was indiscriminately developed and destroyed by rapid urbanization since the 1960s, and the urban heat island phenomenon has also intensified. In 1961, the average temperature in Seoul was 12.4°C, while in 2019, the average temperature in Seoul increased by 1.1°C to 13.5°C. In response, the Seoul Government is trying to lower the city's temperature by greening projects, energy-reducing public architecture, road temperature reduction, and carbon emissions, and has installed 2,500 S·DoT(urban data sensors) across Seoul from 2020 to 2022 to measure 10 types of climate-related data. This study aims to examine the temperature of Seoul through the atmospheric temperature and LANDSAT8 surface temperature data of city data sander S·DoT installed throughout Seoul, calculate the Urban Heat Island Strength, and present it as basic data for Urban Heat Island research in Seoul.

First, the Urban Heat Island Strength was calculated by the surface temperature through the LANDSAT8 image and the air temperature in Seoul through S·DoT and suburban areas air temperature through national weather observation(AWS) data. Second, in the case of LANDSAT8, the temperature of Seoul and the temperature of the suburbs showed a difference of about 0.15°C, while in the case of S·DoT, there was a large difference of 0.87°C. Third, when comparing the two data, the difference in Urban Heat Island Strength was 0.71, showing a large difference. Through these results, it is intended to present basic data for urban heat island research using urban data sensors in Seoul.

Keywords: Urban Heat Island, UHII, Microclimate, Urban Sensor, S·DoT, Landsat8

### References

1. Orsolya Gémes, Zalán Tobak, Boudewijn van Leeuwen (2016), "Satellite Based Analysis of Surface Urban Heat Island Intensity", *Journal of Environmental Geography* 9(1-2), 23–30.
2. Park, C., Lee, D., Sung, S., Park, J., Jeong, S. (2016). "Analyzing the Diurnal and Spatial Variation of Surface Urban Heat Island Intensity Distribution - Focused on 30 cities in Korea -", *Journal of Korea Planning Association* 51(1), 125-136
3. Park, H. (2020). "Comparison of Temperatures and Spatial Resolutions between Urban Sensors and National Weather Observations (ASOS, AWS) for Urban Heat Island Intensity Analysis", *J Korean Soc Hazard Mitig*; 21(3): 39-48.
4. T. R. Oke (1967), "City size and the urban heat island", *Atmospheric Environment*, Volume 7, 769-779.
5. Seoul Open Data, <https://data.seoul.go.kr/>
6. USGS, <https://earthexplorer.usgs.gov/>

84657

## The future in the hands of the young generation. Sustainable development through the eyes of generation Z

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Global environmental degradation processes have been evident for many years. Striving for a good quality of life for all species requires cooperation and responsibility among all current generations. The limitation of natural resources, as well as the scale and nature of destruction are determinants of transformation of the directions of thinking and acting. Visions and beliefs among people are also changing from generation to generation. As a result, in order to make our planet a welcoming space for diverse audiences, it is necessary to examine the knowledge and views of the young population, as the future lies in their hands.

The aim of this paper is to present the results of a study on the perception of the concept of sustainable development by generation Z in Poland. Literature studies and computer-assisted web interviews (CAWI) were used as a research method. The survey questionnaire consisted of 22 questions, which were divided into four main thematic blocks covering general issues related to sustainable development, questions on formal and legal-organizational issues and aspects related to everyday life and education. The survey was conducted in November 2021. The sample consisted of 1172 individuals born between 1995 and 2010. The results were processed using Microsoft Excel and IBM SPSS.

The result of the study is the identification of both positive and negative issues related to the development of urban centers in accordance with the concept of sustainable development in the opinion of generation Z. In addition, the study provided up-to-date results regarding generation Z's assessment of sustainable development activities in their immediate environment, as well as on a national and European scale. The results of the study also indicate the differences between generations in terms of their interest in the discussed issue. Additionally, the analysis made it possible to determine the future directions of development of the concept, which generation Z considered most important and necessary.

Keywords: sustainable development, public awareness, future

### References

Bolton M., Public sector understanding of sustainable development and the sustainable development goals: A case study of Victoria, Australia, *Current Research in Environmental Sustainability*, Volume 3, 2021, 100056. <https://doi.org/10.1016/j.crsust.2021.100056>

Chakravarty D., Mandal S.K., Is economic growth a cause or cure for environmental degradation? Empirical evidences from selected developing economies, *Environmental and Sustainability Indicators*, Volume 7, September 2020, 100045. <https://doi.org/10.1016/j.indic.2020.100045>

Cohen M., Wiek A., Kay B., Harlow J., Aligning Public Participation to Stakeholders' Sustainability Literacy—A Case Study on Sustainable Urban Development in Phoenix, Arizona, [in:] Planning, Development and Management of Sustainable Cities, MDPI, 2019.  
<https://doi.org/10.3390/su7078709>

Moreira P.A.S., Inman R.A., Hanel P.H.P., Faria S., Araújo M., Pedras S., Cunha D., Engagement and disengagement with Sustainable Development: Further conceptualization and evidence of validity for the Engagement/Disengagement in Sustainable Development Inventory (EDiSDI), Journal of Environmental Psychology, Volume 79, 2022, 101729.  
<https://doi.org/10.1016/j.jenvp.2021.101729>

Singh, A. P., Dangmei, J., Understanding the generation Z: the future workforce. South-Asian Journal of Multidisciplinary Studies, 2016, 3(3), 1-5.

Thomas V., Chindarkar N., Evaluation, Economics, and Sustainable Development. In: Economic Evaluation of Sustainable Development. Palgrave Macmillan, Singapore, 2019.  
[https://doi.org/10.1007/978-981-13-6389-4\\_1](https://doi.org/10.1007/978-981-13-6389-4_1)

85194

## Rethinking green infrastructures planning in peri-urban areas: a socio-ecological approach to agropark networks in metropolitan regions

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Peri-urban areas are pivotal in the transitioning of metropolitan areas towards sustainability, in the achievement of the SDG and in implementing the European Green Deal. Ensuring liveable communities is deeply connected to the maintenance of the natural capital and ecosystem services. Green infrastructures have shown to play a core role in dealing with persisting challenges, such as the adaptation to climate change, promoting territorial cohesion and green economy, and avoiding biodiversity loss. Despite the acknowledged pivotal role in peri-urban areas in addressing these challenges, the urban-rural divide (Gren and Anderson, 2018) still present in territorial planning systems undermines progression towards the integration of ecosystem services provision in a coherent way.

In this presentation we argue that meeting these challenges in metropolitan regions can be better achieved through green infrastructure planning when associated with sustainable food systems. Despite the emergence of agroparks in Europe, some decades ago, as a land-based proposal for complementing food production with other urban and peri-urban land uses, the cohesive coupling with spatial planning tools is still lagging behind.

Our research explores the multi-dimensional layering of the network concept as a “boundary object” (Star, 2010) – approaching it from sociological (Castells, 2004) and ecological (Forman, 2014) joint perspectives and placing it in the theoretical framework of spaces of places, and spaces of flow as provided for multiple species. By taking advantage of the Living Lab setting of the ROBUST project (urban-rural.eu) in the Metropolitan Area of Lisbon, and inspired by transdisciplinary research in sustainability science (Lang et al., 2012), the concept of agropark is scrutinized based on interviews with local and regional stakeholders and complementary spatial analysis. In the absence of previous experience in the Metropolitan Area of Lisbon or in Portugal, based on results achieved we will share the advances on a proposal for structuring a metropolitan agropark network, both conceptually and spatially, critically incorporating it in the Portuguese planning and policy framework to promote urban-rural synergies.

**Keywords:** Green infrastructures, sustainable food systems, spaces of flow, spaces of places, living lab, urban-rural connections

### References

- Castells, M. (2004). *The Network Society*. Massachusetts: Edward Elgar Publishing, Limited.
- Forman, R. (2008). *Urban Regions*. Cambridge: Cambridge University.
- Gren, Å., Andersson, E. (2018). Being efficient and green by rethinking the urban-rural divide — Combining urban expansion and food production by integrating an ecosystem service perspective into urban planning. *Sustainable Cities and Society*; 40: 75–82. DOI: 10.1016/j.scs.2018.02.031.

Lang, D.; Wiek, A.; Bergmann, M.; Stauffacher, M.; Martens, P.; Moll, P.; Swilling, M.; Thomas, C. (2011). Transdisciplinary research in sustainability science: practice, principles, and challenges . Sustainability science. 25 - 43. DOI:10.1007/s11625-011-0149-x

Star, S. (2010). This is Not a Boundary Object: Reflections on the Origin of a Concept. Science, Technology, & Human Values 601-617. DOI:10.1177/0162243910377624

85371

## From the Ground Up: Regional Design in the Alabama Black Belt

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The Black Belt is a narrow socio-geographical region spanning much of the American South. Approximately 30 miles in width, the Black Belt stretches over 300 miles from northern Mississippi to western Alabama. The name “Black Belt” was given to this patchwork of forest and prairie in the early 19th century as a direct reference to its dark, exceptionally fertile topsoil. In time, this soil would set off a chain reaction by paving the way for extremely high the rates of labor-intensive cotton production during the Antebellum Period which would then contribute considerably to the concentration of enslaved Africans in the region and eventually, after the Collapse of the Confederacy during the American Civil War, result in a regional legacy of racialized poverty, enduring white supremacy, and an insidious neglect of basic human rights that endures to this day.

It is in this historical context—and with this understanding of the physical earth underfoot as primary grounds for the successful making or unmaking of a region—that a small cohort of students from Wentworth Institute of Technology set out on a semester-long investigation of design at the regional scale within the Alabama Black Belt. Through iterative mapping, socio- and eco-spatial analyses, and the diagramming of various relationships, processes, and flows across the region, students devised a strategy to develop a network of interrelated design interventions across the region as an alternative to more formal, top-down modes of rural urbanization and regional development.

The many investigated and proposed interventions—ranging from post-industrial recreation spaces and ecological sanitation infrastructure to community-supported agriculture distribution centers and the revitalization of Civil-Rights-era downtowns—all, as a collection, challenge normative perceptions of rural space as zones of extraction, disposal, and retreat and, instead, posit the rural end of the Transect as a place for contemporary and future human flourishing. Moreover, and perhaps more critically still, the work of this design-research studio, at its core, intends to draw into question the city-centric approach to the planning and design of a more equitable, just, and resilient future that has become so pervasive among design and planning educators and practitioners. By beginning this work with students, a new professional perspective that is inclusive of design for all people at all points along the rural-to-urban Transect can be built from the ground up.

Keywords: regional planning, restorative spatial justice, ecological urbanism, urban metabolism, rural spaces, pedagogy

### References

1) Mark Mulligan, Associate Dean of the School of Architecture and Design, Wentworth Institute of Technology, mulliganm3@wit.edu. (employer, supervisor)

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## Green Space Creation in Coordination with Healthy Cities Policy in Japan

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Healthy Cities Policies are undertaken in Japan for over 18 years since 2003 and have been promoting health as well as providing the sufficient green spaces through collaborative working of different sections within local government. They are primarily responsible for distinctive themes such as health, grounds maintenance, sport, community development in plan making and taking actions, while sharing the common goals to create more green spaces for promoting citizens' health.

In this study, we reviewed and discussed Green Space Policies in coordination with Health Promotion Plans and Healthy Cities Policies by literature reviews. Then, we undertook six case studies in Japan which have joined the Alliance for Healthy Cities (AHC) in Japan, as well as developing Green Space Policies and implementing projects for creation and utilization in coordination with Health Promotion Plans and Healthy City Policies as follows; Nagoya and Tahara cities in Aichi Prefecture, Nagareyama city in Chiba Prefecture, Fujieda and Hamamatsu cities in Shizuoka Prefecture, and Suita city in Osaka Prefecture.

From the findings, Healthy City Strategy can promote and support actions towards the aim of the declaration of being as a Healthy Cities. In some pioneering cases, responsible sections overarching different departments are newly created within main policies on Health Promotion Plans and Healthy City Strategy. Furthermore, a dedicated coordination team with outlining comprehensive action plans supporting city-wide approaches together with community development. Thus, the coordination beyond different departments can be evaluated as the outcomes of coordination efforts between cross-departments on the delivery of the plans.

In conclusion, two key factors were clarified from viewpoints of the coordination of those plans and policies; to seek for the suitable size of cities for cross-sectional collaboration on plan-making process; and to explore the positive effects of Healthy City Policies to support and promote Green Space Policies by integrated planning of health with providing the sufficient green spaces with social welfare viewpoint.

**Keywords:** Healthy Cities; Sustainable Development Goals; Accessibility; Green Spaces; Local Partnership

### References

Alliance for Healthy Cities, Japan Chapter (2013). What is the Alliance for Healthy Cities? <https://japanchapter.alliance-healthycities.com/>

Barton, H, Grant, M., Mitcham, C., & Tsourou, C. (2009). Healthy urban planning in European cities. *Health Promotion International*, 24(1), i91–i99. <https://doi.org/10.1093/heapro/dap059>

Dempsey, N., Burton, M. & Duncun, R. (2016). Evaluating the effectiveness of a cross-sector partnership for green space management: The case of Southey Owlerton, Sheffield, UK. *Urban Forestry & Urban Greening*, 15, 155-164. <https://doi.org/10.1016/j.ufug.2015.12.002>

Lynn, C. (2018). Policy Review - The future of Public Parks in England: policy tensions in funding, management and governance. *People, Place and Policy*, 12/2, 58-71. <https://doi.org/10.3351/ppp.2018.9443828693>

Morioka, T., Ozaki, T. & Kinoshita, T. (2014). Policy Framework and Performance Indicators of Members of WHO Healthy City Network in Japan towards Inclusive and Integrated Health (In Japanese). *Proceedings of infrastructure planning, Japan Society of Civil Engineers*, 1-12. [http://library.jsce.or.jp/jsce/open/00039/201406\\_no49/pdf/335.pdf](http://library.jsce.or.jp/jsce/open/00039/201406_no49/pdf/335.pdf)

World Health Organisation, Regional Office for Europe. (2017a). *Urban Green Spaces: A brief for action*. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/342289/Urban-Green-Spaces\\_EN\\_WHO\\_web3.pdf](https://www.euro.who.int/__data/assets/pdf_file/0010/342289/Urban-Green-Spaces_EN_WHO_web3.pdf)

World Health Organisation, Regional Office for Europe. (2017b). *Urban Green Space Interventions and Health*. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/337690/FULL-REPORT-for-LLP.pdf](https://www.euro.who.int/__data/assets/pdf_file/0010/337690/FULL-REPORT-for-LLP.pdf)

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## Co-creation for Climate Change. Responsible Research & Innovation Approach

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Territorial Responsible Research and Innovation Fostering Innovative Climate Action (TeRRIFICA) emerged to influence climate change mitigation and adaptation policies and foster competence for climate change adaptation and mitigation in six European regions. One focus is responsible research and innovation (RRI) and the co-creation of knowledge. In a transdisciplinary partnership, the H2020 project TeRRIFICA brings together three research institutions, three non-profit organizations, one public association of universities and one public institution for science promotion. The main project goals are: to involve citizens in agenda-setting processes corresponding to climate change challenges; to develop Climate Change Adaptation Plans that will lead to institutional and governance change; to develop, test and evaluate concrete actions (pilots) focused on mitigation of and adapting to climate change issues; to design and implement a crowd-mapping tool for identification of climate change effects; to enhance the Responsible Research & Innovation principles in local and regional policy.

The climate change challenges affect regional innovation systems that need to develop new approaches, new forms of collective actions between public and private stakeholders as well as new solutions with the aim to address social challenges through innovation. In TeRRIFICA project, we focus on those interactions, using the Quintuple Helix model approach that adds the fifth dimension – the Environment, and sets the stage for sustainability priorities and considerations so that nature is central and equivalent component of and for knowledge production and innovation.

In our presentation we will focus on the following aspects: 1. the crowd-mapping process and its results from six pilot regions; 2. the co-creation process within climate actions in Poznań Agglomeration as a case study of involving citizens in the climate change adaptation and mitigation plan. The results (dated on February 2022) include 1614 spots from six pilot regions. About 73% of pins were added in: Serbia (Belgrade), Belarus (Minsk), and Poland (Poznań Agglomeration). Most of the points (45,5%) are linked to the air temperature category. The fewest points (7,7%) were added in the wind category. 58,2% of total pins represent negative aspects of mapped spots, 41,8% positive ones. Those findings are the reference points for climate actions: co-created innovative projects implemented in a partnerships of local communities. In our presentation we will try to determine the role, competence, and scope of activity of relevant stakeholders within climate action projects; we will also refer to identified needs for action, barriers, and drivers for climate action, as perceived by different stakeholders and how they were addressed in a real-life climate action projects.

Keywords: co-creation, climate actions, RRI, quintuple helix, crowd-mapping

## References

Carayannis, E. G., Campbell, D. F. J., & Grigoroudis, E. Democracy and the environment: How political freedom is linked with environmental sustainability. *Sustainability*, 2021, 13, 5522.

Fagiewicz K., Churski P., Herodowicz T., Kaczmarek P., Lupa P., Morawska-Jancelewicz J. & Mizgajski A., Cocreation for Climate Change—Needs for Actions to Vitalize Drivers and Diminish Barriers. *Weather, Climate and Society*, Vol 13 issue 3, 2021, pp. 555-570.

Owen, R., Macnaghten, P., Stilgoe, J. Responsible research and innovation: from science in society to science for society, with society. *Science and Public Policy*, 39 (2012), pp. 751-760.

Rzeszewski, M., Kotus, J. Usability and usefulness of internet mapping platforms in participatory spatial planning, *Applied Geography*, Volume 103, 2019, pp. 56-6

Trencher, G. P., Yarime, M., Kharrazi, A. Co-creating sustainability: cross-sector university collaborations for driving sustainable urban transformations. *Journal of Cleaner Production*, 2013, 50, pp. 40-55.

84957

## From nature conservation towards functional agrobiodiversity. Making sense of biodiversity in Dutch agricultural landscapes

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According to the IPBES, “Nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating worldwide” (IPBES, 2019, p. XIV). Within the Netherlands, many species do not hold a ‘favourable conservation status’ (FCS) and many habitats are in a ‘not-good condition’ compared to other EU member states (IPO & LNV, 2021). The loss of biodiversity in the Netherlands is largely caused by agriculture and urbanisation, both through loss of acreage and through environmental pressure and fragmentation (PBL, 2020).

The last decade, nature policy in the Netherlands has shifted from the conservation of nature areas towards biodiversity restoration in the wider landscape. From the 1980s until the early 2000s, the Netherlands pursued a designation strategy aimed at expanding the Dutch National Ecological Network (NEN) and, thus, safeguarding biodiversity within nature areas. From 2010 onwards, the focus on nature conservation within the NEN has been criticized and a new perspective developed aimed at land sharing rather than sparing (Beunen & Barba Lata, 2021). In line with this broadened view, ecologist and nature conservationists shifted their focus towards a landscape perspective to integrate biodiversity conservation (Kleijn et al., 2020). In agricultural landscapes, this ambition translates in proposals for so-called nature-inclusive farming in which a central role is afforded to the notion of (functional) agrobiodiversity. This contribution problematizes the concept of ‘agrobiodiversity’ and studies the interpretations and attempts to construct a particular view on biodiversity. On the one hand, ecologist focus upon an academic interpretation of biodiversity research, whereas farmers focus upon the benefits for their farm operations. This paper sketches the negotiations between these interpretations and consequently sketches out what space there is for what type of biodiversity.

Keywords: biodiversity; functional agrobiodiversity, agriculture, landscape planning

### References

Beunen, R., & Barba Lata, I. (2021). What makes long-term perspectives endure? Lessons from Dutch nature conservation. *Futures*, 126(December 2020), 102679.  
<https://doi.org/10.1016/j.futures.2020.102679>

IPBES. (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. In E. S. Brondizio, J. Settele, S. Díaz, & H. T. Ngo (Eds.), *Report of the Plenary* (p. 1148). Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) secretariat.  
<https://doi.org/doi.org/10.5281/zenodo.3831673>

IPO, & LNV. (2021). *Natuur in Nederland. Stand van zaken eind 2020 en ontwikkelingen in*

2021. <https://www.bij12.nl/wp-content/uploads/2021/11/Zevende-Voortgangsrapportage-Natuur-2020.pdf>

Kleijn, D., Biesmeijer, K. J. C., Klaassen, R. H. G., Oerlemans, N., Raemakers, I., Scheper, J., & Vet, L. E. M. (2020). Integrating biodiversity conservation in wider landscape management: Necessity, implementation and evaluation. In *Advances in Ecological Research* (Vol. 63, pp. 127–159). Academic Press. <https://doi.org/10.1016/bs.aecr.2020.08.004>

PBL. (2020). Staat van instandhouding EU-soorten en habitattypen. indicator 0030, versie 57, 07-09-2020. <https://themasites.pbl.nl/balans-leefomgeving/indicatoren/nl0030-staat-van-instandhouding-eu-soorten-en-habitattypen-2020/>

85260

## Regenerate neglected urban fabrics: tools, forms, and scale of project

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The context in which the dissertation moves sees an increasing depletion of resources, where the climate emergency is weighing on the built space and society, and the greenhouse emission are accelerating climate change events. Within this panorama, European Union started in the last years to structure a path toward a climate and carbon-neutral society, urging to rethink actions in various sectors. Regarding the prominent role of the built environment, Nature-based solutions (NBS) and Circular Economy (CE) could play an essential role in urban adaptation, mitigation, and reduction of carbon emissions.

The scope of the contribution is to critically reflect on the formal relapses that these tools (NBS and CE) could have on the built environment in regenerating neglected urban fabrics, so understanding the ontological and cultural features addressed. This could stimulate a debate about the shifting condition of the spatial dimension of the urban project that will characterize the morphological scenario of future cities.

The contribution starts from a theoretical overview, conducted through a literature review. Following, it exposes a critical interpretation of the morpho-typological issues that NBS and CE rise, thanks to a series of recent case studies selected among regeneration projects in European urban context.

Successively, the contribution will focus on the importance of working at an intermediate scale, where the neighborhood project represents a semantic unit that identifies specific relational fields, revealing sensitivity towards the resources of the territory and identifying a point of inflection between plan and project.

In this context, NBS and CE result to be complementary approaches. NBS envisions tackling the adaptation of the urban space, with nature as a regeneration vehicle to restore urban grounds, making the urban space capable of resisting extreme climate events and contrasting consequences such as the heat island effect. Instead, the circular perspective focuses on the project's resources, stressing the necessity to deal with what has been built in the previous decades and imposing new reflection regarding what we can do with what we already have, enhancing the resilience for the availability of raw materials. Moreover, buildings' reuse and renovation could drive the practice to reduce carbon emissions derived from the demolition and reconstruction of new fabrics, decreasing the overall life cycle's emissions and mitigating the impacts of the built environment.

However, the understanding of the spatial effects that these two approaches could produce in regeneration processes is not yet fully investigated and instead deserves attention for the essential role they can have in the reconfiguration of urban space.

Keywords: nature-based solutions, circular economy, urban regeneration, decarbonization, morpho-typological studies, climate emergency

## References

- Bergevoet, T., van Tuijl, M. (2016), *The Flexible City: Sustainable Solutions for a Europe in Transition*, Nai010 Publisher, Rotterdam.
- Cheshire, D. (2016), *Building revolutions. Applying the circular economy to the built environment*. RIBA Publishing, Newcastle upon Tyne.
- De Kay, M. (2011), *Integral sustainable design: transformative perspectives*, Earthscan, London.
- Frampton, K. (2011), *Urbanization and Discontents: Megaform and Sustainability*. In: Lee, S. (eds.) *Aesthetics of Sustainable Architecture*. 1st edn. NAI/010 Publisher, Rotterdam.
- Hawkes, D. (2008), *The environmental imagination. Technics and poetics of the architectural environment*, Routledge, London-New York.
- Hosey, L. (2012), *The Shape of Green: Aesthetics, Ecology, and Design*, Island Press, Washington.
- Kabisch N., Korn H., Jutta S., Bonn A. (2017), *Nature-based Solutions to Climate Change Adaptation in Urban Areas: Linkages between Science, Policy and Practice*, Springer Nature, Cham.
- Morin, E. (2020), *L'entrée dans l'ère écologique*. Edition de l'Aube, La Tour-d'Aigues.

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## Becoming the greenest industrial region in Europe - Strategic Development of Green Infrastructure and NBS in the Ruhr Metropolis, Germany

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Cities and regions face numerous challenges in the 21st century: on the one hand, the impacts of climate change stress people and their build environment. On the other hand, the continuing land consumption and a high degree of sealing lead to a deprivation of the natural environment, which in turn intensifies the effects of climate change and leads to a loss of biodiversity. These challenges are particularly true for the 5.1 million inhabitants of the 53 municipalities of the Ruhr Metropolis – Germany’s largest and most densely populated former industrial region (cf. RVR, 2021a).

One answer to the various challenges is the so-called ‘Green Infrastructure’. The term encompasses all types of (urban) greenery – from balcony plants to large-scale regional parks – and, by referring to the traditionally technical term ‘infrastructure’, highlights the elementary supply service ‘green’ has for society. However, in a broader sense, Green Infrastructure also describes an integrated, interdisciplinary, multi-scale planning approach (cf. MULNV NRW, 2016).

The Ruhr Metropolis and its regional planning authority, the Ruhr Regional Association (German: Regionalverband Ruhr), have recognized the potential of Green Infrastructure and NBS and have set out to become the greenest industrial region in Europe. Key anchor is the development of a regional ‘Green Infrastructure Strategy’. The ‘Green Infrastructure Strategy’ operates on a strategic-conceptual level and supports those actors planning, building and maintaining Green Infrastructure in the region, e.g. through the definition of common strategic as well as quantifiable goals and support on access to funding (cf. RVR, 2021b).

This presentation gives insights into the ongoing development process of the ‘Green Infrastructure Strategy’ of the Ruhr Metropolis and thus provides an example of how planning and management of Green Infrastructure and NBS can be designed and governed on a regional planning level. Special focus is set on the participatory planning approaches used by the regional planning authority in order to qualify the strategy to be ‘out of the region –for the region’. Beyond the strategic level, practical development, management, implementation and maintenance of Green Infrastructure and NBS will be highlighted and reflected upon through the example of heap development.

Keywords: green infrastructure, nature based solutions, strategic planning, governance, participatory planning, heap development

## References

MULNV NRW - Ministerium für Umwelt, Landwirtschaft, Natur- und Verbraucherschutz des Landes Nordrhein-Westfalen (2016): Erläuterungen zum Projektaufruf Grüne Infrastruktur NRW. Website:

[https://www.umwelt.nrw.de/fileadmin/redaktion/PDFs/naturschutz/gruene\\_infrastruktur\\_erlaeuterungen\\_nrw.pdf](https://www.umwelt.nrw.de/fileadmin/redaktion/PDFs/naturschutz/gruene_infrastruktur_erlaeuterungen_nrw.pdf) (last accessed 10 January 2022).

RVR – Regionalverband Ruhr (2021a): People.Nature.Space. Green infrastructure in the Ruhr metropolis. Factbook Green Infrastructure. Website:

[https://www.rvr.ruhr/fileadmin/user\\_upload/01\\_RVR\\_Home/02\\_Themen/Umwelt\\_Oekologie/Offensive\\_GI/AbschlussberichteOGI2020/2021\\_Factbook\\_GI\\_engl.pdf](https://www.rvr.ruhr/fileadmin/user_upload/01_RVR_Home/02_Themen/Umwelt_Oekologie/Offensive_GI/AbschlussberichteOGI2020/2021_Factbook_GI_engl.pdf) (last accessed 10 January 2022).

RVR – Regionalverband Ruhr (2021b): Konzeption der Strategie Grüne Infrastruktur. Website:

[https://www.rvr.ruhr/fileadmin/user\\_upload/01\\_RVR\\_Home/02\\_Themen/Umwelt\\_Oekologie/Offensive\\_GI/AbschlussberichteOGI2020/Abschlussberichte\\_Offensive\\_Gruene\\_Infrastruktur\\_2030\\_Konzeption\\_Strategie\\_Gruene\\_Infrastruktur\\_final.pdf](https://www.rvr.ruhr/fileadmin/user_upload/01_RVR_Home/02_Themen/Umwelt_Oekologie/Offensive_GI/AbschlussberichteOGI2020/Abschlussberichte_Offensive_Gruene_Infrastruktur_2030_Konzeption_Strategie_Gruene_Infrastruktur_final.pdf) (last accessed 10 January 2022).

85370

## Cities embodying circularity. Programs and tools for the regeneration of the built environment in Europe

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The circular economy was born as an industrial and business field, intended as a production model capable of minimizing and reusing its waste. Starting from the end of the nineties, and from the first directives by the European Commission about waste, the circular economy is now the main objective for the construction of urban sustainability policies in several fields, starting from the management of waste and materials up to guide the construction of a sustainable built environment.

One of the main current challenges to the construction of a circular built environment is the amount of produced construction and demolition waste. CDW represents one of the most significant flows in Europe in terms of weight, accounting for more than a third of all waste generated, and they are directly related to the way cities are designed, the materials and techniques with which they are built and how they are regenerated.

The paper outlines the - theoretical and practical - background of regenerative urbanism underling the relationship between urban metabolism, resources and waste, and issues of regeneration, in opposition to the extractive architecture. In this framework, the goal is to build regeneration strategies for the built environment by addressing the entire life cycle and by going beyond the more traditional tools, such as building performance certifications, which only evaluate the sustainability of the final building.

The research focuses on CDW and recognises Green Public Procurement strategy as a current opportunity to incorporate the principles of circularity in urban planning programs.

Two case studies in Europe, in Italy and in the Netherlands, are used to explore the different potential of green procurement in orienting and evaluating circular designs in the different phases of public planning.

The strategies developed by the two countries show some differences and how the construction of a circular city does not depend only on the technologies available, or on the evolution of the legislative context, but is deeply linked to territorial conditions, such as the specific infrastructure for waste treatment, the availability of specific raw materials, local construction technologies and traditions. It therefore requires a place based, adaptive and multilevel design process able to address the city sustainability in all its phases, from design to demolition, open to the uncertainties and also to the new technologies that may emerge but also to state a clear spatial vision for circularity.

### References

Becker J. (2019), "Contribution to Growth - European Public Procurement - Delivering Economic Benefits for Citizens and Businesses", Study Requested by the European Parliament IMCO Committee, PE 631.048.

Fabian, L., Giannotti, E., & Viganò, P. (2012). *Recycling City. Lifecycles, Embodied Energy, Inclusion*. Pordenone.

Mahpour, A. (2018). Prioritizing barriers to adopt circular economy in construction and demolition waste management. *Resources, Conservation and Recycling*, 134, 216-227.

Thomson, G., Newman, P. (2018). Urban fabrics and urban metabolism—from sustainable to regenerative cities. *Resources, Conservation and Recycling*, 132, 218-229

Space Caviar (2021). *Non-extractive architecture. On designing without depletion (vol.1)*. Berlin: Sternberg Press.

84320

## Study on the Capacity of Nine Cities in the Greater Bay Area to Cope with Climate Change Based on the Risk City Theory

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Climate change has become a recognized global disaster, and the huge consumption of fossil energy and air pollution caused by blind urbanization are the main causes of this crisis. The climate crisis makes the whole human society surrounded by various new types of risks, and the concept and theory of risk society and even risk city emerge as the times require, providing new ideas for people to truly build an urban ecological environment that coexists in harmony with nature. China plays an important role in weathering the tide of the climate crisis. At the same time, China is still in the stage of rapid urbanization, and it is necessary to draw lessons from past construction experiences and formulate strategies for the sustainable development of cities with the help of the risk city theory. The study selects 9 major cities located in the Guangdong-Hong Kong-Macao Greater Bay Area, and analyzes the statistical data and main planning texts of these cities in the past five years with the help of the risk city theoretical framework. Based on the three principles of integrity, continuity and equity, the existing capacity of these cities to cope with the climate crisis and their growth potential are assessed. Results tell us that, as one of the regions with the highest level of urbanization in China, the major cities in the Guangdong-Hong Kong-Macao Greater Bay Area show a relatively high level of vulnerability and sensitivity to the ecological environment. The adoption of new risk response strategies centered on energy planning and based on social trust construction needs to be strengthened. Nonetheless, some cities represented by Shenzhen and Guangzhou have appeared to catch the trend of moving closer to the risk city planning, and there is non-negligible room for improvement in the capacity of this region to cope with the climate crisis.

Keywords: Climate Change, Urban Ecology, Risk City Theory, Bottom-to-Top Planning, the Greater Bay Area

### References

- 1.Paddison, Ronan, ed. Handbook of urban studies. Sage, 1998.
- 2.Beck, Ulrich. "Politics of Risk Society." *Environmentalism. Critical Concepts* (1998): 256-266.
- 3.Adam, Barbara, Ulrich Beck, and Joost Van Loon, eds. *The risk society and beyond: critical issues for social theory*. Sage, 2000.
- 4.Jabareen, Yosef. "The Risk City." Springer Netherlands, *Lecture Notes in Energy*. <http://link.springer.com> (2015).
- 5.Jabareen, Yosef. "Planning the resilient city: Concepts and strategies for coping with climate change and environmental risk." *Cities* 31 (2013): 220-229.
- 6.Henning, Annette. "Climate change and energy use: The role for anthropological research."

Anthropology today 21.3 (2005): 8-12.

7.Zanon, Bruno, and Sara Verones. "Climate change, urban energy and planning practices: Italian experiences of innovation in land management tools." Land use policy 32 (2013): 343-355.

## TRACK 13: POLITICS

85125

### The city and its citizens

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The Global South's rise from closed, repressive systems to democratic forms of governance signalled the upsurge of liberal societies and the development of urban spaces organised around the core principles of democracy. However, the twenty-first century has witnessed the fall of rising democracies; "India, the world's largest democracy, has turned into an 'electoral autocracy'." Cities are breeding grounds for social polarisation and spatial injustice in today's neoliberal and politically eccentric world. The erosion of the 'public' from public spaces and transforming cityscapes to securescapes raises concerns regarding the rapid reshaping of the public realm. The temptation to construct fortresses and control spatial flow is increasingly excluding the public. Policing, privatisation our cities. Inaccessibility, a major source of spatial injustice, is a result of constant contestation within the city. The citizen, it seems, is always at war, at times with capital and corporates, sometimes with the state, and every so often with their fellow publics.

The paper shall question the role of development and policies in enhancing spatial injustice and creating inequitable cities. It shall delve into an in-depth analysis of how the democratic state and its use of urbanism as a political tool have contributed to an increasingly exclusive city. The recent development proposals by the central government in New Delhi (Central Vista Redevelopment), Varanasi (Kashi Vishwanath Corridor) and Ahmedabad (Sabarmati Riverfront Development) are all politically driven, top-down in their approach and incorporate authoritative planning ideas. The formal and organisational interventions often represent only the most visible spatial consequences of even more comprehensive urban transformation strategies. However, the paper dives into a more nuanced and complex insight to trace the repercussions of these manifestations of 'spatial injustice' and the way they are reflected in the everyday experience of citizens. Ultimately, it urges the reader to question whether cities today belong to the citizens; Whose city, is it?

Keywords: New Delhi, Public Space, Politics and space, spatial justice

#### References

1. Parkinson, J. R. (2014). *Democracy and Public Space: The Physical Sites Of Democratic Performance* (Illustrated ed.). Oxford University Press, Usa.
2. Soja, E. W. (2009). *The City and Spatial Justice*. Justice et Injustices Spatiales
3. Design Commission. (2015). *Designing Democracy: How designers are changing democratic spaces and processes*. Policy Connect.
4. Lefebvre, H. (2000). *Espace et politique*. Paris: Anthropos.
5. Edelman, M. (1988). *Constructing the Political Spectacle*. University of Chicago Press.
6. Lefebvre, H. (1977). Reflections on the politics of space. In R. Peet (Ed.), *Radical geography* (pp. 339–352). London: Methuen and Co.

84442

## (In) Socio-spatial Justice: Analysis of the plans for the villas of CABA (2016-2019).

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According to the latest TECHO Argentina report, 1 out of every 10 people in Argentina lives in so-called “informal settlements”. Thus, informality has become the only alternative for those who have been excluded from the formal system (Álvarez, 2020). In this sense, the need arises to analyze to what extent the policies implemented in self-produced settlements contribute to promoting justice or, on the contrary, socio-spatial injustice. Policies on 13 slums in the Autonomous City of Buenos Aires between 2016-2019 were examined; analyzing the justice factors proposed by Fraser (2008): recognition, representation and redistribution. The results obtained show how the State only deals with one sphere of justice, the absence of distribution. However, this redistribution is not effective: relocation plans only affected 13%, while improvement plans remained unfinished. Finally, land ownership is not addressed, leaving 36,785 families in a situation of permanent In-Security. Regarding recognition, not only does the inhabitants' organizational capacity not be valued, nor their ability to self-produce space; but also, their opinion is not binding in the decision-making processes. Álvarez et al. (2015) show that the persistent lack of recognition of these processes and the lack of openness towards co-production processes is not a naïf position, since it allows the State to continue exerting pressure on the lowest-income populations through cyclical processes of abandonment and gentrification. It is understood that these families not only suffer a socio-spatial injustice in the face of an absence of recognition, representation and finally redistribution, but also face a necropolitical process (Mbembe, 2011) insofar as these communities have no value for established power. Although, as this research shows, in many of the cases, it is precisely those affected who have done the most to promote socio-spatial justice in their neighborhoods.

Keywords: Self-production, socio-spatial injustice, public policies

### References

Álvarez de Andrés, E., Fernández Güell, J.M., y Smith, H. (2015). Instruments for analysing urban conflicts in the Global South: The case of urban transformation processes in Dakar. *Habitat International*, 49, 187–196. <https://doi.org/10.1016/j.habitatint.2015.05.021>

Álvarez de Andrés, E. (2020). Necropolítica de vivienda: 40 años desmantelando la “informalidad” en Madrid (1979-2019). *Eure*, 46(139), 5–27. <https://doi.org/10.4067/S0250-71612020000300005>

Fraser, N. (2008). *Scales of Justice: Reimagining Political Space in a Globalized World*. Ibérica.

Mbembe, A. (2011). *Necropolítica*. Melusina.

TECHO - Argentina. (2016). Relevamiento de Asentamientos Informales 2016.  
<http://www.techo.org.ar/relevamiento>

84458

## Theorizing on the symbolic values of space in times of growing political tensions

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The growing political and social tensions being observed worldwide are accompanied by the crisis of traditional urban public space functions, amplified by pandemic. This poses a significant challenge for urban design, which unquestionably is also related to the increase of the symbolic significance of public spaces.

Urban design processes have always involved a political component. Traditionally, symbolic dimension of space has been important for the prestige of power, but also for presenting counter attitudes. In democratic societies, with growing social tensions related to different value systems, shaping space requires a special delicacy, sensitivity, respect and understanding. Solutions preferred by the majority often monopolise space, limiting the rights of some minority groups within local community. Professionals (architects, planners) often get involved in these disputes, being unable to distinguish their own political views from the objective rules, governing urban development. Incorrect attitudes lead to a loss of confidence and limit the impact of professional interventions, which actually reinforce political factors. Therefore there is an urgent need for a useful theory which may help firstly, to understand the mechanisms of on-going processes and secondly, provide a tool supporting objectivity in professional decision makings.

This paper will offer an overview on how the escalation of various socio-political conflicts manifest itself in an open war for the symbolic articulation of public spaces, including the placement of monuments. As a case study will serve Poland, but we believe that the observed trends may be treated universally.

For building the theoretical framework we will use firstly, classical concepts on urban design emerging at early 60. (e.g. Alexander, Lynch, Venturi, Cullen) secondly, the radical urban theories derived from Lefebvre, Habermas, Harvey Debord and others, and thirdly, the relatively new debate on urban public space (Zukin, Montgomery), which - in dynamic reorientation of urban space meaning and value – seem to lose their actuality very fast.

Keywords: Public space, symbolic value of space, urban design, right to the city

### References

1. Alexander, Ch. 1978. *The Pattern Language*. Oxford University Press
2. Alexander Ch. 1980. *The timeless way of building*. Oxford University Press
3. Debord, G. 1967. *Society Of The Spectacle*. A Radical Reprint.
4. Harvey, D. 2003. *The right to the city*, *International Journal of Urban and Regional Research*, vol. 27, no. 4, “Debates and Developments” section, pp. 939–941.
5. Lefebvre, H. 1991 (Eng. ed.). *The Production of Space*. Blackwell.
6. Lynch, K. 1960 *The Image of the City*. The MIT Press
7. Zukin, Ch. 2011. *Naked City: The Death and Life of Authentic Urban Places*. Oxford

University Press

8. Venturi, R. 1977. *Complexity and Contradiction in Architecture*. The Museum of Modern Art, New York

84892

## Dialogue and deliberation two transport megaprojects.

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This paper compares two different forums established to facilitate deliberation around two controversial mega transport projects. In 2012 in the UK High Speed 2 established a series of 'Community Forums' along the route of this rail project whilst in Germany in 2011 the state of Schleswig Holstein established Das Dialogforum as a vehicle for community participation around the Fehmarn Belt project linking Denmark and Germany by road and rail. Through a qualitative analysis the rationale behind both forums and their respective impact is compared based upon ethnographic studies of both processes. The extent to which each aligns with the ideals of deliberative democracy is assessed through an analysis of the institutional form of both forums, the experiences of participants, the way discourse is managed in both cases and the extent to which they foster systemic deliberation (Mansbridge et al., 2012) over the issues generated by infrastructure projects. The impact, if any, that each forum has had on the design, planning and outcomes of both projects is also assessed through an analysis of the extent to which such forums represent a shift towards more co-productive forms of infrastructure planning. And the extent to which these project level micro exercises in deliberation permeate the messier macro level public discourse (Hendriks, 2006), for example, whether they reduce levels of controversy and protest against such projects. Finally, the paper also considers the extent to which such forums are capable of addressing wider issues such as the growth-based 'master narratives of infrastructure' (Star, 1998).

Keywords: Mega Transport Projects, Deliberation, Ethnography, Civil Society

### References

- Hendriks, C. M. (2006) 'Integrated Deliberation: Reconciling Civil Society's Dual Role in Deliberative Democracy', *Policy Studies Journal*.
- Mansbridge, J. et al. (2012) 'A systemic approach to deliberative democracy', in *Deliberative Systems: Deliberative Democracy at the Large Scale*.
- Star, S. L. (1998) 'The Ethnography of Infrastructure', *American Behavioral Scientist*, 43(3).

85356

## A Meta-Synthesis Study on the Place of Urban Transformation in Turkey's Urbanization: The Example of Planning Journal

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In the last 20 years, urban transformation in Turkey has emerged as a tool used as a solution to the housing problem. While some urban transformation phenomenon appears as a means of increasing urban rent, sometimes it appears as an implementation that completely transforms the existing settlement spatially, ignores the social and cultural values found here, and sees the urban space as an empty space. For this reason, urban transformation is one of the most emphasized concepts in the urbanization literature in Turkey in recent years. It is accepted by everyone in the country that the Planning magazine, which has been published by the Turkish Chamber of City Planners for 31 years, constitutes one of the most respected archives to monitor the development and change of urbanization in Turkey and to follow the urbanization literature. This study is a meta-synthesis research based on the articles published in the Planning Journal on urban transformation. Meta-synthesis studies are the qualitative findings of studies conducted in a particular field; interpreting, evaluating, revealing similar and different aspects and studies aimed at making inferences. It should be noted that within the scope of this study all of the concepts such as gentrification, urban renewal, urban reorganization, urban revitalization and urban transformation, which are used interchangeably in the Turkish urbanization literature, were used as keywords within the scope of the research and it was tried to reveal how these uses changed. The main purpose of this study is, on the one hand, to determine the place of the urban transformation phenomenon in the urbanization experience of Turkey and to reveal its effects, on the other hand, to clarify the conceptual confusion regarding this phenomenon. This meta-synthesis study, based on the articles published in the Planning Journal on the concept of urban transformation, reveals the traces that urban transformation has erased from its cities as a means of living and the new urban stains it has created.

This meta-synthesis study, based on articles containing urban transformation projects carried out in cities of many different scales and with different socio-cultural values, also enables us to follow how urban transformation transforms from city to city in a country. In addition, this study, which will reveal how important the urban scale is in this follow-up, also points out what kind of an urban struggle against transformation through different urban transformation experiences and how different actors take the stage in this struggle. As a result, the relationality between the causes and results of urban transformation projects that take place with similar practices in developing countries around the world is revealed through comparative examples.

Keywords: Urban Renewal, Meta-Synthesis, Planning Journal of Turkey, Turkish Urbanization, Urban Politics

## References

- Carmon, N. (1999). Three generations of urban renewal policies: Analysis and policy implications. *Geoforum*, 30, 145–158.
- UN-Habitat. (2010). *The challenge of slums: Global report on human settlements 2003*. Revised and updated version (April 2010).
- Lefebvre, H. (1991). *Production of Space*. Oxford: Blackwell Publication. D.
- Nicholson-Smith (Trs.). (1st ed. 1974)
- Harvey, D. (2012). *Rebel Cities: From the Right to the City to Urban Revolution*. London: Verso Pub.
- Friedmann, J., Douglass, M. (Ed.). (1998). *Cities for Citizens: Planning and the Rise of Civil Society in a Global Age*. New York: Wiley.

84508

## Climate Transition Strategies at the local scale towards new forms of multilevel governance for resilience and territorial cohesion

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In recent decades, adaptation and mitigation measures have become increasingly important, both because of the physical need for territories to cope with climate impacts and because of the growth of collective awareness. The implementation of these actions and strategies faces many strategic and technical obstacles and shortcomings. An effective operational planning tool, able to effectively compensate for these criticalities and to support the implementation of urban policies, is represented by the Climate Transition Strategies, which can be traced, in the specific case under analysis, to the Call "Climate Strategy" of Fondazione Cariplo.

An effective process for building climate-neutral and resilient cities must see a comprehensive engagement of city management and dynamics, coordinated and integrated.

Despite numerous and increasing efforts, Italian administrations at various levels often find it difficult to build structured pathways for the above-mentioned reasons. This is mainly due both to the voluntary nature of such processes, which are therefore generally left to the political will that may or may not choose to invest time and resources in the implementation of sustainable and resilient solutions, but also to the lack of strategic steering tools.

In order to effectively respond to the need for urban contexts to adapt to climate impacts and to promote development and management models capable of increasing territorial resilience, the "Climate Strategy" Call has allowed the definition of first four CTS: two carried out by single municipalities (Brescia and Bergamo), two by aggregations of municipalities (Brianza and Mantua). The example of the two aggregations of municipalities is particularly significant in demonstrating the effectiveness of this strategic tool since they can provide a broader context for action, increase the effectiveness of actions and optimize resources. The two processes, which differ in terms of territorial context, premises, and specific objectives, benefited from a common methodology that led them to adopt:

- organic and well-defined coordination structure;
- updated and cross-cutting knowledge framework;
- shared vision and strategic objectives;
- synergistic framework of actions;
- mainstreaming of planning.

The CTS has systemized policies that have been pursued for years in the territories, helping to bridge the gaps that administrations encounter in implementing transition processes. This document can activate and direct concrete, holistic, and widespread supra-local transformative actions. This process, coordinated and shared by the administrations with the stakeholders, is, therefore, able to give stability, coherence, and continuity to adaptation processes involving different stakeholders and sectors of the PA and to favour the implementation and multidisciplinary of policies for territorial resilience on a large scale that would otherwise be difficult to achieve.

Keywords: Climate Transition, Urban Resilience, Territorial Governance, Planning and politics, Planning processes

#### References

- Arras, F., Baruzzi, V., F., Carraretto, G., Freixo Santos, T., Giordano, F., Lapi, M., et al., (2020). DELIVERABLE AZIONE C3 - Linee guida per il mainstreaming nei gruppi di comuni - LIFE15 CCA/IT/000061 MASTER ADAPT “MAInSTreaming Experiences at Regional and local level for adaptation to climate change”
- Bulkeley, H., Betsill, M., (2005). Rethinking Sustainable Cities: Multilevel Governance and the ‘Urban’ Politics of Climate Change. *Environmental politics*, 14.1, 42-63.
- Patel, R., Nosal, L., (2016). Defining the Resilient City. *United Nations University Centre for Policy Research (UNU-CPR)*, 6.
- Magni, F., Musco, F., Litt, G., Carraretto, G., (2020). The Mainstreaming of NBS in the SECAP of San Donà di Piave: The LIFE Master Adapt Methodology. *Sustainability*, 12, 10080. <https://doi.org/10.3390/su122310080>
- Measham, T. G., Preston, B. L., Smith, T. F., Brooke, C., Gorddard, R., Withycombe, G., Morrison, C., (2011). Adapting to climate change through local municipal planning: barriers and challenges. *Mitigation and Adaptation Strategies for Global Change*, 16, 889-909. <https://doi.org/10.1007/s11027-011-9301-2>

84161

## Planning knowledge in city master planning processes: A comparison of two cities in Israel

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Planning has been described as action informed by knowledge (Friedmann, 1987) and as “a process of knowing and learning” (Davoudi, 2015, p.317). While existing research largely highlights tensions between professional and local knowledge, we hypothesize that contemporary knowledge types, contents and communications are more varied. These reflect the rise of popular discourse arenas, populist reactions to plans, the involvement of more professionals from diverse knowledge fields (e.g. law, economics, environment, smart cities) and divisions among progressive and technocratic planners. We examine these evolutions in terms of power-knowledge relations in Israel, by exploring city master planning processes in two mid-sized Israeli cities, over a period of several years. Both cities are located in the Tel Aviv Metropolitan Region, but one (Herzliya) is a mostly upper-middle-class Jewish city, while the other (Lod) is a mixed Jewish-Arab city with a largely disadvantaged population. Through interviews and critical discourse analysis, we probe knowledge production, contents and communications across a number of discourse arenas, including planning meetings and hearings, media reports, municipal websites and social media debates. Our findings confirm the diversity of contemporary knowledge contents, actors and arenas, and we show how these differ between socio-spatial contexts.

Keywords: planning knowledge, critical discourse analysis, technocracy, populism

### References

Davoudi, S. (2015) Planning as Practice of Knowing. *Planning Theory*, 14(3): 316–331.

Friedmann, John. (1987). *Planning in the Public Domain: From Knowledge to Action*. Princeton University Press.

Raco, Mike and Savini, Federico (Eds). (2019). *Planning and Knowledge: How New Forms of Technocracy Are Shaping Contemporary Cities*. Policy Press.

Rydin, Yvonne. (2007). Re-examining the Role of Knowledge within Planning Theory. *Planning Theory*, 6(1), 52-68.

84521

## Depopulation and shrinkage in a Norwegian context: Perspectives, processes, and policies. Findings from a preliminary research project

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Many western countries and regions are experiencing “shrinking”, normally meaning decreasing population numbers and ageing. This situation also applies for both city regions and rural regions, and these demographic tendencies is expected to continue in the coming decades. In Norway and the Nordic countries, this is especially true for rural areas.

The demographic situation, with fewer inhabitants often combined with an increasing proportion of the elderly, is nevertheless given little realistic attention in planning and policy development. In the literature on depopulation, there is a broad consensus demographic decline has for long been disregarded in both literature and practice (Wiechmann & Bontje 2005; Sousa & Pinho 2015; Hospers & Reverda 2015).

In the literature, there is a broad agreement that a growth-oriented planning and unrealistic ideas about growth has prevented the development of proactive strategies in managing decline (Leick & Lang, 2018). In consequence, several researchers have called for alternative planning strategies for shrinkage, or even for a shift of paradigms (Hospers & Syssner, 2018; Syssner & Meijer 2020). Recent studies do indicate that growth-centred planning perspectives are beginning to be challenged. Yet, there is no sign of a shift of paradigms in policy or planning. As Schatz (2017) states, many planners and politicians still employ growth-oriented policies even when they must manage decline. A dominant way of thinking still seems to be that it is only pleasant to live and work in growing societies. It is rational, both as a politician and a planner, to always mark political and planning optimism by proclaiming that the shrinking should be stopped and preferably turned to growth.

In Innlandet region, Norway, 31 of 46 municipalities have had a population decline in the last ten years. The decline is expected to continue. The age composition has changed and will keep changing to a significantly older population. In this paper we will present results from a research project carried out in the winter and spring of 2021. We have reviewed the societal part of the municipal plan and the planning strategy, as well as the local political programs in 31 municipalities with ongoing or expected population decline in Innlandet. We have also reviewed the Innlandet county’s regional planning strategy and regional political programs. Interviews and workshops with politicians and planners have been conducted in Innlandet county and two of the municipalities. To what extent is the demographic development reflected in the current planning and policy practice in Innlandet? Is there a focus on strategies and measures for population growth? To what extent do politicians and planners think we should change the way we plan based on the expected demographic changes?

Finally, in the paper, we will discuss the need for further research and planning practice development on a topic of great importance and relevance all over Europe.

Keywords: Shrinking population, rural planning, population decline, planning practice development

#### References

Leick, B. & Lang, T. (2018) Re-thinking non-core regions: planning strategies and practices beyond growth, *European Planning Studies*, 26:2, 213-228, DOI: 10.1080/09654313.2017.1363398 (Editorial)

Hospers, G., & Reverda, N. (2015). *Managing population decline in Europe's urban and rural areas*. Cham: Springer International

Hospers, G. & Syssner, J. (eds.) (2018). *Dealing with Urban and Rural Shrinkage. Formal and Informal Strategies*. Lit Verlag.

Schatz, L. (2017). Going for growth and managing decline: The complex mix of planning strategies in Broken Hill, NSW, Australia. *Town Planning Review*, 88 (1), 43– 57.

Sousa, S. & Pinho, P. (2015) Planning for Shrinkage: Paradox or Paradigm, *European Planning Studies*, 23:1, 12-32, DOI: 10.1080/09654313.2013.820082

Syssner, J. & Meijer, M. (2020). Innovative Planning in Rural, Depopulating Areas: Conditions, Capacities and Goals. In Hagen & Higdem (eds.) *Innovation in Public Planning. Calculate, Communicate and Innovate*, (151-169) Palgrave.

Wiechmann, T. & Bontje, M. (2015) Responding to Tough Times: Policy and Planning Strategies in Shrinking Cities, *European Planning Studies*, 23:1, 1-11, DOI: 10.1080/09654313.2013.820077 (Editorial)

84285

## Universal University? Micro-geographical assessments of knowledge inputs for digital firms

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For knowledge-intensive firms, external knowledge inputs are crucial inputs to enhance productivity. Therefore, firms locate close to each other to profit from external tacit spillovers. Less is known about details in knowledge transfers from knowledge institutions. This paper examines digital firm clustering and its' proximity to distinct knowledge institutions – research institutes and higher education institutions (HEI) - for Germany's three largest metropolises: Berlin, Hamburg and Munich for 2008-2016 on a micro-geographical scale. Econometric results suggest that digital firms seek complementary knowledge inputs from knowledge institutions on a 3x3km<sup>2</sup> scale, while similar knowledge in departments for data science is significant on a 1x1km<sup>2</sup> scale.. Further, the institutional setting of knowledge matters, as firm clustering is stronger in neighborhoods with HEI than research institutions. However, for HEI, digital firms cluster closest to universities of music, arts and design because the highly tacit knowledge is harder to obtain than more codified research-knowledge. This shows that knowledge spillovers operate on different micro-scales within cities. This finding is significant as it is contradictory to German funding policy which explicitly funded start-up centers and incubators near research universities.

Keywords: proximity, firm location, knowledge institutions, micro-geography, spillover, knowledge base

### References

Grillitsch, M., Schubert, T., & Srholec, M. (2019). Knowledge base combinations and firm growth. *Research Policy*, 48(1), 234-247.

Gómez-Antonio, M., & Sweeney, S. (2021). Testing the role of intra-metropolitan local factors on knowledge-intensive industries' location choices. *The Annals of Regional Science*, 66(3), 699-728.

Rammer, C., Kinne, J., & Blind, K. (2020). Knowledge proximity and firm innovation: A microgeographic analysis for Berlin. *Urban Studies*, 57(5), 996-1014.

Spencer, G. M. (2015). Knowledge neighbourhoods: Urban form and evolutionary economic geography. *Regional Studies*, 49(5), 883-898.

Trippel, M., Tödting, F., & Lengauer, L. (2009). Knowledge sourcing beyond buzz and pipelines: evidence from the Vienna software sector. *Economic geography*, 85(4), 443-462.

84947

## Space for peri-urban farming: residents lived experiences with agriculture in the planning of new peri-urban Oosterwold, Almere, The Netherlands

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Agriculture in peri-urban areas is increasingly earmarked as crucial because of its contribution to re-localising the urban food system. However, current agriculture is losing position in the peri-urban space due to unequal competition with other spatial functions. The integration of agriculture in peri-urban development is beyond the current planning routine of functional segregation, and, moreover, considered complex because the multifaceted nature of farming. We introduce a real world case, Oosterwold (City of Almere, The Netherlands) that formally integrates farming in a new peri-urban development at a scale of 4,300 ha and 15,000 new homes. 50% of Oosterwold is spatially earmarked to (urban) agriculture, and the performance of farming is handed to its new residents. Oosterwold thus offers the opportunity to study what happens if agriculture is concomitantly a spatial and social intervention in a peri-urban development that moves beyond current planning routine. This paper reveals the residents lived experiences with agriculture in Oosterwold using a survey (N=131) and an aerial analysis of properties. The survey uncovers four different typologies of agriculture performance in Oosterwold, i.e. a Pragmatic -agriculture is a hobby-; a Committed -agriculture is an opportunity to be socially engaged-, an Autonomous -agriculture supports me to be self-supporting- and an Entrepreneurial -agriculture is an professional craft-. The aerial analysis reveals that the pragmatic practice prevails in real life Oosterwold. Due to the complexity of merging agriculture into the lifestyle of the new residents, the time needed to develop skills in farming as well as the lack of supporting infrastructures, it is concluded that the social dimensions of space -i.e. time, knowledge, visions and interaction- do count as well when planning for agriculture.

Keywords: peri-urban, planning, agriculture, food, social practice

### References

- Ilieva, R. (2016). *Urban Food Planning: Seeds of transition in the Global North*. New York, Routledge.
- Jansma, J. E. and S. C. O. Wertheim-Heck (2021). "Thoughts for urban food: A social practice perspective on urban planning for agriculture in Almere, the Netherlands." *Landscape and Urban Planning* 206.
- Opitz, I., et al. (2015). "Contributing to food security in urban areas: differences between urban agriculture and peri-urban agriculture in the Global North." *Agriculture and Human Values* 33(2): 341-358.
- Spaargaren, G., et al. (2016). *Practice Theory and Research: Exploring the dynamics of social life*. London and New York, Routledge.

84936

## Local Opportunity Structures for Planning-related Protest in major German Cities

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Eisinger's (1973) political opportunity structures remain of great relevance to explain political protests and social movements in different political settings. While since the 1970s most other theories concentrated on the protesters' resources, capabilities and actions, opportunity structures help to explain the different effects and even effectiveness of these rational actions in varying contexts (Meyer 2004). Subsequent approaches expanded the opportunity structure to include social conditions and to analyse not only the genesis but also evolution of protests (cf. Tarrow 2012). This paper argues that in terms of planning protests it is important to include different aspects of local planning culture, its own capabilities and restraints as well as openness for public participation, represented in a local planning-political opportunity structure (Bertram 2019).

When researching planning-related protests in eight major German cities, the authors found evidence of the big influence of political opportunity structures: Additional to the mandatory public participation and a variety of invited spaces made available during planning processes, decision-making bodies at district level, online petitions and local referenda provide important opportunities for citizens to voice concerns on urban projects.

Decision-making structures at district level differ from city to city due to variations between the municipal constitutions of the respective federal state. In Munich, district committees (Bezirksausschüsse), which allow for citizens' motions, are important focal points for the discussion of planning projects, even though they can only make recommendations to the city council.

While decision-making structures at district level remain relatively stable, over the last decade, various German states and cities have added and widened possibilities for informal participation, petitions and local referenda, which open additional channels for citizen voice (Klages 2015; Kersting 2021). Activist groups have used petitions and local referenda not only to express their opposition and in some cases change or even stop unpopular urban projects; some have also managed to popularise their own agenda and force decision-makers to prioritise alternative visions for urban redevelopment like bicycle-friendly policies and tenant protection. As citizens' protests may influence spatial planning's political opportunity structure it is important to explore how local planning and politics enable or disable these protests.

Keywords: Planning-related protest, political opportunity structures, participatory governance, planning culture, conflict, activism

### References

- Bertram, G. F. (2019): „Aber nicht so!“. Theorie und Praxis, Ansprüche und Wirklichkeiten bürgerschaftlichen Planungsprotests in Berlin 2005 bis 2015. Kassel.
- Eisinger, P. K. (1973). The conditions of protest behavior in American cities. *American Political Science Review*, 67(01), 11–28.

- Kersting, N. (2021). Participatory Democracy and Sustainability. *Deliberative Democratic Innovation and Its Acceptance by Citizens and German Local Councilors*. *Sustainability*, 13(13), 7214.
- Klages, H. (2015). 'Perspectives on the Institutionalization of Citizen Participation at the Municipal Level: A First-Hand Report'. In: *Citizen Participation in Multi-level Democracies* pp. 114–20. Brill Nijhoff.
- Meyer, D. S. (2004). Protest and Political Opportunity. *Annual Review of Sociology*, 30(03600572), 125–145.
- Tarrow, S. G. (2012). *Strangers at the gates. Movements and states in contentious politics*. New York: Cambridge University Press.

84229

## International post-growth perspectives in spatial planning: convergence or divergence?

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Post-growth debates in different countries and contexts support the experimentation with alternatives that divert from a growth-based ideology, the desire to grow or even a ‘growth fetish’. They also inspire approaches within existing local and regional governance and spatial planning regimes (Lamker/Schulze Dieckhoff 2021; Xue 2021). The Netherlands is embracing Kate Raworth’s Doughnut Economy in local public policy, Germany sees developments around ‘Tag des Guten Lebens’ and the Common Good Economy. The United Kingdom, once home to a pure growth ideology, hosts a variety of local and self-sufficient initiatives in housing and food. Spain, with other South European countries, is at the forefront the academic literature. Beyond Europe, Latin America abounds with proposals for a wider social philosophy, such as ‘Buen Vivir’ and radical alternatives including spirituality and indigenous values. Such connections between post-growth and planning hold the potential for enriched international debates (Savini et al. 2022). And yet, it appears that national specificities keep international interaction on the topic within planning relatively superficial, or unidirectional (Lamker 2021). This contribution contrasts international post-growth debates to outline: Do different approaches and perceptions of post-growth converge? Or do they diverge based on perceived problems, diverse aims between self-sufficient niches and regime change, as well as local governance and local planning systems? Post-growth planning holds the potential to spark change on different scales and to discuss and criticise a contemporary mainstream against societal diversity and ecological limits (Ferreira/von Schönfeld 2020). What can local and national debates on post-growth planning learn? International insights and collaborations might be key in making this happen.

Keywords: Post-growth, post-growth planning, degrowth, societal change, roles of planners

### References

- Ferreira, A., & Schönfeld, K. C. von (2020). Interlacing Planning and Degrowth Scholarship: A Manifesto for an Interdisciplinary Alliance. *DisP - the Planning Review*, 56(1), 53–64. <https://doi.org/10.1080/02513625.2020.1756633> (Forum).
- Lamker, C. W., & Schulze Dieckhoff, V. (2021). New roles in collective, growth-independent spatial organisation. In B. Lange, M. Hülz, B. Schmid, & C. Schulz (Eds.), *Social and Cultural Geography: Vol. 49. Post-Growth Geographies: Spatial Relations of Diverse and Alternative Economies* (pp. 347–362). Transcript.
- Lamker, C. W. (2021). *Becoming a Post-Growth Planner*. *Rooilijn*(September). <https://www.rooilijn.nl/artikelen/becoming-a-post-growth-planner>
- Savini, F., Ferreira, A., & Schönfeld, K. C. von (Eds.). (2022). *Post-Growth Planning: Cities beyond the market economy*. Routledge. <https://doi.org/10.4324/9781003160984>

Xue, J. (2021). Urban planning and degrowth: a missing dialogue. *Local Environment*, 1–19.  
<https://doi.org/10.1080/13549839.2020.1867840>

84427

## Counter-hegemonic Practices in Urban Redevelopment: The Case of the Dakota Crescent Housing Estate in Singapore

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Compulsory land acquisition and resettlement policies have played a critical role in Singapore's model of urban planning and economic growth since the 1960s. In Singapore's public housing estates, where over 80 per cent of the population live, various renewal and redevelopment schemes have been introduced to allow the Housing and Development Board to upgrade older estates in situ, as well as demolish and rebuild them for more optimal land use. The highly non-consultative implementation of the latter approach has periodically led to bottom-up resistance and counteractions from affected residents and advocacy groups, such as in the case of Dakota Crescent, a colonial-era housing estate, from 2014. This paper focuses on these resident- and civil society-led practices as the object of study, and asks: what are their effects on the Singapore government's approach to the redevelopment of public housing? Under what conditions do these practices contribute to changes in governance structures and state-civil society relations? Drawing on theories on strategic-relational institutionalist planning, cultural political economy, social innovation, and collective action, the paper positions resident and civil society involvement in housing renewal amidst the interactions among actors, institutions, and social structures. The case of the Dakota Crescent estate is examined, based on a qualitative analysis of documents, literature, and data gathered from interviews with the actors involved. The findings demonstrate how counter-hegemonic groups have contested Singapore's model of public housing redevelopment on discursive, ideological, technological and material levels, often eschewing overt confrontations with the government and employing more discreet forms of mobilization. The paper concludes by outlining some possibilities for alternative modes of urban participation and governance to engender more inclusive, equitable planning and redevelopment outcomes for public housing residents in Singapore.

Keywords: Housing redevelopment, civil society, participation, governance, Singapore

### References

Hong, Danielle. 2018. Building the urban commons in Singapore: the cemetery, red-light district and public housing estates as sites of contestation, *Inter-Asia Cultural Studies*, 19:3, 404-418.

Moulaert, Frank and Diana MacCallum. 2019. *Advanced introduction to social innovation*. Cheltenham: Edward Elgar.

Sum, Ngai-Ling, and Bob Jessop. 2013. *Towards a cultural political economy: putting culture in its place in political economy*. Cheltenham: Edward Elgar.

Van den Broeck, Pieter. 2019. "Mythes over participatie in wijkontwikkeling:: Het Antwerpse Schipperskwartier als case." In *Participatiegolven: Dialogen over ruimte, planning en ontwerp in*

Vlaanderen en Brussel, edited by Annette Kuhk, Hildegard Heynen, Liesbeth Huybrechts, Jan Schreurs and Frank Moulaert, 73-98. Leuven: Leuven University Press.

84417

## Rules are Made to be Broken: National Planning Laws, Earthquakes and Emergency Policies in Israel and Italy

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The Israeli Planning and Construction Law (1965) as well as the Italian Urban Planning Law (1942) define the hierarchical structure of the national planning system. Nevertheless, in times of crisis, real or imagined, the state endorses emergency legislation and special policies, which are legal but contradict or even negate ordinary laws, often in the very rationality of the system structure. Moreover, the new policies and legislation determine rescaling of planning powers as well as changes in the relations and authorities of different actors that are involved in the planning and development process.

This presentation is a part of an on-going research dealing with planning and crisis discourses in Israel and Italy. In the lecture we will discuss planning related to earthquakes. We will focus on two case studies. The Israeli – The National Master Plan for Strengthening Existing Structures against Earthquakes (TAMA 38) of 2005. And the Italian – The Sustainable and Environment-friendly Anti-seismic Complexes Project (C.A.S.E) that was planned and built after the 2009 earthquake in the Abruzzo Region. These two case studies are different from each other as to their time of intervention and planning products. However, there is a high degree of similarity in the way both case studies bypass the existing national planning law, while creating strong centralization and distinct involvement of the private sector.

The research offers answers to two main questions – 'How' and 'Why'. By using Critical Discourse Analysis (CDA) (Fairclough, 2013; Marko, 2013) to analyze mass-media discourse (newspapers), professional discourse and governmental discourse (protocols and formal publications), we will show how actors use emergency and fear discourses to modify and overcome planning norms. By using Interpretive Policy Analysis (IPA) (Yanow, 2000, 2007) to analyze the policy influences on various actors, we will try to explain why different actors are interested in changes in the legislation framework, the planning procedure and space. We will reveal what public and private actors in both countries can gain, politically and financially, from those changes; which tools they prefer; and how common is the use of earthquakes crisis discourse to achieve these interests.

Keywords: Crisis, Crisis discourse, Earthquakes, Planning policy, Rescaling of planning powers, State of emergency

### References

- Fairclough, N. (2013). *Critical discourse analysis: The critical study of language*. Routledge.
- Marko, D. (2013). Fear Control in Media Discourse. *Southeastern Europe*, 37(2): 200–219.
- Yanow, D. (2000). *Conducting interpretive policy analysis*. Sage University Papers Series on Qualitative Research Methods, Vol 47. Thousand Oaks: Sage.

Yanow, D. (2007) Interpretation in policy analysis On methods and practice. *Critical Policy Analysis*, 1(1): 110-122.

84797

## Cohesion in the German Rhenish mining area – how the end of open-pit coal mining transforms rural villages into real-world laboratories

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The German Rhenish mining area is in a continuous state of conflict. Since the middle of the last century, open-pit coal mining has been ongoing, which led to the demolition of more than 50 villages. Subsequently, thousands of people had to leave their homes. In the meantime, resettlements took place, new villages were built nearby and residents moved there. Some inhabitants fought for years against their relocation. Other villagers rely either professionally on mining, or benefited financially from resettlements. This resulted in a deep rift between “remainers” and “leavers” (Döring & Kost 2020). Meanwhile at the German national level, current climate activism led to a politic paradigm shift. In 2020, a legislation passed that ends coal-fired power generation by 2038 – at the latest (BMW i 2020). As a consequence, a regional structural change is expected for the Rhenish mining area, since the most dominant landscaping workplace will close down. Villages which should be abandoned now remain but will be located directly at the open-pit edge.

At the same time, the combination of conflictual circumstances and the scheduled beginning of the post-mining era also creates a laboratory environment for socio-spatial research questions concerning social cohesion (e.g., Stanley 2003, Chan et al. 2005): How can social infrastructure be rebuilt in villages which lost the majority of its population? How can social cohesion be built from the scratch in the new villages? How successful can formats of encounter be in such conflictual circumstances?

This paper presents some first findings of a transformative research project which examines cohesion processes in different villages. The project seeks to analyse, but simultaneously improve cohesion in these villages by analogue, digital, and mediative measures. With a mixed-method approach (e.g., qualitative interviews, surveys, and workshops), project findings will show how formats of encounter and participation are utilised by the local residents to build and establish social infrastructure and how it will influence social cohesion.

Keywords: real-world laboratory, conflict, social cohesion, transformation, structural change, Rhenish mining area

### References

- BMW i – Federal Ministry for Economic Affairs and Energy (2020): Wording advice for Act on the Phase-out of Coal-fired Power Plants adopted, Press release, 30/06/2020.  
<https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2020/20200630-wording-advice-for-act-on-the-phase-out-of-coal-fired-power-plants-adopted.html>.
- Chan, Joseph; To, Ho-Pong; Chan, Elaine (2006): Reconsidering Social Cohesion: Developing a Definition and Analytical Framework for Empirical Research. In: Social Indicators Research 75

(2): 273–302.

Döring, Martin; Kost, Susanne (2020): Garzweiler – Eine Spurensuche. Westfälisches Dampfboot.

Stanley, Dick (2003): What do We Know about Social Cohesion: The Research Perspective of the Federal Government's Social Cohesion Research. In: The Canadian Journal of Sociology 28 (1): 5–17.

84081

## Assessment of the public comment process. Evidence from urban green infrastructure planning in Romania

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The potential of urban green infrastructure, i.e., multifunctional networks of green and blue spaces, to address urban challenges and provide ecological, social and economic benefits makes it an important investment for urban areas. However, its planning is challenging, as it should embody principles of connectivity, multifunctionality, integration and multi-scale planning. Thus, we aim to empirically assess the public written comments made for different planning documents concerning urban green spaces to reveal how the theoretical considerations of UGI planning are applied in practice. We developed an evaluation protocol to systematically assess the public comments received for different planning documents about urban green spaces. We used as case studies three Romania's city capitals, where such documents have been subject of public debate on the official websites of the selected municipalities. The evaluation protocol contained 46 predefined items, which were classified into five main categories, focusing attention on the extent the public comments (i) divulge the planning approach and process principles on green infrastructure, (ii) are directed towards important modifications and particular aspects from the debated planning documents and (iii) are incorporated back into the documents content. Our preliminary results indicate that the theoretical consideration of UGI planning add little support for UGS development and practice. Furthermore, the obtained results underline the relatively low level of public comment incorporation into the approved version of the planning documents. Our findings may be explained by the limited support from the Romania's public administration to promote dialog with citizens and further integration of the public input in governing processes. In conclusion, our study contributes to the existing literature regarding collaborative planning by identifying the strengths and weaknesses of the public consultation process in Romania, and the challenges for linking the theoretical considerations of green infrastructure planning with practice.

Keywords: content analysis, public comment, public consultation process, urban green spaces

### References

Burby, R. J. (2003). Making Plans that Matter: Citizen Involvement and Government Action.

*Journal of the American Planning Association*, 69(1), 33–49.

<https://doi.org/10.1080/01944360308976292>

Calvert, T., Sinnott, D., Smith, N., Jerome, G., Burgess, S., & King, L. (2018). Setting the Standard for Green Infrastructure: The Need for, and Features of, a Benchmark in England.

*Planning Practice & Research*, 33(5), 558–573. <https://doi.org/10.1080/02697459.2018.1531580>

De'Arman, K.J. (2020). Is Public Participation Public Inclusion? The Role of Comments in US Forest Service Decision-Making. *Environmental Management*, 66, 91–104.

<https://doi.org/10.1007/s00267-020-01278-5>

Grădinaru, S. R., & Hersperger, A. M. (2019). Green infrastructure in strategic spatial plans: Evidence from European urban regions. *Urban Forestry & Urban Greening*, 40, 17–28.

<https://doi.org/10.1016/j.ufug.2018.04.018>

Metzger, J., Soneryd, L., Linke, S. (2017). The legitimization of concern: A flexible framework for investigating the enactment of stakeholders in environmental planning and governance processes. *Environment and Planning A*, 49(11), 2517–2535.

<https://doi.org/10.1177/0308518x17727284>

84377

## (The politics of) Post-crisis measures, ecological transition, and urban development

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After decades of austerity politics, post-crisis measures such as ‘Next Generation EU’ and, before that, the so-called ‘Green New Deal’ (substantiated e.g., through the ‘Renovation Wave Strategy’), are seen and awaited as a major opportunity for recovery and relaunch for cities and territories, particularly in those countries which contested and/or actually suffered more than others for the previous EU political economy orientation.

Italy is among those countries. Although public discourse and the media are mostly concerned with highlighting the many opportunities opened (for those who can be able to catch them), its translation of the above-mentioned EU initiatives is rather contentious, posing a number of questions regarding legitimacy and efficacy, particularly in the long run, and challenging planning theory as regards the very meaning and role of planning in this time.

The Italian PNRR (Piano Nazionale per Ripresa e Resilienza), ‘National Plan for Recovery and Resilience’ is, before describing any other feature, a plan without a plan. How can it be? What does it mean? It will be implemented through a huge number of projects disseminated through the country, showing clusters around the strongest cities and regions, and within metropolitan spaces, in their richest areas, thus contradicting the (at least declared) imperative of reducing socio-economic unbalances.

The policies defined for reaching the objective of ecological transition are also questioned since, at the moment, they seem to be more a new way for doing what we always did with a new legitimization.

Presenting evidence from the case of Rome, from long-lasting research on the relation between urban political economy and planning in the capital city of Italy, and relating them to political ecology concepts and theories, we will show how a ‘perfect storm’ contributed to the affirmation of the reasons of ‘ecological transition’ as hegemony. This leads to the substantial convergence of two out of the three pillars of sustainability, economy and ecology, moving towards what is emerging as the new leading economic sector: environmental technology and the environment overall.

Keywords: urban political economy; political ecology; urban planning; planning theory; development paradigms and sustainability

### References

- Heynen, N., Kaika, M., & Swyngedouw, E. (Eds.). (2006). *In the nature of cities: urban political ecology and the politics of urban metabolism* (Vol. 3). Taylor & Francis
- Pizzo, B. (2015). *Problematizing resilience: Implications for planning theory and practice*. *Cities*, 43, 133-140.
- Wichterich, C. (2015), *Contesting green growth, connecting care, commons and enough*. In: Harcourt, W. & Nelson, I. L. (Hrsg.), *Practising Feminist Political Ecologies: Moving Beyond*

the 'Green Economy' (67-100). London: Zed Books

Smith, N. (2010). Uneven development: Nature, capital, and the production of space. University of Georgia Press

Harvey, D. (2006). Spaces of global capitalism. A Theory of Uneven Geographical Development London: Verso.

Patel, R. & Moore, J. W. (2017), A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet. Oakland: University of California Press

84864

## Sustainable urban development as a travelling planning idea

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The term sustainable urban development can currently be found in almost every spatial planning strategy and document. Sustainable urban development is used to refer to a highly complex objective that planners and politician all around the globe strive for. However, sustainable urban development can bundle up various – and potentially contradictory – rationalities, values and practices, and can be used to justify a sheer limitless number of potential actions and measures (Griggs et al., 2017; Gunder & Hillier, 2009).

By employing qualitative content analysis, this contribution explores how the abstract goal of sustainable urban development is represented in policy documents at various spatial scales. It analyses global and European policy documents which relate to planning, such as the New Urban Agenda, the EU Urban Agenda and the EU Territorial Agenda 2030, in order to uncover the dominating discourses relating to sustainability and sustainable urban development. Moreover, the analysis covers policy documents from the field of planning published at the national, regional and local level in Finland.

To highlight the transfer of ideas as well as their transformation, the contribution builds on the theoretical concept of travelling planning ideas (Healey, 2011, 2013; Tait & Jensen, 2007). When travelling between changing geographical and institutional contexts, ideas in planning change their meaning as they are re-contextualised and translated.

By combining theoretical approaches and qualitative content analysis, the contribution addresses three research questions: How does the planning idea of sustainable urban development travel between different levels of government? How do the meanings of sustainable urban development change along the way? Which aspects of sustainable urban development are emphasised or omitted in different contexts?

Keywords: sustainability, discourse, policy document, content analysis, European Union, Finland

### References

Griggs, S., Hall, S., Howarth, D., & Seigenuret, N. (2017). Characterizing and evaluating rival discourses of the ‘sustainable city’: Towards a politics of pragmatic adversarialism. *Political Geography*, 59, 36–46. <https://doi.org/10.1016/j.polgeo.2017.02.007>

Gunder, M., & Hillier, J. (2009). Sustainability of and for the Market? In *Planning in Ten Words or Less* (pp. 135–155).

Healey, P. (2011). The universal and the contingent: Some reflections on the transnational flow of planning ideas and practices. *Planning Theory*, 11(2), 188–207.

<https://doi.org/10.1177/1473095211419333>

Healey, P. (2013). Circuits of knowledge and techniques: The transnational flow of planning ideas and practices. *International Journal of Urban and Regional Research*, 37(5), 1510–1526.  
<https://doi.org/10.1111/1468-2427.12044>

Tait, M., & Jensen, O. B. (2007). Travelling ideas, power and place: The cases of urban villages and business improvement districts. *International Planning Studies*, 12(2), 107–128.  
<https://doi.org/10.1080/13563470701453778>

84595

## Challenges in Managing Public Space

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Public spaces face major societal challenges such as energy transition, climate adaptation, and circular economy, which affect the way public space is planned and managed. Coping with these challenges will involve a range of transitions and adaptations in the existing public spaces. An integrated long-term vision on the creation and management of public space as well as sufficient attention for the management of public space in both academic and national debates is lacking. The lack of discussion on the management of public space, the strategic, organizational, and managerial elements, further poses major challenges for effective and future-proof management of public space.

This article focuses on the practice of public space management in the Netherlands. The aim is to investigate how managers involved in managing public space deal with the unforeseen changes that affect the effectiveness of managing public space. A qualitative study based on an exploratory expert interview method was conducted to achieve this aim. The study found that coping with the ongoing challenges could not be limited to the process of managing public space. This emphasizes the need for a holistic approach to public space aimed at an integral and long-term vision to the process of creating and managing public space. The study was able to identify some initiatives on dealing with the challenges that can be seen as examples towards a bold, fresh way of thinking regarding integrative and future-proof approaches. The findings of this research provide useful input for city authorities, scholars, and managers to reflect on a vision for more efficient and effective creation and management of.

Keywords: Managing Public Space, Challenges, Governance, Organization, Strategy

### References

1. Meyer et. al, (2006). Public Management Reform: An Identity Project Renate Institute for Public Management, Wien
2. Dempsey, N and Burton, M, (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry and Urban Greening*, (11 pp. 11-20).
3. Carmona M and De Magalhães C, (2009). Dimensions and Models of Contemporary Public Space Management in England. *Journal of Environmental Planning*
4. Carmona, M, (2018). Principles for public space design, planning to do better. *Journal of Urban Design International* (2019, 24 pp.47–59).
5. Duivenvoorden E et. al. (2020). Managing public space – A blind spot of urban planning and design. *Cities*, (2021, Volume 109)
6. Teriman, (2012). Measuring neighborhood sustainability: a comparative analysis of residential types in Malaysia, Queensland university
7. Banerjee and Loukaitou-Sideris, (2011). Companion to Urban Design. Routledge Companions Taylor and Francis Group.

84067

## Post-socialist urban financialization: Flexibilization of urban norms and commons, or just a new assetization game?

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The paper analyzes the expansion of neoliberal financialization in urban (re)development in the post-socialist context of Serbia. After the year 2000, the transitional changes and the establishing of the post-socialist institutional framework have created conditions for attracting foreign direct investments, predominantly in the services sector and urban real estate. Due to the global financial crisis and the collapse of the real estate bubble (2008), this sector is rapidly recovering and developing, thanks to the state support. The introduction of new regulations in financial activities with a role to neutralize the speculative tendencies at the market was largely absent, which is especially reflected in the urban (re)development. The galloping urban financialization has been fueled by growing interests of capital in the real estate sector. The financialization would have been almost impossible without the arrival of the world's leading real estate investment trusts and the investment of international capital in housing, commerce space, offices, and urban land. The urban financialization, especially housing financialization, is a dominant and the fastest-growing activity that uses new financial instruments and products. It is considered driving force of financial capitalism in urban redevelopment through extraction and monetization of the values of urban commons. The paper explores the financialization of urban real estate under the patronage of post-socialist state. We apply a comprehensive empirical analysis of financialization from a multi-scalar perspective: using available indicators (at the national scale); and using a panoramic view on several large urban projects in Belgrade (at the local level). Our findings indicate that financialization was accompanied by a strong appropriation and erosion of urban commons and norms, as well as a new assetization game. Given the lack of research on financialization in Serbia, we propose some improvements regarding the control of the urban financialization, planning and governance in line to the UN Guidelines, as well as the global financing approach in the new economy.

Keywords: Urban financialization, urban redevelopment, flexibilization of urban norms, assetization of commons, urban planning and governance, post-socialist context

### References

- Aalbers, M. (2020) Financial geography III: The financialization of the city, *Progress in Human Geography*, 44(3):595-607.
- Anguelov, D., Leitner, H. & Sheppard, E. (2018) Engineering the financialization of urban entrepreneurialism: The JESSICA Urban Development Initiative in the European Union. *International Journal of Urban and Regional Research*, 42, 573-593.
- Gabor, D.V. (2012) The road to financialization in Central and Eastern Europe: The early policies and politics of stabilizing transition, *Review of Political Economy*, 24(2):227-249.
- Lapavistas, C. (2013) The financialization of capitalism: 'Profiting without producing', *City*, 17:6, 792-805.

Palley, T. (2021) Financialization revisited: the economics and political economy of the vampire squid economy, *Review of Keynesian Economics*, 9(4):461–492.

Rutland, T. (2010) The financialization of urban redevelopment, *Geography Compass*, 4(8): 1167-1178.

Weber, R. (2010) Selling city futures: The financialization of urban redevelopment policy, *Economic Geography*, 86(3):251-274.

UN Guidelines (2020) Guideline No.12 Ensure the regulation of businesses in a manner consistent with state obligations and address the financialization of housing, in *Guidelines for the Implementation of the Right to Adequate Housing, Report of the Special rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to nondiscrimination in this context*, Human Rights Council, Forty-third session 24 February–20 March 2020. United Nations, General Assembly, pg.16-18.

84696

## Heritage Management Policies during the Neoliberal Period: Case Study in Cappadocia, Turkey

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Neoliberal policies have consuming effects on most of the resources. One of these resources under threat is fragile heritage properties by inappropriate site management. Using Turkey as an example, this study explores the efficiency of spatial conservation and development plans and the role of local and central authorities in heritage management. The UNESCO World Heritage "Göreme National Park and Cappadocia Rocky Areas" is one of the most striking examples of mismanagement in Turkey. Since the demolishing process of hundreds of licensed and unlicensed construction has started in 2019, all the conservation management system has changed in the region. The National Park status has taken. The new authority named Cappadocia Spatial Presidency has been established by the new legislation special for the region. Local and central administrations have passed their duties related to the heritage management of the site to the new institution. Yet, most of the research about the region focuses on the building scale restoration projects, tourism development, and history while there is a crucial need for focus on heritage management. In this context, this exploratory study used qualitative research methods. Study participants reported a strong need for conservative approaches, not neoliberal policies based on construction. Inadequacy-equipped technical personnel and various other problems were reported in the region as well. The article concludes by addressing the implications for enhancing sustainable heritage management, through the adaptation of the new authority, Cappadocia Spatial Presidency. Besides the new administrative structure, there are essential needs for sustainable legal, administrative, and technical tools to protect the unique nature, history, archaeological, cultural, and urban values of Cappadocia to pass them on to future generations. Otherwise, the destruction of the region is inevitable, and universal values will be lost irreversibly.

Keywords: neoliberalism, heritage management, conservation, development

### References

- Ashworth, G. (2011). Preservation, conservation and heritage: Approaches to the past in the present through the built environment. *Asian anthropology*, 10(1), 1-18.
- Harvey, D. (2006). Neo-Liberalism as creative destruction. *Geografiska Annaler: Series B, Human Geography*, 88(2), 145-158.
- Perry, M. (2001). *The Role of Private Sector in Cultural Heritage Preservation*. Washington, D.C: The World Bank in Cooperation with UNESCO
- Urry, J. (1990) *The Tourist Gaze: Leisure and Travel in Contemporary Societies*. London: Sage.
- Tosun, C. (2001). Challenges of sustainable tourism development in the developing world: the case of Turkey. *Tourism management*, 22(3), 289-303.

## TRACK 14: THEORY

84365

### Space for Species – What Can Planning Do: Planning, Practices and Institutional Design

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Holding this conference implies that space for species should be a concern for planning. Why? One school of planning thought rejects this question: if planning is the link between knowledge and action (Friedmann, 1987: 38-44), any issue that involves applying knowledge for action can engage planning e.g. Rexford Tugwell, a US planner who advocated planning as the fourth branch of government (Alexander, 2022.a). But perhaps "if planning is everything, maybe it's nothing" (Wildavsky, 1973).

Another approach relates planning to practice; sociology of knowledge definitions imply three kinds of planning practice: 1) Generic "planning" - planning that anyone can do; 2) Knowledge-centered "something" (e.g. spatial, environmental or transportation) planning; 3) Real planning in particular situations, e.g. metro-regional planning for Stockholm, European TEN transportation planning, or in specific contexts, e.g. informal or Southern planning (Alexander, 2022.b).

Generic "planners" (including planning academics like us) could address the space for species issue, but without exhaustive knowledge or superior expertise our success would be limited.

Recognized knowledge-centered planning practices, e.g. spatial-, environmental- or transportation planning, should be more effective. These planners can apply their specialized knowledge and advocate appropriate action with the authority of professional expertise.

A promising direction for such planning engagement is institutional design (ID). ID means "designing institutions...rules, procedures and organizational structures to enable and constrain behavior and action (to) conform...to held values, achieve desired objectives or execute given tasks" (Alexander, 2012: 164). Some ID examples in planning involving the practical effectuation of species' rights:

- Spatial planning: the institutionalization in planning of species' property rights and interests, e.g. giving species' representatives (NGO or advocacy-planner) standing to object to submitted plans; requiring consultation with species' representative in statutory planning process.
- Environmental planning: requiring species' representative consultation on- and review of environmental policies, regulations, plans and projects, e.g. review of submitted plans' and projects' EISs.
- Transportation planning: ensuring species' accessibility and preservation of species' ROW e.g. requiring routes (HW, rail etc.) to be planned so as not to block species' ecological (migration and mobility) corridors.

Keywords: planning species space planning practices institutional design

## References

Alexander ER (2012) Institutional Design for Value Capture and a Case: The Tel-Aviv Metropolitan Park. *International Planning Studies* 17(2): 163-177.

Alexander, ER (2022.a) A Post-postmodernist Perspective on Power in Planning: Planning Theories, Practices and Power, pp.... in Grange, T, Gunder, M, & Winkler, T (eds.) *The Handbook of Planning and Power*, Cheltenham UK: Edward Elgar.

Alexander, E. R. (2022.b) On planning, planning theories and practices: A critical reflection. *Planning Theory* 21 (forthcoming)

Friedmann, J (1987) *Planning in the Public Domain*. Princeton NJ: Princeton University Press.

Wildavsky, AB (1973) If Planning is Everything, Maybe it's Nothing. *Policy Sciences* 4 (2): 127-153.

85321

## Urban Digital Twins as a tool for multi-species approach in planning

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Urbanisation is a global phenomenon that has generated the dilemma of how to sustainably design living spaces for the growing human population, while also protecting habitats of rapidly decreasing wildlife. Urban centres and agglomerations have developed at areas that often used to accommodate rich native fauna and flora. Due to human disturbance, nature is therefore forced to survive in fragmented habitats. To counteract, cities around the World are trying to find ways to restore green-blue networks that serve on one hand as recreational areas, yet provide habitat connectivity for wildlife. These conflicting priorities, however, often create challenges for planning.

Contemporaneously Urban Digital Twins (UDTs) are increasingly being taken into use as urban planning tools, for instance in the mapping and prognostics of utilities, traffic and services in urban environments. This has increased the necessity and opportunity to develop also digital twins of green-blue infrastructures, such as urban vegetation or wildlife. In this article we address the potentially conflicting priorities of planning for recreation and biodiversity. Furthermore, we present the possible benefits of utilising UDTs to show variable urban planning scenarios. As a distinction from two-dimensional maps, UDTs constitute an inclusive and interactive experience for urban stakeholders. Additionally, they can be developed to allow users e.g. to compare scenarios of potential futures in an easy-to-access environment.

To illustrate the potential of UDTs as tools for comparing scenarios, we develop a 3D digital twin of a pilot area in Tallinn, Estonia. We estimate maintenance costs and typical biodiversity metrics, such as habitat suitability for several urban taxa, for different green area types of our digital twin based on previous studies. Thereafter we develop alternative green area scenarios for our pilot areas, such as urban development, turning lawns to meadows, increased fragmentation, status quo, and afforestation. The scenarios allow users to compare how several variables of interest are affected by urban planning choices and will help to bridge the gap in the human-biodiversity planning conflict. Hence, it supports inclusiveness in the urban environment.

Keywords: Urban Digital Twins; multi-species planning; habitat creation; scenario modelling

### References

- 1) Global forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools // Karen C. Seto, Burak Güneralp, and Lucy R. Hutyra
- 2) Biodiversity in cities needs space: a meta-analysis of factors determining intra-urban biodiversity variation // Joscha Beninde, Michael Veith, Axel Hochkirch

- 3) What makes urban greenspace unique – Relationships between citizens’ perceptions on unique urban nature, biodiversity and environmental factors // Yuan Wang, David J. Kotze, Kati Vierikko, Jari Niemelä
- 4) An Urban Biodiversity Assessment Framework That Combines an Urban Habitat Classification Scheme and Citizen Science Data // Enjie Li, Sophie S. Parker, Gregory B. Pauly, John M. Randall, Brian V. Brown and Brian S. Cohen
- 5) Planning for the Future of Urban Biodiversity: A Global Review of City-Scale Initiatives // Charles H. Nilon et al.

84538

## Aesthetics in Planning: Ethics, Reason and Marketing

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Aesthetic judgments are intrinsic to physical planning. Whereas moral aspects- e.g. justice-dominate planning theory debates, there is a need to explore the relationship between moral and aesthetic judgments. This relationship is relevant from a daily-practice perspective, as aesthetics considerations play a relevant role in many debates, not least due to the marketing strategies of many developers and interest groups. Although aesthetic considerations in planning (the ugly building or the transformed landscape) have traditionally been associated to moral judgments (the social responsibility of ownership rights or the respect to the natural environment), in many cases, keeping some parts of the scheme outside the physical view has sufficed to avoid substantive discussion on technical and moral issues (e.g. covering-up transport infrastructure eliminates the discussion on the environmental impacts and social inequities of motorized mobility).

The aim of this paper is to explore the relevance and the potential of aesthetic considerations for planners. This includes the potential of aesthetic judgments about planning proposals to build-up support (e.g. through the construction of attractive views or visions or the in urban renewal operations) and to facilitate or hamper communicative action, (e.g. through the tactical use of aesthetics judgements to interfere with technical or moral ones).

The paper focuses on the relevance of experience in the aesthetic judgments of stakeholders and the general public, and the ability of planners to facilitate and shape such experience not only at the linguistic (interpretation) level, but also at the non-linguistic (understanding) level. The aesthetic experience of stakeholders confronting a planning proposal can strongly influence its outcome and the planning process in itself is a source of experience open to aesthetic judgement. The aesthetic dimension can be tactically used by some stakeholders: for example, promoters of large redevelopment projects can benefit from the appeal to ambition, fantasy and over-expectations in their lobbying and marketing activities.

The paper takes as a case study a large redevelopment project in Madrid, Spain: Madrid Nuevo Norte. It examines the confrontation in the approval process, and the successful marketing strategy to create aesthetic judgments to overcome criticisms based on the value and potential of the pre-existent landscape and to manipulate the compliance with the legal procedures that legitimate public debate and public decisions.

The paper claims the relevance of formal procedures from an aesthetic and not only moral perspective. It also highlights the influence of aesthetics in planning, which can move the process in many different and unexpected ways, and the need to steer this influence, prioritizing the human and local scales in aesthetics considerations, and making visible the hidden spaces and no-man's places frequently generated by regeneration projects.

Keywords: complexity; ideology and planning; justice theories; planning theories

#### References

- Shusterman, R. (1992). *Pragmatic Aesthetics: Living Beauty, Rethinking Art*. Oxford UK & Cambridge USA, Blackwell.
- Dewey, J. (1934). *Art as Experience*, Penguin Books.
- Santayana, G. (1896). *The Sense of Beauty*.
- Marotta, S. and A. Cummings (2018). "Planning affectively: Power, affect, and images of the future." *Planning Theory* 18(2): 191.213.
- McGreevy, M. P. (2017). "Complexity as the telos of postmodern planning and design: Designing better cities from the bottom-up." *Planning Theory* 17(355-374).

85069

## About Benefits of Practice Theory for a Better Understanding of Planning

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For a long time, it was assumed that ‘planning’ is an administrative task that follows rational rules. However, it became clear that this understanding of planning is short-sighted. In response to its complexity and the linked uncertainty, different planning theory approaches have broadened the meaning of ‘planning’, incorporating the enmeshments with technical, socio-cultural, political, and ethical dimensions of planning. To this account, practice-theoretical approaches, which have been rediscovered in social and cultural studies since the 2000s (e.g. Reckwitz 2002 and Schatzki 2002), have recently also been taken up in the planning context (Watson 2002). It is argued that Practice Theory can help to deepen the understanding of ‘planning’ by defining planning as a practice that “guides, prevents, enables, questions or legitimizes other practices” (Dünckmann et al. 2019: 317). In addition, it is assumed that Practice Theory not only offers a promising theoretical approach, but also methodological and analytical access to an improved understanding of ‘planning’ (ib.: 317-318).

Following this perspective, we explore Practice Theory for planning by shedding light on the complex relations of planning and moralities using the example of weighing and development of planning alternatives. Here, we address the following questions: What particular structures of social rules characterize planning practices? Specifically: In which ways do values mediate planning? In which ways do practice theories sharpen the understanding of values in planning decisions? In this respect, we deal with values in urban planning decision-making processes and link urban planning with a practice theory perspective. It is a theoretical, conceptual contribution to a better understanding of the moral philosophical dimension of planning (Marcuse 1976; Hendler 1995, Hillier 2004; Campbell 2012), which is not least important because of the foundation it can provide for a multi-species approach and related questions.

Keywords: planning theories, practice theory, planning ethics, planning practices, weighing, values

### References

- Campbell, H., 2012. ‘Planning ethics’ and rediscovering the idea of planning. *Planning Theory*, 11(4), pp. 379–399.
- Dünckmann, F., Haubrich, D. and Runkel, S., 2019. Praktiken und Raum. In: Schäfer, S. and Everts, J., ed. 2019. *Handbuch Praktiken und Raum. Humangeographie nach dem Practice Turn*. Bielefeld: transcript, pp. 317–339.

Hendler, S., 1995. *Planning Ethics*. Routledge: London.

Hillier, J., 2004. 'But Tights Jeans Are Better!': Moral Improvisation and Ethical Judgement in Local Planning Decision-Making. In: Lee, R. and Smith, D., M., ed. *2 Geographies and Moralities. International Perspectives on Development, Justice and Place*. Malden, Oxford and Victoria: Blackwell, pp. 211–227.

Marcuse, P., 1976, Professional Ethics and Beyond: Values in Planning. *Journal of the American Institute of Planners*, 42(3), pp. 264–274.

Reckwitz, A., 2002. Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory* 5(2), pp. 243–263.

Schatzki, T., 2002. *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*. University Park, Pennsylvania State University Press: Pennsylvania.

Watson, V., 2002. Do We Learn from Planning Practice?: The Contribution of the Practice Movement to Planning Theory. *Journal of Planning Education and Research*, 22(2), pp. 178–187.

85541

## Sound as a complexity element of different city structures

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The urban fabric can be perceived as a heterogeneous and complex system of interactions between the individual and the collective, the physical and the non-physical, the functional and the emotional, the internal and the external, the organized and the random (Jacobs, 1961; Kavartzis and Hatch, 2013). City is a palimpsest, it is not only that which is built. It is made up of different aspects, both material and immaterial: experienced in the everyday, influenced by time-dimensions, qualified by memories, existing through the interaction and movement between human bodies and senses (Karandinou et al, 2009).

In the current state of academic research, the way of analyzing city dynamics and socio-spatial linkages is focused on the multidimensional conceptions of city which both reflect and interrelate the rich diversity and complexity of contemporary urban life (Healey, 2002). As the city, could be seen both as a spatial and a temporal reference point, it is the most privileged field for understanding human activity and its influences on the space (Stefanou, 2001). In this research, it is chosen to approach the city through a non-material parameter: sound and its relation to different spatial structures (planned and unplanned-autogenous). Urban sonic places imply a constant interplay between the urban environment and the sounds, which are created by people using the city, infrastructures, technologies, natural elements. It's a dynamic relationship, affected by the normal rhythms of life and over the longer term by redevelopment, planning decisions, cultural, social, economic and environmental trends. (Cusack, 2017)

This paper consists of a mixed methodological approach: a) an extensive literature review aiming to understand the relevance of the dimension of sound and urban soundscape to the complexity of city structure, b) field research which commences with urban fabric identification, including field recordings of the urban soundscape of Thessaloniki and observation of the urban environment. Thessaloniki, the second largest city in Greece, is a multicultural city with a long historical past and a population with a vibrant and diverse cultural background, which is reflected in the tangible and intangible elements of the urban space.

Keywords: urban fabric, complexity, urban soundscape

### References

- Cusack, P. 2017. Berlin sonic places. A brief guide. Berlin: Wolke.
- Healey, P. 2002. 'On creating the 'city' as a collective resource'. *Urban studies*, 39(10), 1777-1792. DOI:10.1080/0042098022000002957.
- Jacobs, J. 1961. *Death and Life of Great American Cities*. New York: Random House.
- Karandinou, A., Achtipi, C., & Giamarelos, S. 2009. 'Athens by sound'. *Metalocus*, 24, 88-88.
- Kavartzis, M., & Hatch, M. J. 2013. 'The dynamics of place brands: An identity-based

approach to place branding theory'. *Marketing theory*, 13(1), 69-86.

Schafer, R. M. 1977. *Our sonic environment and the soundscape. The tuning of the world*. New York: Knopf.

Stefanou, J. (Ed). 2001. *The physiognomy of a place - The character of the Greek city of the 21st century (In Greek)*. Athens: NTUA.

85000

## The Doubleness of Beirut's Ruins: Between a Past War and Wars Yet to Come

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The sight of war ruins is a common feature in Beirut's landscape. The civil war (1975-1990) left behind an expansive geography of war-scarred ruins in Beirut and its peripheries. Amid a massive construction boom, skyrocketing land and housing prices, and high demand for building sites in Beirut's immediate southern peripheries, the continued presence of ruins 25 years after the end of the war is puzzling. Based on an archival and ethnographic study in the Hayy Madi-Mar Mikhail neighborhood, a peripheral area within the southern suburbs of Beirut, this paper examines the transformation of the geography of civil war's ruins over time and its re-inscription within the unfolding sectarian conflict. The paper explores the spatial production of ruins during the war: when buildings along the "green line," the battle line that separated East from West Beirut during the civil war, were partially destroyed and later on inhabited by war displaced families from south Lebanon. This investigation is followed by examining the reasons behind why these ruins stand empty in times of 'peace.' I show that the current geography of civil war ruins is a result of a territorial conflict over Beirut's peripheries that have been transformed onto sectarian frontiers in the years after the end of the civil war. The paper will discuss what I call the doubleness of the ruins — as products of a past civil war and a present territorial war that is not-so-different from the civil war but using planning and building law tools — in the transformation of the area into a deadly sectarian frontier in "times of peace."

Keywords: ruins, doubleness, war, periphery, property, Beirut

### References

- Fawaz, Mona. "Neoliberal Urbanity and the Right to the City: A View from Beirut's Periphery." *Development and Change* 40, no. 5 (2009): 827–52.
- Miraftab F (2017) Insurgent practices and decolonization of future(s). In: Bhan G, Srinivas S, and Watson V (eds) *The Routledge Companion to Planning in the Global South*. Abingdon: Routledge, pp. 276–288.
- Roy, Ananya. "The Blocake of The World Class City: Dialectical Images of Indian Urbanism." In *Worlding Cities : Asian Experiments and the Art of Being Global*, edited by Ananya Roy and Aihwa Ong, 259–78. Malden, MA: Wiley-Blackwell, 2011.
- Stoler, Ann Laura. *Imperial Debris: On Ruins and Ruination*. Durham ; London: Duke University Press Books, 2013.
- Watson V (2009) Seeing from the South: Refocusing urban planning on the globe's central urban issues. *Urban Studies* 46(11): 2259–2275.
- Weizman, Eyal. *Hollow Land: Israel's Architecture of Occupation*. New York: Verso, 2007.

<http://books.google.com/books?id=k9h6QgAACAAJ>.

-Yiftachel O (1998) Planning and social control: Exploring the dark side. *Journal of Planning Literature* 12(4): 395–406.

81930

## The Important of the Urban-Wildland Interface in the Science of Cities

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The Science of Cities seeks to understand how urban areas function in an effort to shape sustainable and equitable development both for urban areas and their surrounding ecosystems for farmland, forests, waterways and wildlands. This research introduces the concept of perfusion dynamics as an underpinning theory to explain urban growth and the uptake of ex-urban resources (food, energy and water). This theory helps fit urban areas within their regions.

In forming and testing a new theory for urban metabolism, we draw from concepts of perfusion in the biological and ecological sciences for support. For example, we consider the ecosystem of a coral reef, where its complex topography supports diverse and abundant species. Like a coral reef, reconsidering urban form with perfusion dynamics helps explain the fractal, branching pattern of urban growth and dynamics at play in studies on urban scale. We suggest that there is a maximum distance from the urban edge beyond which goods and services no longer evenly permeate interior urban neighborhoods.

To provide proof of concept, we demonstrate how to measure the urban thickness with geoprocessing tools using a dataset of 13,561 Urban Areas in the United States. We show that as urban areas approach a threshold of 10 km in thickness, they tend to elongate. Over a third of US urban areas are within 0.5 km of the urban interface. Only 4% of all urban areas have grown beyond the perfusion constraint of 5km from the urban interface. Because the urban interface is socially governed, our exploratory research points out practical considerations for urban planning and future research.

Keywords: wildland, sustainable development, fractal morphology, urban form, spatial planning

### References

- Angel S, Parent J, Civco DL, Blei A and Potere D (2011) The dimensions of global urban expansion: Estimates and projections for all countries, 2000–2050. *Progress in Planning* 75(2): 53-107.
- Batty M (1997) Cellular automata and urban form: a primer. *Journal of the American Planning Association* 63(2): 266-274.
- Bettencourt LM (2013) The origins of scaling in cities. *Science* 340(6139): 1438-1441.
- Brinkley C (2018) Fringe benefits: Adding rugosity to the urban interface in theory and practice. *Journal of Planning Literature* 33(2): 143-154.
- Brinkley C (2019) Cities as Coral Reefs: Using rugosity to measure metabolism across the urban interface. *Annals of the American Association of Geographers* 109(5): 1541-1559.

84982

## The dual-sided ethos of soft planning: discussing the risks, opportunities and challenges of a soft turn in planning practice and theory

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Over the last decade, soft planning has become an increasingly visible concept. Since the term soft spaces was firstly coined, soft planning has been used to describe a growing number of practices that occur at the margins of statutory planning systems. However, as soft planning-related literature proliferates, so does the diversity of approaches and planning practices it encompasses. Such diversity fuels long-standing questions about what can or cannot be considered as soft planning as well as about its usefulness for today's planning theory and practice: What exactly distinguishes soft planning from strategic spatial planning? What is new in soft planning and how useful is it for planning theory and practice? What normative debate does it entail and how significant is it to better understand the risks and opportunities planning is facing today?

To shed light on this still unclear conceptual outline, this paper delves on a systematized reading and interpretation of soft planning literature vis-à-vis its relationship with strategic spatial planning. Focusing on what is called the “contextual components of planning”, we look into five components - ethos, governance, politics, policies, and spaces / scales. The aim is to establish soft planning as a construct – a systematic identification of its constitutive attributes and substance - and contribute to develop the signification of soft planning as a concept, i.e., the methodological confirmation of its underlying meanings and purposes while making room for a more tangible and intelligible conceptualization of soft planning.

Results show that despite its increasing dissemination, there is no explicit theory of soft planning so far. Nevertheless, an implicit theory of soft planning takes shape. The debate on soft planning builds on the principles and flagships of strategic spatial planning. However, a transition is underway that raises a normative controversy about the underlying values of planning practices. ‘Soft’ is actually a metaphor that accommodates this dual-sided ethos of soft planning: either perverse permissiveness or progressive flexibility. The question though is not to choose between the two sides, but rather address this conflictual quandary to induce positive change in planning practices.

Keywords: Soft Planning; Soft Spaces; Spatial Planning; Territorial Governance; Planning Theory and Practice

### References

Albrechts L (2003a) Planning and power: towards an emancipatory planning approach. *Environment and Planning C: Government and Policy* 21: 905–924. DOI: 10.1068/c29m.

Allmendinger P and Haughton G (2010) Spatial planning, devolution, and new planning spaces. 28: 803–819. DOI: 10.1068/c09163.

Faludi A (2010) Beyond Lisbon: Soft European Spatial Planning. *disP - The Planning Review* 3625(2010). DOI: 10.1080/02513625.2010.10557098.

Healey P (1997) Collaborative Planning. *Shaping Places in Fragmented Societies*. Houndmills: MacMillan.

Jessop B (1998) The rise of governance and the risks of failure: the case of economic development. *International Social Science Journal* 50: 29–45.

Metzger J (2011) Neither revolution, nor resignation: (re)democratizing contemporary planning praxis: A commentary on allmendinger and haughton's 'spatial planning, devolution, and new planning spaces'. *Environment and Planning C: Government and Policy* 29(2): 191–196. DOI: 10.1068/c10210.

Paasi A and Zimmerbauer K (2016) Penumbral borders and planning paradoxes: Relational thinking and the question of borders in spatial planning. *Environment and Planning A* 48(1): 75–93. DOI: 10.1177/0308518X15594805.

Swyngedouw E (2005) Governance Innovation and the Citizen: The Janus Face of Governance-beyond-the-State. *Urban Studies* 42(11): 1991–2006. DOI: 10.1080/00420980500279869.

84392

## Beyond histories and futures: A typology of temporal mechanisms for the control of space

Surajit Chakravarty

The mutually constitutive relationship between space and time has long been debated in social theory. As argued by Lefebvre and by Foucault, spatial relations are produced by social contestation in which power plays a significant structuring role. Temporal structures, too, result from the struggles and inequities that they serve also to obscure. From diurnal regulations such as frequencies of public transportation modes, to long-term policies controlling rents and mortgages, to epoch-defining deadlines to respond to climate change and its effects, policies regarding space and spatial practice are built on temporal structures and calculations.

In fields concerned with the built environment, time is frequently interpreted through frameworks of histories and futures, rhythms, and speed. Another common approach is that of ‘speed’, ‘instantaneity’ and ‘compression’, often considered closely with the effects of technology on society and culture (Castells, 1997). Recent scholarship (Andres and Kraftl, 2021; Chakravarty, 2020; Charbgoo and Mareggi, 2020; Laurian and Inch, 2019), however, has opened up new avenues for exploring the relationships between the state, society, space and time. These studies move beyond the simple Cartesian timeline (past, present and future), by interpreting time and temporalities in the realms of labor, technology, community, conviviality, and planning.

This paper aims to investigate how temporal structures, practices, and governmentalities, perpetuate unjust socio-spatial outcomes. Through a thorough review of existing literature, and drawing on planning cases (from various contexts internationally), the paper develops a typology of temporal mechanisms through which power is exercised on the production of space through the control of time. Ten kinds of temporal practices are used to illustrate the relationship between temporality and power, in the context of urban planning and the control of space. The argument culminates with the development of the idea of ‘temporal justice’.

Keywords: Time, temporality, justice, planning, socio-spatial, power

### References

- Andres, L. & Kraftl, L. (2021), New directions in the theorisation of temporary urbanisms: adaptability, activation and trajectory, *Progress in Human Geography*, 45(5), 1237-1253.
- Castells, M. (1997). An introduction to the information age. *City*, 2(7), 6-16.
- Charbgoo, N., & Mareggi, M. (2020). A framework for time studies in urban planning: Assessment of comprehensive planning in the case of Tehran. *Environment and Planning B: Urban Analytics and City Science*, 47(6), 1098-1114.
- Chakravarty, S. (2020). Continuous Production and New Forms of Labour: A Case for

Reclaiming Public Time. *Journal of Human Values*, 26(1), 75-92.

Laurian, L., & Inch, A. (2019). On time and planning: Opening futures by cultivating a “Sense of Now”. *Journal of Planning Literature*, 34(3), 267-285.

84384

## Characteristics of urban settlements impacting avian species behaviour in India

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Due to myriad climate types in India, every region has a unique vegetation and land cover, attracting many migratory bird species throughout the year, ranging from flamingos to peregrine falcons. This natural heritage encourages tourism (bird sanctuaries and festivals) and a healthy biosphere. Yet, when Indian cities are planned for further development, the importance of the avian species is limited to earmarked space for land use, without further study on their nesting and feeding habits, culminating into a reduced influx of birds every year.(2)(3)

Another observation for Indian avian species in urban settlements is the settlement fabric itself.(1) A low rise settlement fabric with higher green cover attracts small bird species depending on trees and flowers for sustenance.(5) Similarly, a mid-rise fabric attracts more domestic species such as the common mynah while a high rise settlement attracts high altitude nesting birds.(4) The nesting habits are also observed to be directly proportional to the number and size of lakes in the region.

The National Urban Planning guidelines - URDPFI norms focus on urban development for human development, population density and direct dependence on amenities for physical and spiritual health. Today, while the forest cover in the country has grown, cities which were previously hailed for their green cover have drastically lost the same. Although the pressure on land for housing and transport is present, urban forestry is essential for a healthy city – providing avenues for healthy activity while decreasing the heat island effect.(6) Community wisdom and avian expert opinion is essential to address the issue and provide better and dense urban forests to bring the birds back, acknowledging them as actors in a healthy urban settlement. This paper attempts to analyze the trends of bird behaviour directly impacted by urbanization in Indian settlements and propose solutions to enhance the same.

Keywords: Birds, Biodiversity, Landscape, Planning, Urban settlement

### References

1. Piotr Tryjanowski, Tim H. Sparks, Stanisław Kuźniak, Paweł Czechowski, Leszek Jerzak (2013) Bird Migration Advances More Strongly in Urban Environments
2. Christopher B. Hensley, Christopher H. Trisos, Paige S. Warren, Jennie MacFarland, Steve Blumenshine<sup>1</sup>, Joshua Reece<sup>1</sup> and Madhusudan Katti (2019) Effects of Urbanization on Native Bird Species in Three Southwestern US Cities
3. Anne-Sophie Bonnet-Lebruna, Andrea Manica, Ana S.L.Rodrigues (2020) Effects of urbanization on bird migration
4. João Carlos de Castro Pena, Felipe Martello, Milton Cezar Ribeiro, Richard A.

Armitage, Robert J. Young, Marcos Rodrigues (2017) Street trees reduce the negative effects of urbanization on birds

5. Caroline Isaksson (2018) Impact of Urbanization on Birds: How They Arise, Modify and Vanish

6. John M. Marzluff, Worldwide urbanization and its effects on birds

84301

## Do planning theorists need to re-new outdated but popular paradigms? – Rawls, just cities, and the rights of “animals and the rest of nature”

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The book “A Theory of Justice” by John Rawls’ (1971/1999), although not written with a particular focus on urban life, is very popular in discussions of the just city (Fainstein 2010; Moroni 2020). Although social values and justice expectations have developed over the past 50 years, many just-city-authors have not bothered to update Rawlsian justice in light of social change. Their accounts of the just city remain forever filled with the diamonds and rust of the 1970s. For example, Rawls thought that humans do not owe justice “to animals and the rest of nature” (Rawls 1971/1999: 448). Such neglect today seems appalling. The expanding awareness for animal rights has changed contemporary perceptions of factory farming, abattoirs and meatpacking centers, or chicken shredding. Authors like Singer (1995), Nussbaum (2006: 325–407), Abbey (2007), or Korsgaard (2020) consider the disregard for justice for animals as speciesism (as dreadful as sexism or racism). But do just-city-authors, who rely on Rawls, have an obligation to address Rawls' speciesism, and if yes, how?

The case of animal rights and the just city is an example of the quagmire of planning theorists, who borrow from outdated but popular theories. Should planning theorists update such old-fashioned material? And if just-city-authors enhance Rawlsian justice to account for animal rights, do they fulfill academic standards or do they merely pursue political correctness and cancel culture? The problem seems to be smaller with borrowing ideas from Aristotle, Kant, or Rousseau. With authors long gone, it is understood that their sensibilities do not match current perceptions. But borrowing from an (almost) contemporary author requires stricter scrutiny. This is particularly true for an author, whose ideas are borrowed to support an ethical concept such as the “just city”. Intuitively, most planners would not think of a city as just if, let us say, in this city slavery or bonded labor are permitted. But what about a city where human animals kill and eat non-human animals on a regular basis? A conception of justice as compassion (Davy 1997: 348–356) may help planners understand which killing/eating habits may be compatible with the just city.

Keywords: animal rights; just city; justice as compassion; planning and justice; Rawls; speciesism.

### References

- Abbey, Ruth (2007) Rawlsian resources for animal ethics. *Ethics & the Environment* 12(1) 1–22.  
Davy, Benjamin (1997) *Essential injustice*. Springer.  
Fainstein, Susan S. (2010) *The just city*. Cornell University Press.

Korsgaard, Christine M. (2020) *Fellow creatures. Our obligations to the other animals.* Oxford University Press.

Moroni, Stefano (2020) The just city. Three background issues ... *Planning Theory* 19(3) 251–267.

Nussbaum, Martha (2006) *Frontiers of justice: Disability – nationality – species membership.* The Belknap Press of Harvard University Press.

Rawls, John (1971/1999) *A theory of justice.* Revised edition. The Belknap Press of Harvard University Press.

Singer, Peter (1995) *Animal liberation.* 2nd edition. Pimlico.

85536

## DID DARWIN WAIT FOR COVID-19 TO ‘COME TO TOWN’? SPECIES IN THE CITY AND THE RELATIONSHIP BETWEEN BIOLOGY AND URBAN STUDIES

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The images of animals returning to the empty (from humans) centre of the cities during the quarantine because of Covid-19 are still in planners' memories. Perhaps what is not in many planners' memories is that Geddes was also a biologist in a period when biology was considered a type of a 'multidisciplinary' branch of knowledge. The aim of the paper is to examine the current situation of the relationship between biology and urban studies/ planning and discover its possible roots. Since this paper is a purely theoretical one, the primary method is the analysis of selected texts, both 'modern classic' and contemporary (the latter mainly belonging to the tendency of 'pop studies').

The analysis is mainly divided into two main parts. The first refers to general biological approaches. The obvious starting point is Darwin's theory of evolution through natural selection. Dawkins claims that this is the only answer to the biggest question of all: 'why do we exist'? One of the additional questions he asks is why are there so many different kinds of animals? Next comes Diamond's question what is it about that two per cent difference in DNA between human beings and chimpanzees that has created such a divergence between evolutionary cousins. Wilson, who also analyzed the origins of creativity, is confident that 'every species is a masterpiece'. He was also the first who designated biophilia in the sociobiological sense claiming that as the tendency of humans to focus on and affiliate with nature and other life-forms, it has, in part, a genetic basis.

The second part of the analysis refers to the relation between biology and urban studies/ planning. Geddes developed in 1906 a 'biologist's viewpoint' referring to a completed city as a result of a synthesis of town, school, cloister and city proper. In 1931 he developed a stairway of knowledge with sociology at the top, followed by biology, physical science and mathematics. Geddes largely influenced Mumford, and Mc Harg constitutes a link with Mumford under the umbrella of 'ecohumanist' urbanism, a synthesis of natural systems ecology with the many dimensions of human ecology. The next step is the biophilic approach to cities and urban planning before Covid-19 reminded us in a hard way that the spread of globalization leads to the destruction of existing ecosystems and dangerous infections originating in animals but transmitted to humans.

The main conclusion is that, although the perception of animals circulating in the cities became conscious during the recent pandemic, the wild side of the cities ('urban jungle') existed well before that. Darwin had already 'come to town' leaving various traces, e.g. natural songs.

Keywords: species, biophilic cities, Covid-19, urban planning, Darwin, Geddes

#### References

1. Arvay, C. (2020) *Biophilia in der Stadt: Wie wir die Heilkraft der Natur in unsere Städte bringen*, Munich: Goldmann.
2. Beattey, T. (2017) *Handbook of Biophilic City Planning & Design*, Washington: Island Press.
3. Cohen, W. J. (2019) *Ecohumanism and the Ecological Culture: The Educational Legacy of Lewis Mumford and Ian McHarg*, Philadelphia: Temple University Press.
4. Dawkins, R. (1976/ 2006) *The Blind Watchmaker*, London: Penguin.
5. Diamond, J. (1992/ 2006) *The Third Chimpanzee: The Evolution and Future of the Human Animal*, New York: Harper Collins.
6. Meller, H. (1994) *Patrick Geddes: Social Evolutionist and City Planner*, London: Routledge.
7. Schilthuizen, M. (2018) *Darwin Comes to Town: How the Urban Jungle Drives Evolution*, London: Quercus Publishing.
8. Wilson, E. (1990) *Biophilia: The Human Bond with Other Species*, Harvard University Press.

84557

## Planning urban social spaces and their interrelations

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Following our theoretical perspective for understanding urban social spaces and their interrelations (Jabareen and Eizenberg, 2021), we examine the role of planning in the formation and relations of these spaces. Conceiving urban social spaces as discursive and real entities (Laclau and Mouffe, 2014) with real and sensual qualities (Harman, 2018) that are constituted through specific relations, we analyze London's master plans from 1943 (the first master plan), 1976, 2004 and 2020 to identify urban social spaces within discursive social relations, their "differential position" in an urban system and the specific "identity" given to different social spaces by the planning system. While urban social spaces are highly dynamic, constantly evolving, and their mixtures of social groups and real and sensual qualities are changing, we assume that planning has a significant role in decreeing this dynamic. We argue that planning has the power to envision and direct the nexus of positions of urban social spaces and affords and limits possibilities for their interrelations. In a dielectric mode of thinking, we examine the manifestations of the three logics that construct our analytical framework – the logic of difference, the logic of equivalence, and the fantasmatic logic – in the master plans. We portray the evolution of planning treatment of the differences and similarities among social spaces and the fantasy (Gunder, 2003) about the kind of spaces and relations between them that the city of London oath to encapsulate. The analysis of London master plans excavates the political relations, ranging from harshly antagonistic to inclusive, and the fantasmatic logic that urban planning is submerged in, and allows a more critical understanding of urban reality by illuminating inequality, injustice, antagonism, and the formulation of "otherness."

Keywords: Social spaces; Urban planning; London; master plans; antagonism; fantasmatic logic

### References

- Gunder M (2003) Passionate planning for the others' desire: An agonistic response to the dark side of planning. *Progress in Planning* 60: 235–319.
- Harman G (2018) *Object-Oriented Ontology: A New Theory of Everything*. London: Penguin.
- Jabareen, Y., & Eizenberg, E. (2021). Theorizing urban social spaces and their interrelations: New perspectives on urban sociology, politics, and planning. *Planning Theory*, 20(3), 211-230.
- Laclau E and Mouffe C (2014) *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. London: Verso.

84597

## Spaces of Care: Redefining Spatial Justice from a Perspective of Care

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Social inequality, exploitation, and oppression have long been concerns of feminist care ethicists. Conceptualizations of care as a mode of ethical action have their roots in moral philosophy and developed out of a feminist critique of a prevailing justice and rights perspectives within political philosophy. An ethics of care that is qualitatively different from discourses on rights and justice presupposes vulnerability, interdependency, and responsibility as fundamental features of social relations. The focus on care as interdependence rests on the idea of the relational dependence between humans, other beings, and the environment, all of which have spatial dimensions. This relational space is shaped by ‘being-in-common’ (McKinnon et al. 2022) which implies a view of the world in which human beings are considered as always enmeshed in relationships with other humans as well as non-human species, nature, and the environment. However, despite the efforts of some notable work (see e.g., Till 2012; Williams 2017), contemporary planning theories and related scholarship remain inspired by liberal political theory, dominated by conceptual frameworks of rights and justice. Inspired by feminist thought, we can see theoretical and empirical explorations emerging where care and justice are not conceived as opposing rationales. Rather, placing care in its moral and political context (Tronto 2005) connects the private and public spheres, and enables us to address questions of what constitutes just, sustainable, and liveable spatial environments for humans and other beings. This conference contribution is based on a research collaboration (see Gabauer et al. 2022) that involved a group of scholars from different disciplinary backgrounds. Drawing on detailed case studies from Europe, the Americas, and Asia, this joint endeavor aimed at systematically introducing debates on care to the interconnecting fields of urban studies, planning theory, and related disciplines. Departing from this research, the following conference paper seeks to offer perspectives of redefining and enhancing the idea of spatial justice by including an ethics of care. It attempts to tackle the question of the possibilities for multi-species approaches to planning.

Keywords: Care, Ethics of Care, Interdependency, Planning, Planning Theory, Spatial Justice

### References

- Gabauer, A., Knierbein, S., Cohen, N., Lebuhn, H., Trogal, K., Viderman, T. and Haas, T. (2022) (eds.) *Care and the City: Encounters with Urban Studies*. London/New York: Routledge.
- McKinnon, K., Healy, S. and Dombroski, K. (2022) *Care from the Beginning: Birthing Collective Origins, Interdependent Cities, and New Community Economies*. In: A. Gabauer, S. Knierbein, N. Cohen, H. Lebuhn, K. Trogal, T. Viderman and T. Haas (eds.) *Care and the City: Encounters with Urban Studies*. London/New York: Routledge, pp. 24–33.
- Till, K.E. (2012) *Wounded Cities: Memory-Work and a Place-Based Ethics of Care*. Political

Geography 31(1): 3–14.

Tronto, J.C. (2005) An Ethic of Care. In A.E. Cudd and R.O. Andreasen (eds.) *Feminist Theory: A Philosophical Anthology*. Oxford: Blackwell, pp. 251–263.

Williams, M.J. (2017) Care-Full Justice in the City. *Antipode* 49(3): 821–839.

84368

## Imagined Territories

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This study explores the mutual contingency between societal sustainability transformations (1) and spatial development and elaborates new roles that the profession of urbanism could assume in this interplay. It aims to produce new actionable knowledge that has operational significance to the profession of urbanism and broadens its role in the sustainability discourse.

The roles of territory as a fulcrum and public imagination as facilitator or resistor of social transformation towards sustainability have been broadly discussed in recent years (among many others, see 2 and 3). The study elaborates the conjunction of these hypotheses experimentally, in a real-world setting, leading to specific changes in the local territory and society of concern and generalizable scientific results.

The present real-world experiment (4) is conducted in Liechtenstein to study and scientifically support societal change as a searching and learning process framed by spatial development. To this end, over thirty public events and workshops centered around themes of spatial development have been conceived and carried out over three years and in nine locations. These events serve as the experimental system (5) through which the research is pursued. Different map- and model-based workshop and discussion formats have been tested to bring experts, decision-makers, and civil society actors into an imaginative exchange during these events. The discursively constructed imaginations of the territory in each instance are treated as the epistemic object of the research. The events are multi-medially documented and subsequently analyzed using qualitative content analysis methods and procedures rooted in the Grounded Theory paradigm (6).

The author developed new instruments, processes, and tools through the real-world experiment and its analysis. Spatial development in is thereby reinterpreted from a product of experts' planning to a breeding ground for democratic sustainability development. These findings are proposed for broader application in the field of urbanism.

Keywords: real-world experiment, transformation research, spatial development, imagination, territory

### References

(1) WBGU (Ed.). (2011). *World in transition: A social contract for sustainability*. German Advisory Council on Global Change.

(2) Latour, B. (2018). *Down to earth: Politics in the new climatic regime* (English edition). Polity Press.

(3) Mulgan, G. (2020). The Imaginary Crisis (and how we might quicken social and public imagination). Demos.

(4) Gross, M., Hoffmann-Riem, H., & Krohn, W. (2005). Realexperimente: Ökologische Gestaltungsprozesse in der Wissensgesellschaft. Transcript.

(5) Rheinberger, H.-J. (2012). Experimental systems: Difference, graphematicity, conjuncture. In B. Barrett (Trans.), *Intellectual birdhouse: Artistic practice as research* (pp. 89–99). Koenig Books.

(6) Charmaz, K. (2014). *Constructing grounded theory* (2nd edition). Sage.

85317

## Emancipation through populism? Seeing those non-visible planning

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This paper detects the emancipatory potential of populism and suggests that populism, although often seen disruptive to democracy, may nevertheless have a role in the emancipation of the non-visible in planning. In general, populism is considered antipluralistic and democracy-distorting (Müller, 2016; Rosanvallon, 2008; Sager, 2020). Chantal Mouffe (2018), however, proposes to follow Ernesto Laclau's (2005) theory of populism, which introduces populism as "a discursive strategy of constructing a political frontier dividing society into two camps and calling for the mobilization of the 'underdog' against 'those in power'" (Mouffe, 2018: 10). For Laclau, populism is a social logic with implications to many phenomena (Laclau, 2005).

In *Hegemony and Socialist Strategy* (1985), Laclau and Mouffe introduce the 'logic of difference' and the 'logic of equivalence'. The former refers to the expansion of political space and increasing complexity, while the latter concerns its simplification (Laclau & Mouffe, 1985: 130). Populist articulation, as it indeed simplifies the political space, follows the 'logic of equivalence'. Through populist articulation, pluralism condenses into a singularity, a collective actor capable of challenging the existing power. As such, populist articulation may, under certain conditions, provide a means of pursuing emancipation for those 'underdogs', whose voice is not heard in planning.

The 'logic of difference' has been well embraced in planning theoretical discussion, perhaps so much so that it has overshadowed the 'logic of equivalence'. With two planning examples this paper presents how the 'logic of difference' alone is not enough but also the 'logic of equivalence' is needed for emancipation. This paper provides conceptual tools for understanding and identifying when populist articulation can support emancipation in planning.

Keywords: populism, emancipation, democracy, post-politics

### References

- Laclau E (2005) *On Populist Reason*. New York and London: Verso.
- Laclau E and Mouffe C (1985) *Hegemony and Socialist Strategy*. London: Verso.
- Mouffe C (2018) *For a Left populism*. London: Verso.
- Müller J-W (2016) *What is Populism?* University of Pennsylvania Press.
- Rosanvallon P (2008) *Counter-democracy*. Cambridge: Cambridge University Press.
- Sager T (2020) Populists and planners: 'We are the people. Who are you?' *Planning Theory* 19(1): 80–103.

85232

## Theorizing placemaking in the spectrum of spatial planning theories; how to

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Acknowledging the significant shift in spatial planning thought and its several implications for the future of spatial planning, this paper attempts to deepen an understanding of placemaking. Correlations and links between the evolutionary trajectories of placemaking and spatial planning theory reveal that they diachronically form intricate relationships and perhaps create a new learning metaphor for planning practice.

In an endeavor to locate placemaking's emergence and gradual consolidation in the spectrum of planning theory, it is evident from the literature that it has some ubiquitous qualities. The practice of placemaking is described as a mostly experimental, non-plan approach, with minimum intervention and maximum flexibility. Its main aim is to get things done, to learn by doing, and to establish a transformative learning and collective understanding of place versus space.

Rephrasing Friedmann on the ways of doing planning theory, theorizing placemaking could potentially attempt to define the object of placemaking via the relation between knowledge and action, to observe placemaking projects at work in a particular place, to achieve a wholesome understanding as well as to facilitate an empirical and critical inquiry and normative explorations.

Following the above as steps of a methodology for theorizing placemaking, a linguistic analysis of literature on the term was performed, followed by a thorough examination of case studies around the world and a collection of tools used in its practice. Trends and discussions on planning theory were also inputs as well as the potential answers to the question 'why do planning theory'.

This paper is aiming to contribute to the establishment of a theory of placemaking, taking into account the growing need of citizens to "control" public space and the newly-formed bottom-up dynamics as an aspect of public participation in the mainstream planning process.

Keywords: placemaking, theorizing, planning theory, theory of placemaking, participation, place

### References

- Barry J, Horst M, Inch A, et al. (2018) Unsettling planning theory. *Planning Theory* 17(3): 418–438. DOI: 10.1177/1473095218763842.
- Fainstein SS (2005) Planning Theory and the City. *Journal of Planning Education and Research* 25(2): 121–130. DOI: 10.1177/0739456X05279275.
- Friedmann J (2003) Why Do Planning Theory? *Planning Theory* 2: 7–10. DOI: 10.1177/1473095203002001002.

Gunder M, Madanipour A and Watson V (eds) (2017) *The Routledge Handbook of Planning Theory*. 1st edition. New York: Routledge.

Schneekloth L and Shibley R (1995) *Placemaking: The Art and Practice of Building Communities*. Wiley. Available at: <https://www.wiley.com/en-gr/Placemaking%3A+The+Art+and+Practice+of+Building+Communities-p-9780471110262> (accessed 22 January 2020).

Toolis EE (2017) Theorizing Critical Placemaking as a Tool for Reclaiming Public Space. *American Journal of Community Psychology* 59(1–2): 184–199. DOI: 10.1002/ajcp.12118.

85359

## In Retrospect: The Welfare Ambitions of Transit-Oriented Development

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This paper will focus on the recent resurgence of Transit-Oriented Development (TOD) as a peri-urban planning model. While TOD has gained an innovative and wholesome reputation for fusing transport and land-use planning to meet urban and regional challenges of the 21stC, urban scholars worry that its reductionist outlook on place (Qviström et al., 2019), partially fueled by normative belief in urban morphology to solve societal problems (Keil, 2018), significantly reduces its credibility as a socially sustainable solution for peri-urban regions. Where deployed, research suggest that TOD holds a worrisome track record for spurring gentrification and social exclusion (Kammruzzaman et al., 2014; Saldaña and Wykowski, 2012). To advance the peripheral potential of TOD, this work draws from different work made in the fields of landscape studies (Qviström et al., 2019), political geography (Keil, 2018), as well as relational geography (McFarlane, 2016) calling to enrich urban and regional planning with place-specific qualities. While significant scholarly contributions have been made, with some e.g., stressing the need to specify and contextualize concepts such as urban density (McFarlane, 2016) and others proposing a wholesale theoretical re-orientation of urban studies to acknowledge peri-urban landscapes as the loci of scholarly inquiry (Keil, 2018), few have tested their theoretical reflections empirically and far fewer have done so with relation to transport and land-use planning.

The empirical entry of this research is to provide a historical account of Swedish peri-urban TOD planning as an important strategy to achieving the Swedish post-war welfare agenda. Through site visits and by means of archival research in Vällingby and Farsta – two TOD-sites in the Stockholm region that ‘flagshipped’ Swedish welfare planning during the post-war period – the aim of this study is two-fold: I wish both to underline how peri-urban areas served as vital locations for the materialization of Swedish welfare politics, and that TOD was a key strategy to materialize it. By studying TOD as a post-war welfare model for achieving Swedish dreams of solidarity and social well-being, this work seeks to enrich current TOD planning and inspire TOD planners to push further to achieve inclusive and sustainable peri-urban development.

Keywords: Transit-Oriented Development, peri-urban regions, peri-urban development, welfare planning, political geography, landscape studies

### References

Kamruzzaman, M., Wood, L., Hine, J., Currie, G., Giles-Corti, B. & Turrell, G. (2014). Patterns of social capital associated with transit-oriented development. *Journal of Transport Geography*, 35: 144-155.

Keil, R. (2018c). *Suburban planet: Making the world urban from the outside in*. Cambridge: Polity Press.

McFarlane, C. (2016) The geographies of urban density: topology, politics and the city. *Progress in Human Geography* 40.5, 629–48.

Qviström, M., Luka, N. & De Block, G. (2019). Beyond Circular Thinking: Geographies of Transit-Oriented Development. *International Journal of Urban and Regional Research*, 43(4): 786–793.

Saldaña, R. & Wykowski, M. (2012). Racial Equity: New Cornerstone of Transit-Oriented Development. *Race, Poverty & the Environment*, 19(2): 13–15.

84712

## Planning Theory and Theorizing from Everyday Life

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This paper explores transitions in everyday life and derives an everyday-theory based approaches at the interface of urban studies and planning theory from there.

Scholars in these fields repeatedly refer to Henri Lefebvre's oeuvre (1974, 1967, 1970). His centenary work in the background 'La Critique de la Vie Quotidienne' (1947, 1961, 1981) remains, however, somehow underestimated, although in many places empirical evidence points to manifest turnovers as regards everyday life in contemporary processes of urbanization. This indicates an exigency to introduce everyday-theory-based approaches in planning theory, thereby searching for deep conceptual linkages between planning and theorizing lived space. This contribution enlightens the socio-historical genesis of Lefebvre's Critique of Everyday Life and provides an update of such a critique by actualizing contemporary Critiques of Lived Space and Everyday Life informed by more recent positions. How can we urgently make sense of manifest transitions in urban everyday life in contemporary times shaken by unsettling?

Keywords: lived space, everyday life, urbanization, social change, urban studies, planning theory

### References

Lefebvre, H (2014 (1947, 1961, 1981)) Critique of Everyday Life – The one volume edition. Trans. Morre, J and Elliott, G. London, New York: Verso

Lefebvre, H (1974) La production de l'espace. L'homme et la société, 31-32 (January-June), pp. 15-32

Lefebvre, H (1970) La révolution urbaine (Collection „Idées“). Gallimard, Paris 1970.

Lefebvre, H (1967) Le droit à la ville. In: L'Homme et la société, 6, pp. 29-35. Available Online: [https://flacso.edu.ec/cite/media/2016/02/Lefebvre-H\\_1967\\_Le-droit-a-la-ville.pdf](https://flacso.edu.ec/cite/media/2016/02/Lefebvre-H_1967_Le-droit-a-la-ville.pdf) (last accessed 11 February 2020)

KNIERBEIN, S (2021) Everyday-theory based turns in Urban Studies (Original in German: Alltagstheoretische Wendungen im Feld der Internationalen Urbanistik). In: Kogler, R. und Hamedinger, A (eds) Interdisciplinary Urban Research (Original in German: Interdisziplinäre Stadtforschung). Bielefeld. Transcript, S. 165-188. <https://doi.org/10.1515/9783839452967-008>

84164

## The Rolle of Workplace Location on Future Spatial Planning

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The world of labour is undergoing major changes. With the processes of digitalisation, the possibilities to work independently wherever people live or spend their time are increasing. Digital-based forms of work promote the development of mobile work in a self-determined location (e.g. in a home office or co-working space). Such location-independent forms of work offer new opportunities for regional development of rural areas and especially small and medium-sized towns. The strategic (re-)linking of living and working is in many respects both an opportunity and a challenge: a shift of the centre of people's lives can strengthen the places of residence in rural areas, through increased (also) economic demands, through a mix of uses and a diversified demand for local supply or through a reduction in traffic burdens such as commuting. In this study, we explore both the socio-spatial preconditions and the effects of this shift from places of work to places of residence in rural areas. The aim is to outline a systematic classification of co-working spaces (based on Kelle/ Kluge 2010) with regard to future spatial development in order to promote the opportunities of mobile work in different suburban and rural areas.

Keywords: Digitalisation of work; remote work, socio-spatial perspective, classification of co-working spaces, suburban area, rural development

### References

Diefenbacher, H.; Foltin, O.; Held, B.; Rodenhäuser, D.; Schweizer, R.; Teichert, V. (2016): Zwischen den Arbeitswelten. Der Übergang in die Postwachstumsgesellschaft. 1. Aufl. Frankfurt am Main.

Hölzel, M.; Vries, W. T. de (2021): Digitization as a Driver for Rural Development—An Indicative Description of German Coworking Space Users. In: Land, 10, H. 3, 1–21.

Kelle, U.; Kluge, S. (2010): Vom Einzelfall zum Typus. Fallvergleich und Fallkontrastierung in der qualitativen Sozialforschung. 2. Aufl. Wiesbaden.

Reuschke, D.; Ekinsmyth, C. (2021): New spatialities of work in the city. In: Urban Studies, 58, H. 11, 2177–2187.

85013

## Planning and the Multi-local Urban Experience — the Power of Lifescapes

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We have heard innumerable times that more than half of the world’s population now “lives in urban areas”, and that urbanization continues: According to the World Urbanization Prospects reports published yearly by the UN, the share of the urban population was already 55% in 2018 (United Nations, 2019). Interestingly, however, the authors using this reference never pause to ask the key question: what do we mean by ‘live’? Living as corporeal people of flesh and blood, or as statistical units defined by censuses and population registers? Unlike the statistical units, the corporeal people are inherently multi-local, and this challenges our usual way of conceptualizing space and place, residence, urbanization, urban growth and—indeed—planning. This paper discusses the theoretical problems opened by this discrepancy, drawing from a variety of sources in philosophy, geography, urban studies and planning theory (e.g. Foucault, Hägerstrand, Castells, Hintikka, Bhaskar, Faludi, and more). It will be argued that our tacit presupposition of unilocality needs extending, not only to the plurality of residencies and workplaces and movement between them, but also to the possibilities and relevant modalities of their use, as well as the negativities or absences of not using them. This will make it possible to address such contemporary phenomena as telework or using several places of residence regionally, inter-regionally and even internationally. The pandemic can be seen as a ‘reality check’ demonstrating the role of statistics as a state-science (*science de l’État*) unable to deal with the corporeal human being who is constantly on the move. Discussion on multi-locality will in the end lead us to spatial understanding that can be called ‘lifescapes’.

Keywords: multi-locality, urbanization, lifescapes, living, corporeal, statistics

### References

- Bhaskar, R. (1993). *Dialectic. The Pulse of Freedom*. London and New York: Verso.
- Castells, M. (2000). *The Rise of the Network Society*, 2nd Edition. Malden, Oxford and Carlton: Blackwell Publishing.
- Faludi, A. (2018). *The Poverty of Territorialism: A Neo-Medieval View of Europe and European Planning*. Cheltenham: Edward Elgar Publishing.
- Foucault, M. (1986). *Of Other Spaces*. *Diacritics*, Vol. 16(1), pp. 22–27. Translated by Jay Miskowicz from “Des Espaces Autres”, March 1967.
- Habermas, J. (1981). *Knowledge and Human Interests*. 2nd Edition. London: Heinemann.
- Hintikka, J. (1969). *Models for Modalities. Selected Essays*. Synthese Library, Vol. 23. Netherlands: Springer.

Hägerstrand, T. (1970). What about People in Regional Science? Papers of the Regional Science Association, Vol. 24, 7–21.

Jordan, B. (2009). Blurring Boundaries: The “Real” and the “Virtual” in Hybrid Spaces. Human Organization, Vol. 68(2), 181–193.

84089

## Towards a topology of planning theories – Re-organising planning knowledge in the 21st century

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Planning theories are not only partially and exemplarily selected in planning sciences, they are also an essentially anarchic undertaking: Criticism of existing approaches and of a missing foundation are more numerous than constructive contributions to further advancement. Theories, no matter how concrete or general, reflect different bodies of knowledge and are based on certain presuppositions and fundamental values (Barker/Kitcher 2014). In planning science, these are rarely made explicit and discussed (Alexander 2016: 94). Previous structuring approaches attach much weight to the temporal classification and historical change of planning understandings as well as the distinction between substantive and procedural theories (Allmendinger 2017). However, this does not do justice to the knowledge inherent in planning theories (Davoudi 2015), nor does it help much in answering important questions and connections, such as the ontological relationship between theories and reality/practice or the question of ethical foundations of the planning discipline.

In our contribution, we devote ourselves to a re-organisation of knowledge for planning in the 21st century. Numerous challenges, be it the impacts of climate change and adaptation and mitigation strategies, or societal polarisation and the question of appropriate decision-making, require a rethinking and reorientation of planning approaches. A first step in this direction could be an inventory in which the existing planning knowledge, organised and validated in planning theories, is recorded and systematised. We present a "topology" of planning theories, a systematisation of planning theory approaches that is characterised neither by right nor wrong, but meets the scientific demands of a disciplinary foundation and integrates the collected knowledge from the field of spatial planning. The distinction between procedural or substantial, analytical or normative, project-related or strategic, moderating or sovereign should be avoided, i.e. dichotomous pairs of opposites that correspond to ideal-typical basic assumptions and can hardly be found in the analytical separation. On the contrary, the topology approach emphasises how certain elements relate to each other, not to be confused with typology, where the aim is to distinguish and differentiate individual elements from each other. We conclude with numerous examples of what this means for the systematisation of planning knowledge.

Keywords: Planning theories; systematisation; planning discipline; planning knowledge

### References

- Alexander, E. R. (2016): There is no planning - only planning practices: Notes for spatial planning theories. *Planning Theory* 15(1), 91-103.
- Allmendinger, P. (2017): *Planning Theory*. London: Palgrave.

Barker, G. & Kitcher, P. (2014): *Philosophy of Science—A New Introduction*. New York: Oxford University Press.

Davoudi, S. (2015): Planning as Practice of Knowing. *Planning Theory*, 14(3), 316-331.

84385

## 'SMART AND/OR JUST? Digitization and Urban Citizenship: Evidence from Beersheba

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Traditional urban spatial planning has to date largely ignored the rapid digitization of cities. Yet, there is little doubt that fundamental social change is in the making in most cities. The paper builds on the concept of urban digital citizenship to ask: Can there be a smart and just city? can the digitization reduce inequality and displacement and promote social justice?

For this end, the paper combines two conceptual lenses, namely, the digital and the just city. Within this framing, we conducted a theoretically informed study of the actual consequences of rapid digitization in the growing Beersheba metropolitan region, Israel.

Beersheba is the medium urban region whose population is composed mainly of Jewish immigrants and indigenous Bedouin-Arab population. The city was recently declared the country's 'cyber capital', and the home of major military intelligence bases. This has propelled the introduction of several development plans for a 'smart city', most notably the 'Smart7' plan, and the 'innovation district' established two years ago at the urban core. Our project examined these digitization policies focusing on three main dimensions: material, socio-economic and power.

The findings are mixed: digitization has improved service delivery significantly for most residents, but at the same time widened the digital divide and displaceabilities. It has also spawned substantial privatization of control over services and data collection, although most residents accept this change in the name of security. These findings point to difficulties in developing inclusive urban digital citizenship, and to tensions in promoting both 'smart' and just city.

Keywords: Digital city, smart city, just city, Beersheba, Bedouins

84020

## From forecasts to scenarios: Explanation, narration, argumentation, and instrumentalization in strategic city-regional land-use and transportation planning

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The paper proposes a theoretical framework for the application of four scenario planning approaches in strategic land-use and transportation (LUT) planning, focusing on metropolitan and city regions. These approaches are based on making trend scenarios, explorative scenarios, normative scenarios and backcasting scenarios. Each of them has a specific place in the process, each also representing a distinct mode of knowing respectively: explanation (knowing what), narration (knowing how), argumentation (knowing to what end and practical judgment) and instrumentalization (doing). The trend scenario method that follows the correspondence theory of truth (explanation) is necessary for identifying the need to explore alternative futures, if the forecasted future indicates undesirable outcomes. Drafting explorative scenario plans, then, follows the coherence theory of truth (narration), and opens an array of plausible future horizons and related planning responses. Thereby, explorative scenario plans provide an agenda for selecting among them the scenario plan to be held as the normative plan (vision), in an argumentative process that follows the consensus theory of truth (argumentation). Finally, in programming steps of implementation from the present towards the vision, the backcasting scenario method is taken into use, relying on the pragmatic theory of truth (instrumentalization). This framework scenario planning approaches is contrasted with reflections from Finnish planning practitioners, and it is further applied in reviewing the scenario and impact assessment process of the recent (2019) Helsinki Metropolitan Region strategic LUT plan. The empirical methods used include guided workshop discussion, follow-up questionnaire and document analysis. While the paper observes that explorative scenario planning in the form of storytelling (narration) has largely been absent in strategic metropolitan and city-regional LUT planning, the framework it proposes enables identifying how explorative scenario planning, as an approach and mode of knowing, has an essential role in the formation of strategic insight and foresight, as interrelated with other approaches and modes.

Keywords: Backcasting, Helsinki Metropolitan Region, intuitive logics, normative scenario, theory of truth

### References

- Bartholomew, K. (2007). Land use-transportation scenario planning: promise and reality. *Transportation*, 34, 397–412.
- Davoudi, S. (2015). Planning as practice of knowing. *Planning Theory*, 14(3), 316–331.

- Mäntysalo, R. & Grišakov, K. (2017). Framing 'evidence' and scenario stories in strategic spatial planning. In: *Situated practices of strategic planning*, L. Albrechts, A. Balducci & J. Hillier (eds.). London: Routledge, 348-361.
- Schwartz, P. (1991). *The art of the long view*. New York: Doubleday.
- Sustar, H.; Mladenovic, M.N. & Givoni, M. (2020). The Landscape of Envisioning and Speculative Design Methods for Sustainable Mobility Future. *Sustainability*, 12(6), 2447.
- Walton, J.S. (2008). Scanning Beyond the Horizon: Exploring the Ontological and Epistemological Basis for Scenario Planning. *Advances in Developing Human Resources*, 10(2), 147-165.
- Zapata, M.A. & Kaza, N. (2015). Radical uncertainty: scenario planning for futures. *Environment and Planning B: Planning and Design*, 42, 754 – 770.
- Zegras, C.; Sussman, J.; & Conklin, C. (2004). Scenario Planning for Strategic Regional Transportation Planning. *Journal of Urban Planning and Development* 130 (1), 2-13.

85091

## Just processes – just outcomes? Learning from Local Development Actions on the Relationship between Procedural and Distributive Justice

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Planning scholars widely agree on the significance of the relationship between procedural and distributive justice for achieving spatial justice (e.g. Davoudi & Brooks, 2014; Israel & Frenkel, 2017; Pirie, 1983). Yet the relationship between these two types of justice is not well understood, neither conceptually nor empirically. A central reason might be that both, procedural and distributive justice, are loaded with various philosophical and epistemological perspectives as well as normative aspirations (e.g. Campbell & Marshall 2006; Stein & Harper 2005), which makes the study of their relationship rather complex. A recent comprehensive overview by Dadashpoor & Alvandipour (2020) confirms this underlying complexity, since they identify no less than five schools of justice in planning thought.

Therefore, in this paper, we present an analytical framework for examining the justness of processes and outcomes that draws on a comparative study. Building on empirical evidence from 22 case studies on local development actions across Europe, our study sheds light on how and to what extent procedural justice and distributive justice are interrelated in practice. As a result we identify factors either promoting or inhibiting procedural and/or distributive justice and derive a number of practical principles for just planning. Although often treated as separated, our analysis shows that ‘(un)just’ processes are interrelated with ‘(un)just’ outcomes in practice in most of our cases. Based on this, we argue that if planning practice is supposed to inform planning theory, and vice versa, we need to develop a conceptual basis for how to tackle the relationship between procedural and distributive justice from a more holistic angle. Our suggested analytical framework might be a first step into this direction, as it brings together these two dimensions of justice and discusses how they intersect. As a consequence, this should help us to better understand the relationship between the substantial challenges (and attaining distributive justice is a central one of those) needing to be tackled by planning practice as well as to overcome the prevailing passion for analyzing separately (and often only) ‘good’, ‘efficient’ or even ‘fair’ processes.

Keywords: just planning, procedural justice, distributive justice, spatial justice, social justice

### References

Campbell, H., & Marshall, R. (2006). Towards justice in planning: A reappraisal. *European Planning Studies*, 14(2), 239–252.

Dadashpoor, H., & Alvanidpour, N. (2020) A genealogy of the five schools of justice in planning thought. *Habitat International*, 101, Article 102189.

Davoudi, S., & Brooks, E. (2014). When Does Unequal become Unfair? Judging Claims of Environmental Injustice. *Environment and Planning A: Economy and Space* 46(11), 2686–2702.

Israel, E., & Frenkel, A. (2017). Social justice and spatial inequality. *Progress in Human Geography*, 42(5), 647–665.

Pirie, G. H. (1983). On Spatial Justice. *Environment and Planning A*, 15(4), 465–473.

Stein, S. M., & Harper, T. L. (2005). Rawls's 'Justice as Fairness': A Moral Basis for Contemporary Planning Theory. *Planning Theory*, 4(2), 147–172.

84550

## An Assemblage-Thinking Approach to the Governance of Residential Land-Use in Metropolitan Regions

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Coordinating residential land-use in metropolitan regions is often analysed by applying institutionalist approaches, which regard planning systems as multifaceted sets of institutions that regulate the production, use, and change of space (Sorensen 2018). This interconnectedness of structure and agency through institutions has been discussed in planning theory for long time (e. g., Healey 1997). Opponents such as Manuel DeLanda (2006) criticise such an ontological perspective as “meso-reductionist”. The “system-as-a-whole” ontologies implicitly assumed in most governance approaches can generate static, context-insensitive accounts and “one-size-fits-all” recommendations and fixes (Briassoulis 2019). Therefore, we apply an Assemblage Thinking (AT) approach to understand, how specific circumstances determine the governance of residential land-use in a metropolitan region. AT is a form of relational, poststructuralist thinking rooted in the work of Deleuze and Guattari (1987). It also includes Latour’s articulation of socio-material networks in the context of actor-network theory and DeLanda’s re-constructed theory of assemblages as well (Savage 2020). Our aim is to illustrate how assemblage thinking can be productively used to trace and describe the situatedness of governance processes used in coordinating residential land-use in a metropolitan region. The case study traces an ongoing process for the development of a cooperative residential land-use concept in the Leipzig Metropolitan Region. Our analysis is based on a review of publicly available planning documents, protocols, and informational publications for the general public; 38 semi-structured interviews with actors from Leipzig Metropolitan Region; and participatory observations. Our key findings illustrate the importance of introducing the material alongside the human components to sensitize planners to complex urban-regional dynamics uniquely situated in space and time. Furthermore, they demonstrate the insights that can be gained for an understanding of these dynamics by conceptualizing the main actor as an assemblage itself.

Keywords: governance, metropolitan regions, residential land-use, assemblage-thinking

### References

- Briassoulis, H. (2019). Governance as multiplicity: The Assemblage Thinking perspective. *Policy Sciences* 52(3), 419-450.
- DeLanda, M (2006). *A new philosophy of society: Assemblage theory and social complexity*. London: Continuum.
- Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus*. Minneapolis: University of Minnesota Press.
- Healey, P. (1997). *Collaborative Planning. Shaping Places in Fragmented Societies*. Houndmills,

Basingstoke, Hampshire: MacMillan.

Savage, G. C. (2020). What is policy assemblage? *Territory, Politics, Governance*, 8(3), 319-335.

Sorensen, A. (2018). New Institutionalism and Planning Theory. In: M. Gunder, A. Madanipour & V. Watson (Eds.), *The Routledge Handbook of Planning Theory* (pp. 250-263). Routledge: New York, London.

84380

## The 'Coronial City': Regime, Displaceability and Digitization

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The urban Covid literature so far has focused on immediate management and spatial practices, with little discussion of the theoretical implications. We suggest here the concept of the 'coronial city' as a new theoretical perspective to account for the spatial management and planning of pandemic stricken cities.

Echoing its colonial counterpart, the 'coronial city' is premised on external invasion, using tools such as suspension of the law, emergency regulation, rapid digitization, surveillance and militarization. We argue that the rise of the coronial city has exposed the weaknesses of urban citizenship, regime and planning, which have failed to protect many of urban rights. The coronial city, we suggest, highlights vulnerabilities in the right to the city embedded in the current urban regime, which has folded during the crisis to state imposition 'from above'.

Notably, this development runs counter to most urban and planning theories, which have emphasized the rise in the power of cities, due to globalization, neo-liberalism and 'planetary' processes. Such theories have often overlooked the lingering power of nationalism and states in the dynamics of urban affairs, often in tension to putatively hegemonic forces of capital and privatization.

This argument is illustrated through a comparative study of three metropolitan regions in Israel/Palestine – Jerusalem, Beersheba and Tel-Aviv. We focus on the condition of urban displaceability which may take the form of physical eviction and expulsion; home demolition and denial of services, or regulative, legal and physical obstacles to accessing urban space, resources and political power..

We found that new restrictions had effected mainly vulnerable communities with loss of income which forces migrant workers and young people away from the city. Debtors, migrants and indigenous communities have often been uprooted from their locations. In parallel 'smart' urban networking and technologies have improved the rights and power of those who are less displaceable, but at the same time infringe on the already limited rights of the marginalized.

Based on our case studies, the Coronial city has accelerated the return of 'legal' coloniality into the contemporary urban order.

Keywords: coronial city, urban regime, displacement, digitization, coloniality

References

N/A

84112

## Revisiting the Purpose of Land Policy: Efficiency and Equity

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Land policy intentionally influences how and by whom land shall be used; therefore, it touches upon the efficiency and equity of land use. This conceptual contribution offers the economic perspective on the role of planners and on the purposes of planning and land policies. It frames the purposes of planning and land policy with the help of welfare economics and its analysis of efficiency and equity (or justice). It puts it as a two-side model also incorporating environmental concerns in contrast to Campbell's three-side sustainability model of planning priorities. Applying the perspective of economic theory on planning and land policy brings a highly needed mutual understanding between these disciplines. It also allows building a solid theoretical ground for the analysis of trade-offs between efficiency and equity. Situations minimising needless trade-offs should be of particularly high interest as they provide opportunities for improvements without necessary sacrifices.

To demonstrate efficiency and equity as the fundamental purposes of land policies, we define efficiency and equity and the trade-off between them and apply the perspectives of these fundamental purposes of land policies on (i) land policy goals; (ii) land policy instruments; (iii) different frameworks proposed for instrumental evaluation. We discuss the trade-offs between efficiency and equity and possible pathways for their minimisation within land policies. As welfare economics relies highly on selected assumptions that simplify the reality and which validity is questionable, we also bring forward limitations of the welfare economics' view on efficiency and equity within the planning area.

Keywords: efficiency; equity; land policy; planning; trade-off

### References

Anguelovski, Isabelle. 2016. "From Toxic Sites to Parks as (Green) LULUs? New Challenges of Inequity, Privilege, Gentrification, and Exclusion for Urban Environmental Justice" *Journal of Planning Literature* 31 (1): 23-36.

Campbell, Scott D. 1996. "Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development." *Journal of the American Planning Association* 62 (3): 296-312.

Davy, Benjamin. 2012. *Land policy: Planning and the spatial consequences of property*. Ashgate Publishing, Ltd.

Fainstein, Susan S. 2017. „Urban planning and social justice“. In: *The Routledge handbook of planning theory*. Routledge. p. 130-142.

Needham, Barrie, Edwin Buitelaar and Thomas Hartmann. 2019. *Planning, Law and Economics: The Rules We Make for Using Land*, Routledge.

Okun, Arthur M. 2015. *Equality and efficiency: The big tradeoff*. Brookings Institution Press.

Stiglitz, Joseph E. 2012. *The price of inequality: How today's divided society endangers our future*. WW Norton & Company.

## TRACK 15: ACTIVISM

84353

### Neighborhood Activism in Riga: Are Urban Movements Bridging the Gap Between Citizens and Local Authorities in Post-Socialist Cities?

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Until recently, the civil society in post-socialist Europe has been predominantly viewed as “weak” due to the lack of social and political trust, the general passivity, and low levels of engagement in political processes (Jacobsson & Korolczuk, 2020). The last decade has demonstrated that urban activism represents a dynamically evolving and flexible pattern of practices, ambitions, and networked civic actors, constantly ‘learning,’ adapting, resisting, and contesting the actual urban regimes of post-socialist cities (Darieva & Neugebauer, 2020). Moreover, the research shows a changing role of urban activism as a source of identity and a sense of belonging for urban dwellers (Domaradzka, 2018) enabled by social media and other digital platforms (Afzalan & Evans-Cowley, 2015; Kotus & Hławka, 2010). With the focus on institutionalized urban movements, this research explores the capacity of neighborhood organizations to act as an intermediary between the local authority and citizens on urban planning and management issues. The study follows a two-step approach: (1) we explore the context by reconstructing the trajectory of institutionalized neighborhood activism in Riga and the emergence of governance structures for their engagement in urban planning and management processes; (2) we use a survey to study the role, representativeness, activities, and interests of Riga neighborhoods’ Facebook groups, formed under the umbrella of existing neighborhood associations. Overall, there are 35 neighborhood organizations in Riga representing 38 (out of 58) neighborhoods. Over the years, they have become a legitimate actor influencing urban planning, management, and governance processes, e.g., Riga Neighborhood Alliance facilitated the implementation of participatory budgeting initiative since 2019. The majority of the organizations use social media to activate citizens and create place-based online communities for information exchange and local discussions. However, these online communities reveal comparatively homogenous citizen groups with a typical sociometric structure of contacts and interaction patterns. They are instrumental in mobilizing support or collecting opinions on specific planning issues, but their interests primarily lie with everyday local issues. Nevertheless, there is a potential to strengthen the role of established neighborhood organizations as intermediaries between the local authority and citizens, but it requires flexibility and diversification of existing collaboration and communication patterns.

Keywords: Neighborhood activism, post-socialist cities, social media

References

- Afzalan, N., & Evans-Cowley, J. (2015). Planning and Social Media: Facebook for Planning at the Neighbourhood Scale. *Planning Practice & Research*, 30(3), 270–285. <https://doi.org/10.1080/02697459.2015.1052943>
- Darieva, T., & Neugebauer, C. S. (2020). Introduction. *Urban Activism in Eastern Europe and Eurasia: Overcoming Distances*. In T. Darieva & C. S. Neugebauer (Eds.), *Urban Activism in Eastern Europe and Eurasia. Strategies and Practices* (pp. 6–21). DOM Publishers.
- Domaradzka, A. (2018). Urban Social Movements and the Right to the City: An Introduction to the Special Issue on Urban Mobilization. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 29(4), 607–620. <https://doi.org/10.1007/s11266-018-0030-y>
- Jacobsson, K., & Korolczuk, E. (2020). Mobilizing Grassroots in the City: Lessons for Civil Society Research in Central and Eastern Europe. *International Journal of Politics, Culture, and Society*, 33(2), 125–142. <https://doi.org/10.1007/s10767-019-9320-7>
- Kotus, J., & Hławka, B. (2010). Urban neighbourhood communities organised on-line – A new form of self-organisation in the Polish city? *Cities*, 27(4), 204–214. <https://doi.org/10.1016/j.cities.2009.12.010>

84580

## Hydrological communities in action. The case of “Bruxelles sensible à l’eau” action research project

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In Brussels Capital Region (in short Brussels), citizen participation in urban planning has a long tradition. The first resistance organisations emerged in reaction to urban transformations (known as Bruxellisation) driven by the 1958 International Exhibition, where large parts of the city were demolished to make space for real estate projects and large-scale mobility infrastructure to the detriment of the settled population (Guérin et al., 2007). At present, Brussels has recently put environmental issues at the centre of its development as a response to international pressure (e.g. European Water Directive) and to grassroots movements drawing attention on the damages experienced by inhabitants because of the malfunction of the water infrastructure (e.g. urban flooding, water pollution). In this context, there is a growing need to explore both the physical dimension of the environmental infrastructure and new methods of participatory governance to support grassroots movements in their struggle to influence institutional programmes (De Muynck & Nalpas, 2021). The paper draws on the authors’ involvement in the participatory action research project ‘Brusseau: Bruxelles sensible à l’eau’ (2016–2020) funded by the regional government. Brusseau explores models of participation to enlarge the debate on (storm) water management and governance within Brussels. At the centre of the reflection, Brusseau places ‘hydrological communities’ – assemblies of inhabitants, non-profit organisations, local institutions, universities, professionals (e.g. urbanists, planners and architects) and citizen associations working, living and governing in a sub-catchment. The paper aims to explore the extent to which the actors’ active involvement in the ‘hydrological communities’ led to the development of socio-technical innovation systems for stormwater management in dense urban environments. We rely on participatory observations during the activities of Brusseau, project reports and evaluations, as well as on semi-structured interviews with involved partners. As main contribution, the paper deepens the importance of collaboration between the plurality of actors (Köhler et al. 2019). Specific attention is given to the role of non-institutional actors, usually recognised as the more engaged in experiments facing climate change (Broto & Bulkeley, 2012) and their in-between active and engaged work as intermediaries among civil-society and institutional actors (Guy et al., 2011).

Keywords: environmental activism, storm water management, non-institutional actors, socio-technical innovation, Brussels Capital Region

References

Broto, V. C., Bulkeley, H. (2013). A survey of urban climate change experiments in 100 cities. *Global Environmental Change* 23 (1), 92–102. <https://doi.org/10.1016/j.gloenvcha.2012.07.005>

De Muynck, S., Nalpas, D. (2021). The renewal of politics through co-creation: the analysis of the case of rainwater and biowaste in Brussels. *International Journal of Action Research*, 1, 18-40. <https://doi.org/10.3224/ijar.v17i1.02>

Guérin A., Maufroy L., Raynaud F. (2007). *Bruxelles Change...! 10 ans de politique de la ville en Région de Bruxelles-Capitale*

Guy, S., Marvin, S., Medd, W., Moss, T. (2011). *Shaping Urban Infrastructures. Intermediaries and the Governance of Socio-technical Networks*. London: Routledge

Köhler, J., Geels, F.W., Kern, F., Markard, J., Wiczorek, A., Alkemade, F., Avelino, F., Bergek, A., Boons, F., Fünfschilling, L., Hess, D., Holtz, G., Hyysalo, S., Jenkins, K., Kivimaa, P., Martiskainen, M., McMeekin, A., Mühlemeier, M.S., Nykvist, B., On-songo, E., Pel, B., Raven, R., Rohrachner, H., Sandén, B., Schot, J., Sovacool, B., Turnheim, B., Welch, D., Wells, P. (2019). An agenda for sustainability transitions research: State of the art and future directions. *Environmental Innovation and Societal Transitions* 31, 1-32. <https://doi.org/10.1016/j.eist.2019.01.004>

84755

Planners as intermediate activists for urban governance innovation.  
Bridging professional, civil society and political roles to make sense of,  
problematize and innovate governance culture.

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Bottom-up initiatives have been explored by urban and planning scholars for their roles in planning processes, for their impacts and for their political value. In particular, urban governance scholars have argued they can generate effects of innovation on urban governance relations and cultures. This field of research has focused on the involvement of planners within the limits of their professional roles and communities, mostly linked with the production of planning innovations. Connecting this debate with literature on activist planning, the paper argues that combining professional, civil society and political roles, networks and knowledge, planners can make sense of, problematize and pursue urban governance innovations tackling not just single or sectorial issues, but also the underlying cultural characters of urban governance. The research is based on the qualitative analysis of the activities of Cocai, a civic association that aims to promote a more collaborative urban governance culture in Verona, Italy. It gathers urban planners, architects, engineers and social workers. The research is the result of two years of participation in Cocai, acquiring data through participant observation, semi-structured interviews, archives. The research explores the evolution of the association, assessing the changes in direct actions and projects, and the effects they produced. The professional roles, knowledge and networks of the members of Cocai provided them access and experiences they used to make sense of the urban governance of Verona. Mixing their professional and activist roles, they developed a shared problematization of the issues of the governance culture of the city, arguing that the generalized inability to foster collaboration in Verona limits the resolution of structural urban issues. The association aims to transform this culture by establishing intermediate spaces of collaborative networking, discussion and action with urban actors, and by coordinating multi-stakeholder direct action projects tackling key urban issues. The analysis reveals that the association is highly influenced by the professional activity of its members, both in the skills they employ and the relations they activate. At the same time, their experiences as political and civic activists are essential sources of knowledge and relations. The operations of the association have had mixed results. The paper concludes that the union of professional, civil society and political roles, networks and knowledge jointly lead activist planners to orient their actions beyond intermediate planning dialogue on single issues; these combined positions support them in making sense and problematizing the cultural characters of the urban governance they see limiting planning dialogue, and in innovating this culture through direct practices in intermediate positions. The paper finally reflects on the limits of this mode of activist planning for governance innovation.

Keywords: Activist planning, Urban governance innovation, Planning activism from intermediate positions, Governance culture, Direct action

#### References

- Christmann, G. B. & Ibert, O. & Jessen, J. & Walther, U-J. (2019). Innovations in spatial planning as a social process – phases, actors, conflicts, *European Planning Studies*. DOI: 10.1080/09654313.2019.1639399
- Dente, B. & Coletti, P. (2011). Measuring Governance in Urban Innovation, *Local Government Studies*, 37:1, 43-56. DOI: 10.1080/03003930.2010.548553
- Forester, J. (2009). *Dealing with differences. Dramas of mediating public disputes*. New York, NY: Oxford University Press.
- Gerometta, J., Haussermann, H. and Longo, G. (2015). Social Innovation and Civil Society in Urban Governance: Strategies for an Inclusive City. *Urban Studies*, 42(11), 2007– 2021.
- Gonzales, S. and Healey, P. (2005). A Sociological Institutional Approach to the Study of Innovation in Governance Capacity. *Urban Studies*, 42(11), 2055–2069.
- Sager, T. (2016). Activist planning: A response to the woes of neo-liberalism?. *European Planning Studies*, 24(7), 1262–1280.

84938

## Facing social justice through urban commoning: the case study of Lucha y Siesta

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The growth of social-spatial inequalities is one of the most relevant aspects of the new urban question. As inequalities increase, we have witnessed an increasing pluralization of forms of life that has made the cultural system of the contemporary city: hybrid, diversified, pluralistic and contested. Thus an overall need for social justice emerges in the changing city and issues of justice are (again) seen as reading key and as an orientation for action, to act in the city (in crisis) and interpret it. It is in this context that the “question” of urban commons has acquired a cogency and great importance from intellectuals, institutions and citizens. Cities are increasingly crossed by processes of commoning, which consider the (re) appropriation and management of urban goods and services as the way to recognize, extend and redefine some fundamental rights through the transformation of the urban space. These experiences are often oriented towards the shared management of urban goods and services and represent processes of transformation of the city as attempts to overcome the traditional separation between state, private and community.

The paper aims to demonstrate that urban commoning practices respond to issues of social justice (redistribution, recognition e participatory parity), through collective care that allows to experiment with new forms of community, to redesign the basic needs for outlining existing paths of transformation and creating individual and collective emancipation. The paper will address these issues in the context of the city of Rome through the analysis of the experience of the "Casa delle Donne Lucha y Siesta" as a case study. At the heart of this urban commoning practice is the will to address the problem of male violence against women by practicing care relationships capable of questioning gender policies, reclaiming the need for women's places in urban space. Using qualitative methodologies related to the ethnographic approach through semi-structured interviews, participatory observation and action-research methods, the contribution shows how this practice of urban commoning is able to respond to social justice issues, transforming urban space and experimenting with new forms of welfare capable of holding together collective and individual becoming.

Keywords: Urban commoning, Socio-spatial justice, Gender, Care

### References

- Crosta P.L.(2010), *Pratiche. Il territorio è l'uso che se ne fa*, Franco Angeli, Milano  
De Angelis M. (2017), *Omnia sunt communia*, Zed books, London  
Duncan N. (1996), *BodySpace. Destabilizing Geographies of Gender and Sexuality*, Routledge, London

Fincher R. and Iveson K. (2008), *Planning and Diversity in the City: Redistribution, Recognition and Encounter*, Palgrave Macmillan, London

Harvey D. (2013), *Rebel cities. From the Right to the city to the urban revolution*, Verso, London

Massey D. (1994) *Space, Place and Gender*, Polity press, Cambridge

Soja. E.W. (2010), *Seeking spatial justice*, University of Minnesota Press, Minneapolis

Stravides S. (2016), *Common Space: The City as Commons*, Zedbooks, London

84435

## New values, actors and strategies in the urban ecosystem. The Movement for the Caracol da Penha Garden as a pedagogical case.

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The rapid generalization of a community based on sharing, collaboration, co-decision making, and co-operation has given greater visibility to a range of activities in a paradigmatic transition toward what is known as the fourth sector.

Active citizenship and the forms it has adopted fall into this new category. The renewed dynamism of civil society, led through properly organized citizen groups (Dominiak, 2020), but also inorganic and conjunctural social movements, can be interpreted in several ways, but perhaps that which fits best is the increasing de-legitimization of formal power or, at least, the need to deepen the democratic system in an urban context (Heimans & Timms, 2019).

All these urban transformation mechanisms (McLaren & Agyeman, 2017) become condensed in the transfer from a context of government, i.e., a formal system of articulation of actors in the public sphere, to a context of governance, i.e., an informal system, with variable geometry both in terms of scale and the nature of the actors involved. This is oftentimes a troubled process because it means an effective redistribution of power, something that is almost never peaceful or easy (Wan, Shen & Choi, 2021).

The discussion of the emergence of these new values is reflected in the narrative for the formation of, and the activity carried out by, the “Caracol da Penha” movement. The related challenge was based around a demand that a green space be built instead of a car park, that is equipped to serve the locals but also the entire city of Lisbon, Portugal.

Popular mobilization, the reversal of the decision by Lisbon City Council, the use of Participatory Budget mechanisms, the ability to produce and organize information and communicate it, makes this case emblematic for many other participatory processes, and appears to have been a learning ground for all actors involved.

This process of reversing a unilateral decision already taken by a local power, thanks to the structured and dynamic mobilization of the local community, makes it possible to see in practice how the change of values in the power system is tending towards a more collaborative democracy in an urban context.

Keywords: Active citizenship; public participation; public spaces; urban policies; urban governance

### References

Dominiak, J. (2020). Human and social capital in urban agglomeration and its changes in the core-peripheries pattern. The example of Poznań agglomeration. *City, Culture and Society*, 23,

100371.

Heimans, J., Timms, H. (2019). *New Power : Why outsiders are winning, institutions are failing, and how the rest of us can keep up in the age of mass participation*. London: Pan Macmillan

McLaren, D., Agyeman, J. (2017). *Sharing Cities. A Case for Truly Smart and Sustainable Cities*. Cambridge: MIT Press

Wan, C., Shen, G. Q., & Choi, S. (2021). Underlying relationships between public urban green spaces and social cohesion: A systematic literature review. *City, Culture and Society*, 10038

84511

## How Urban-Political Protest Against Gentrification Leads to Socio-Spatial Change in the Neighborhood of Leipzig-Connewitz

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Cities are subject to constant change. But current trends (e.g., corporate urban development, privatization, high-priced construction projects, or rising rents) benefit only a small, exclusive population segment. People worldwide are gathering to collectively oppose urban policy issues such as the housing shortage, a lack of affordable housing, or the displacement of lower-income households. The housing question has become an issue for many social movements (Annuziata and Rivas-Alonso, 2018; Gestring et al., 2014)).

After decades of population loss, the city of Leipzig (Germany) has been experiencing an urban renaissance in recent years and has become one of the fastest-growing major cities in the country (Siedentop et al. 2019). The housing market is increasingly tight, numerous high-priced construction projects are taking place, and affordable housing is becoming scarcer. After a debate about vacancy, shrinkage, urban redevelopment, and poverty, a gentrification debate has developed in Leipzig (Rink, 2015).

This debate is primarily carried out by urban-political protest in the neighborhood of Leipzig-Connewitz, which is characterized by a left-wing alternative and autonomous scene. For ten years now, activists have been campaigning, mostly peacefully, against the supposed gentrification of their neighborhood. In 2019, Connewitz made national headlines due to militant protests against gentrification, resulting in a media-supported discussion about left-wing extremism and violence in the context of gentrification. Connewitz as a neighborhood has become the object and the performative site of protests.

This observation served as a starting point to examine the urban-political protest in Leipzig-Connewitz for their connections to the (supposed) gentrification of the neighborhood. This was done with a discourse analysis according to Jäger (2012), in which a total of 354 documents were analyzed.

In this paper, I focus on the finding that urban-political protest against gentrification, meaning against neighborhood upgrading or transformation, can spur neighborhood socio-spatial change. I argue that, on the one hand, resistance to gentrification contributes to the cultural capital of the neighborhood. On the other hand, small-scale protest legitimizes regulatory measures at a neighborhood level, pushing the neighborhood toward conformity, thereby putting the area in order and further upgrading it.

Keywords: gentrification, urban transformation, urban-political protest, activism

#### References

Annuziata, Sandra; Rivas-Alonso, Clara (2018): Resisting gentrification. In: Loretta Lees; Martin Phillips (Eds.): Handbook of gentrification studies. Cheltenham, UK, Northampton, MA, USA: Edward Elgar Publishing, pp. 393–412.

Gestring, Norbert; Ruhne, Renate; Wehrheim, Jan (2014): Stadt und soziale Bewegungen. Wiesbaden: Springer Fachmedien Wiesbaden.

Jäger, Siegfried (2012): Kritische Diskursanalyse. Eine Einführung. 6. vollst. überarb. Auflage. Münster: UNRAST-Verlag (Edition DISS, Bd. 3).

Rink, Dieter (2015): Zwischen Leerstand und Bauboom. Gentrifizierung in Leipzig. In: Frank Eckardt; René Seyfarth; Franziska Werner (Eds.): Leipzig. Die neue urbane Ordnung der unsichtbaren Stadt. Münster: UNRAST Verlag, pp. 88-107.

Siedentop, Stefan; Fleischer, Janne Jakob; Münter, Angelika; Osterhage, Frank; Volgmann, Kati; Rösch, Jutta et al. (2019): „Stadt oder Umland?“. Aktuelle Trends des Bauens und Wohnens in deutschen Stadtregionen. In: ILS Journal (2/19), pp. 1–12.

85176

## Activism in digital twin cities: planning support system for self-organizing urban planning

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Citizen activism benefits from the development of information and communications technologies (ICT). Such technologies enable quick communication and self-organization (Batty et al. 2012). For example, social media discussions about urban planning have become popular in Helsinki (Mäenpää et al. 2017). Another more advanced digital tool is the planning support system abbreviated as PSS (Klosterman 1997). One such PSS is under development in the GreenTwins research project, which focuses on the green digital twins of Helsinki and Tallinn. This PSS is based on an earlier concept developed by citizen activists in Helsinki for creating alternative urban plans.

Citizen activists are a diverse group of actors, from trained planners to amateurs (Mäenpää & Faehnle 2018). In addition, activists' digital skills can vary considerably. Consequently, developing a PSS for activists can be a challenging task. The research question was in what situations and how would citizen activists use the PSS being developed in GreenTwins.

GreenTwins has arranged multiple workshops and questionnaires for all stakeholders involved in urban planning. Questionnaire answers were analyzed by counting the votes for each question. They asked where and how respondents would use the GreenTwins PSS. Their current role was also asked because many stakeholders have more than one role.

The most voted choice was to use the PSS in activist meetings, which reflects the original PSS concept. However, home and work use were voted almost as important. The importance of home use may reflect the popularity of online discussions. Also, the preferred way to use the PSS was to share plans on social media. Interest in work use could be explained by many respondents' professional backgrounds. Interestingly, many respondents would use the PSS for modifying other users' plans instead of creating their own plans. In addition to this, discussions and voting of plans were favored.

In conclusion, the results show that most activists would prefer to use the PSS collaboratively with other users. For this reason, online functionality can be considered an essential feature of the PSS. The research will continue with user testing of the developed PSS.

Keywords: activism, planning support systems, self-organization, urban planning, user research

## References

Batty, M., Axhausen, K. W., Giannotti, F., Pozdnoukhov, A., Bazzani, A., Wachowicz, M., Ouzounis, G. & Portugali, Y. (2012). Smart cities of the future. *The European Physical Journal Special Topics*, 214(1), pp. 481-518

Klosterman, R. E. (1997). Planning Support Systems: A New Perspective on Computer-Aided Planning. *Journal of Planning Education and Research*, 17(1), pp. 45–54

Mäenpää, P., Faehnle, M. (2018). Urban civic activism: solutions for the governance of a self-organizing urban community. *Helsinki quarterly* 2/2018 [Accessed 31 January 2022]. Available at: <https://www.kvartti.fi/en/articles/urban-civic-activism-solutions-governance-self-organising-urban-community>

Mäepää, P., Faehnle, M. & Schulman, H. (2017). Kaupunkiaktivismi, jakamistalous ja neljäs sektori. In Bäcklund, P., Häkli, H. & Schulman, H. (ed): *Kansalaiset kaupunkia kehittämässä*. Tampere: Tampere University Press, pp. 246

84230

## Citizen Engagement: Shaping Places Together – and re-shaping spatial planning

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During the last decades, the emergence of citizens' collectives, with citizens taking matters in their own hands and shaping their places according to their own needs, wishes and ideas, can be witnessed. They are regularly responding to neo-liberal market ideologies and public services inefficiencies. Citizens take on roles that they consider as missing, underperformed, or ineffective, drawing inspiration from sustainability or post-growth ambitions or from "just city" and "right-to-the-city" debates. The rise of these 'non-planners' can be perceived as a risk by public planners who may lose steering options and control. At the same time, civic initiatives offer public planners an opportunity to keep up with, and adapt to, emergent realities in a diverse, dynamic, fluid, and fast-changing society.

This paper draws on a selection of core articles in planning scholarship. It investigates how citizens (re-)shape urban places by responding to perceived flaws in how spatial planning addresses societal challenges. The literature review discusses actors, types of spaces, intentions, interventions, and roles of emerging 'non-planners'. By taking responsibility, citizens engage in the complicating and enduring juggling of balancing ideological intentions and pragmatic possibilities. In advancing their immediate (spatial) environment, they act as activists, producers of public goods, raisers of political awareness, facilitators of debates and missionaries, envisioning radically different urban futures and addressing vulnerabilities of the excluded and marginalized in communities. Through their actions and interventions, they also force public spatial planning and urban governments to open to more spontaneous transformation.

The paper shows a variety of practices complementary to, independent from, or opposing formal planning actors and interventions. Five dilemmas citizens face are identified, highlighting the tensions that surface on exclusion, participation, and governmental responsibilities when citizens claim their role in urban governance. This paper hopes to stimulate the wider debate on how citizen engagement can support the dynamic transformation of urban settlements, and how the growing influence of citizens raises questions, such as what spatial planning is and what it is not, and, ultimately, what it might become.

Keywords: Citizen initiatives, engagement, inclusion, collective action, urban governance, roles of planners

### References

Healey, P. (2015). Citizen-generated local development initiative: recent English experience. *International Journal of Urban Sciences*, 19(2), 109–118.  
<https://doi.org/10.1080/12265934.2014.989892>

- Horlings, L. G., Lamker, C. W., Puerari, E., Rauws, W. S., & van der Vaart, G. (2021). Citizen Engagement in Spatial Planning, Shaping Places Together. *Sustainability*, 13(19), Article 11006. <https://doi.org/10.3390/su131911006>
- Igalla, M., Edelenbos, J., & van Meerkerk, I. (2019). Citizens in Action, What Do They Accomplish? A Systematic Literature Review of Citizen Initiatives, Their Main Characteristics, Outcomes, and Factors. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 30(5), 1176–1194. <https://doi.org/10.1007/s11266-019-00129-0>
- Koning, J. I. J. C. de, Puerari, E., Mulder, I., & Loorbach, D. (2019). Landscape of participatory city makers. *FormAkademisk - Forskningstidsskrift for Design Og Designdidaktikk*, 12(2). <https://doi.org/10.7577/formakademisk.2706>
- Rauws, W. S. (2016). Civic initiatives in urban development: Self-governance versus self-organisation in planning practice. *Town Planning Review*, 87(3), 339–361. <https://doi.org/10.3828/tpr.2016.23>
- Seyfang, G., & Smith, A. (2007). Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental Politics*, 16(4), 584–603. <https://doi.org/10.1080/09644010701419121>

84222

## Activism and Power Strategies of Professionals and Various Actors towards Collaborative Planning in Urban Regeneration: A case study of Hubei village's conservation controversy in Shenzhen city, China

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Bottom-up built-heritage movement with activism of professionals and civil societies has the potential to force powerful decision makers to adopt more inclusive and collaborative planning for urban regeneration. Nevertheless, there has been little known in the authoritarian context, where there are often unbalance power relations between government and society. The research uses the case study of Hubei village's regeneration, which lasted over 10 years, to reflect the impact of activism and power strategies of professionals, civil society, citizens and other actors on the collaborative planning process. It develops a theoretical framework based on power theory (Lukes, 2004; Purdy, 2012 and Healey, 2006) and multi-scalar/fragmented characteristics of hierarchical decision-making systems (Mertha, 2009; Gui et al, 2009). Data are collected through semi-structured interviews, relevant policies, project documents and online information. The results reveal that the third-party professionals, civil society and citizens used power resources and platforms such as petition, social capital (e.g. Guangxi) and new media to develop strategies to challenge the pro-growth coalition between government and developers in the regeneration process. These strategies included collective actions (e.g. petition), social mobilization through new media, the formation of an influential network among planning professionals, and the mobilization of the national level government representatives. They facilitated structural power (shaping agenda) and discourse power (especially through new media), which in turn affect the decision power. Local government and developers were forced to change decision making and adopt new strategies by incorporating participation, consultation and communication mechanisms in the planning process. In short, the activism of professionals, civil society and other actors largely affected the transformation of the government-led demolition project into a more collaborative planning practice. However, it should indicate that the responsibilities and adaptive actions of different levels of governments are also important for this governance transformation in the Chinese context.

Keywords: Built-heritage movement; Power strategy; Fragmented governments; Activism; Urban redevelopment; Governance transformation

### References

- Lukes, S. (2004). *Power: A radical view*. Macmillan International Higher Education.
- Purdy, J. M. (2012). A framework for assessing power in collaborative governance processes. *Public administration review*, 72(3), 409-417.

- Healey, P. (2006). Transforming governance: Challenges of institutional adaptation and a new politics of space. *European planning studies*, 14(3), 299-320.
- Healey, P. (2003). Collaborative planning in perspective. *Planning theory*, 2(2), 101-123.
- Lee, C. K., & Hsing, Y. T. (2009). *Social activism in China: Agency and possibility* (pp. 13-26). Routledge.
- Mertha, A. (2009). "Fragmented authoritarianism 2.0": Political pluralization in the Chinese policy process. *The China Quarterly*, 200, 995-1012.
- Gui, Yong, Weihong Ma, and Klaus Mühlhahn. "Grassroots transformation in contemporary China." *Journal of Contemporary Asia* 39.3 (2009): 400-423.

84001

## Public space activism as entrepreneurialism? The case of Beirut, Lebanon before and after 2019

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Since 2005, in an unstable country, and a capital city with scarce public spaces, Beirut, Lebanon has witnessed a series of activism campaigns seeking to meet collective needs for public spaces. These campaigns were initiated by various groups, local NGOs and CSOs, for example Public Works, Nahnoo, and Dictaphone among other. Their concerns were place-based, and reflected local-interests. After the nationwide demonstrations in 2019, existing and new activist groups scaled up their projects and interests to resonate with the national scale discourses on civic rights, refuting the current regime, and calling for political, economic and social changes. This paper aims to identify types of public space activism and understand their organisation, their approaches, the events they organise, the locations they choose, and the triggers behind their activism. The starting point for this research is a revisit of Beirut's urban growth and planning in relation to the inherent social fragmentation following the civil war period 1975-1990. The latter led to the closure or annihilation of public spaces from the everyday lives of Beirut's residents, the real estate dynamics resulting in the upsurge of privatised spaces and shrinking of open public spaces. Further, the movements related to public space activities, which emerged in the last decade are examined and studied within the four-step model identified by Mady and Chettiparamb (2016: 296), with place-based identities, interest-based identities, consensus-oriented processes, and the institutionalisation of the collaborating groups, with the purpose of investigating their positions between design-based entrepreneurial projects or community-led ones. The information for this paper derives from desk-based research of available documentation on Lebanese public space activism, field notes and interviews related to selected cases. Results indicate that a relation exists between the scale and location of the space being addressed, the level of institutionalisation of the activist coalition, and the success of sustaining access to it for diverse user groups and activities. The paper concludes that while inherent contextual specificities, and ongoing political and economic instability could trigger activism, its response to local needs could be jeopardised by the gap between the activists and the local population, and the possible schism in discourses that reflect imported rather than local issues.

Keywords: Beirut, public space activism, instability, place-based identity, privatization, scale, entrepreneurialism

References

- Chiu C., Giamarino C. (2019) Creativity, Conviviality, and Civil Society in Neoliberalizing Public Space: Changing Politics and Discourses in Skateboarder Activism From New York City to Los Angeles. *Journal of Sport and Social Issues* 43(6): 462–492
- Farah J. & Teller J., (2012) Bricolage Planning: understanding planning in a fragmented city. In Polyzos S. (Ed.). *Urban Development, In-Tech*: <https://www.intechopen.com/chapters/34603>
- Farah, J., Cabrera J., Teller, J. (2014), Bridging the gap between Do-It-Yourself urban practices and urban systems Insights from Bolivia and Lebanon. In Cooper F. et al (Ed.), *Creative Adjacencies: New Challenges for Architecture, Design and Urbanism*, Katholik Universiteit Leuven, pp. 396–408
- Harb, M. (2018) New Forms of Youth Activism in Contested Cities: The Case of Beirut. *The International Spectator* 53(2): 74–93.
- Healey, P. (2006) *Collaborative Planning: Shaping Places in Fragmented Societies*, 2nd ed. [first in 1997]. Basingstoke and New York: Palgrave MacMillan.
- Hou, J. & Knierbein, S. (2017). *City unsilenced: Urban Resistance and Public Space in the Age of Shrinking Democracy*. New York: Routledge.
- Mady, C. (2018) Public Space Activism in Unstable Contexts: Emancipation from Beirut's Postmemory. In: Knierbein, S. and Viderman, T. (eds) (2018) *Public Space Unbound Urban Emancipation and the Post-Political Condition*. New York, Oxon: Routledge: 189–206.
- Mady, C. & Chettiparamb, A. (2016) Planning in the face of 'deep divisions': A view from Beirut, Lebanon. *Planning Theory* 16(3): 296–317.

85012

## Civic Societies and the Planning Process: Exploring the role of local civic societies in the English planning system

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As a discretionary system, English planning is plan-led but makes space for each case to be assessed on its own merits (Reade, 1987). The interaction between developers, planners and wider society in discussions around a particular proposed development therefore plays a crucial role in shaping built environment quality, with subsequent impacts on people's health and wellbeing.

Whilst the neo-liberalisation of planning has reshaped decision-making and the settings it takes place within (Slade, et.al., 2019; Allmendinger and Haughton, 2013), public participation remains a statutory element within plan-making and decision-making for individual cases. The impacts of public participation continue to be explored against debates around built environment quality and its impact on populations (Brownill and Inch, 2019), alongside a renewed emphasis in policy circles on beautiful buildings and beautiful places (MHCLG, 2020; BBBB Commission, 2020).

Within this context, there is an unexplored question about the role played by local civic societies in planning decision-making. In the words of the umbrella organisation; Civic Voice (2022):

"Civic societies provide a focus for voluntary and community action to improve the places where people live, work and relax. They champion the importance of these places to decision makers...Civic societies promote and celebrate the best of what is inherited from the past and what is developed for the future."

Our research develops an understanding of how effectively civic societies engage in planning processes. A questionnaire was administered to all Civic Voice members, collecting quantitative and qualitative data from 59 societies in England. Our analysis shows that societies vary in their relationship with their community; in how they organize themselves; and in their relationship with decision-making in planning.

We thereafter reflect on place leadership (Hambleton, 2015) and place stewardship (TCPA, 2014), highlighting the potential role for civic societies in championing place. In particular, the vital role played by amenity groups such as civic societies in acting as a counterpoint to a system increasingly driven by economic efficiency is highlighted. The potential threats to civic societies emanating from external pressures, including proposed planning reforms (MHCLG, 2020), as well as internal limitations are also explored.

Keywords: Civic societies, participation, place-stewardship, place-leadership, place-making

## References

Allmendinger P. & Haughton G. (2013) The Evolution and Trajectories of English Spatial Governance: 'Neoliberal' Episodes in Planning, *Planning Practice & Research*, 28:1, pp.6-26.

Brownill, S. and Inch, A. (2019) Framing people and planning: 50 years of debate. *Built Environment*, 45 (1), pp.7-25.

Building Better Building Beautiful Commission (2020) Living with Beauty: Promoting health, well-being and sustainable growth. Available at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/861832/Living\\_with\\_beauty\\_BBBBC\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/861832/Living_with_beauty_BBBBC_report.pdf) (Last Accessed: 29th January 2022)

Civic Voice (2022) Civic movement. Available at:

[http://www.civicvoice.org.uk/about/civic\\_movement/](http://www.civicvoice.org.uk/about/civic_movement/) (Last Accessed: 28th January 2022)

Hambleton, R. (2015) Place-based collaboration: Leadership for a changing world. *Administration*, Vol.63 (Issue 3), pp. 5-25.

Ministry of Housing, Communities & Local Government (2020) Planning for the Future white paper. Available at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/958420/MHCLG-Planning-Consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/958420/MHCLG-Planning-Consultation.pdf). (Last Accessed: 29th January 2022)

Reade, E. (1987), *British Town and Country Planning*, Milton Keynes, Open University Press.

Slade, D., Gunn, S. and Schoneboom, A. (2019), *Serving the Public Interest? The Reorganisation of UK Planning Services in an Era of Reluctant Outsourcing*. Available at:

<https://www.rtpi.org.uk/media/2005/servingthepublicinterest2019.pdf> (Last Accessed: 28th January 2022)

Town and Country Planning Association (2014) *Built today, treasured tomorrow: A good practice guide to long-term stewardship*. London: Town and Country Planning Association

84599

## Activism and Property rights: Newspaper coverage of planning in Tel Aviv-Jaffa

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Current planning debates are expanding beyond traditional participatory and regulatory frameworks (McAuliffe & Rogers, 2019), while officials, developers and activists increasingly rely on mass media to promote their perspectives (Rogers, 2016). Yet scholars doubt whether for-profit media empowers activism, as they usually support officials and existing market-led power relations (Herman & Chomsky, 2002).

This paper focuses on the intense coverage of plans and planning debates in Tel Aviv-Jaffa, by five leading Israeli media outlets along five recent years. I analyzed the full coverage and planning activity, identified the spaces journalists gave to certain plans, their highlights and silences and how they represented various areas, issues and people. I found that journalists focused more on plans that provoked residents' activism. However, this did not mean that media adapted an anti-market agenda. They covered mobilizations against entrepreneurial projects and also against the reduction of property and development rights in projects. I discuss this realm as part of the current urban culture in large and expensive cities, such as Tel Aviv, and question the roles of media, planners and activists in preserving the neoliberal narrative.

Keywords: activism, property rights, media

### References

Herman, E.S. & Chomsky, N. (2002), *Manufacturing Consent: The Political Economy of the Mass Media*, Pantheon Books.

McAuliffe, C. & Rogers, D. (2019). The politics of value in urban development: Valuing conflict in agonistic pluralism. *Planning Theory*, 18(3) 300–318.

Rogers, D., (2016). Monitory democracy as citizen-driven participatory planning: the urban politics of REDWatch in Sydney. *Urban Policy and Research*, 43(3), 225–39.

85151

## Between practice and research: the role of the association ETICity in the projects for the urban reactivation of the Piave neighbourhood in Mestre

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The abstract is a starting point for a reflection on the role of the association ETICity in the Piave neighbourhood of Mestre, in the Venice mainland. Since 2012, ETICity has offered support to self-organised entities, grassroots instances and civil society for the implementation of projects and the relationship with institutional bodies. We intend to deepen the role of "planner" of ETICity, not as a public sector stakeholder but as an "independent place-maker" (between activist and professional identity). Through action-research it supports grassroots proposals and dialogue with local institutional stakeholders (both public and private entities and from the third sector).

The Piave neighbourhood is considered problematic and "peripheral", characterised by commercial desertification, difficult coexistence between long-term and new/foreign inhabitants, degradation of public real estate, petty crime, low investments (both public and private).

Different methods such as action research, direct observation, and fieldwork are used in order to study the dynamics that have taken place there. Indeed, ETICity has been directly involved in some projects to:

- \_ advance proposals for urban reactivation and transformation, 2017, "Reverberi";
- \_ relaunch a cultural institution, 2018, "UR\*Cinema Dante";
- \_ design and manage a neighbourhood's "concierge and courtyard", 2021.

From these experiences, it has emerged the existence of a local self-organised network and its difficulties in establishing a constructive dialogue and receiving ongoing support from the Municipality of Venice. Simultaneously, collaborations have been established with third sector entities through calls and training programmes. If, on the one hand, grassroots activism persists in the neighbourhood, on the other hand, there have also been issues in the last decade. The most recurrent are struggling to have a medium-long term planning and lasting forms of collaboration and co-design with local public administration. In order to answer these needs, frequently new forms of both professional and activist figures emerge, trying to (re)connect grassroots requests and initiatives to institutional planning. ETICity tries to deal with these critical issues in order to find methods and tools to re-imagine and transform the city together.

Keywords: activism, collective space, action-research, professional identities, Venice mainland

### References

Cremaschi, Marco, and Frank Eckardt. Changing places: urbanity, citizenship, & ideology in new European neighbourhoods. Amsterdam: Techne Press, 2011.

Crosta, Pier Luigi. *Pratiche. Il territorio «è l'uso che se ne fa»* [Practices. The territory "is the use that is made of it"]. Milano: FrancoAngeli, 2010.

Mantovan, Claudia, and Elena Ostanel. *Quartieri contesi. Convivenza, conflitti e governance nelle zone Stazione di Padova e Mestre* [Contested neighborhoods. Coexistence, conflicts and governance in the areas of Padua and Mestre station]. Milano: FrancoAngeli, 2015.

Saija, Laura. "Writing about engaged scholarship: Misunderstandings and the meaning of "quality" in action research publications". *Planning Theory & Practice* 15, no. 2 (April 2014): 187–201. <https://doi.org/10.1080/14649357.2014.904922>.

84986

## Did Advocacy Planning Perform as Expected?

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Civil society engagement in the spatial planning of neighbourhoods has been an increasing trend from the medio 1960s. Advocacy planning has been a branch of planning theory and a strategy for activist planning practice ever since. The ever-increasing inequities in many countries under neoliberal influence throughout the following decades may help to explain the continued academic interest in advocacy planning. Moreover, this planning mode is a source of inspiration for campus-based outreach and service-learning in poor neighbourhoods.

This study surveys the properties of advocacy planning cases reported in English in academic journals and books 1980–2020. The search for cases does not go further back in time, as I wanted to see how the ambitions of advocacy planners were fulfilled in a long-time perspective, after the early wave of enthusiasm for this new approach to community planning had cooled down. The main purpose is to provide a reality check intended both for scholars teaching advocacy planning and activists practicing it. Scholarly publications on advocacy planning are scattered around broad fields of research. Only ten of the twenty collected cases would have been found, had the search been limited to the fifty most cited journals in the thematic groups ‘geography, planning and development’ and ‘urban studies’ according to Scimago Journal Rankings for 2019. The collection of cases contains eight from Europe, nine from the Global South and three from North America.

One research question is whether preconceived expectations and claims concerning the features and effects of advocacy planning correspond with reality as portrayed in the twenty identified case studies. To find out, I collected articles and book chapters written about advocacy planning in the period 1965–1979. The point was not to compile a complete collection, but to identify planners’ assumptions and expectations about advocacy planning that could be checked empirically in a comparison with descriptions of the twenty cases. Some expectations held by planning scholars turned out to be quite different from reality, especially regarding how confrontational advocacy planning is in practice: It is less so than expected. Further, more attention is given to means and substance relative to ends and process than foreseen in the 1960s and 1970s. It was also found that advocacy planning gives room for a wider range of resistance-building approaches on the part of the external experts, than the sceptics anticipated. In some cases, it seems to be a participatory and empowering approach, while in other cases technical and legal planning expertise was at the core of the advocate planners’ work.

The study did also check to what extent advocacy planning processes have been successful. The empirical results show that community goals were wholly or partly achieved in the great majority of cases.

Keywords: Advocacy planning; Activist planning; Planning theory; Community resistance; Community empowerment

#### References

1. Davidoff, P. (1965): 'Advocacy and pluralism in planning', *Journal of the American Institute of Planners* 31(4)331-338.
2. Kocabas, A. and M.S. Gibson (2011): 'Planned gentrification in Istanbul: the Sulukule renewal area 2005-2010', *International Journal of Sustainable Development and Planning* 6(4)420-446.
3. Parker, G. and E. Street (2018): *Enabling Participatory Planning. Planning Aid and Advocacy in Neoliberal Times*. Bristol: Policy Press.
4. Piven, F.F. (1970): 'Whom does the advocate planner serve?', *Social Policy* 1(1)32-35, 37.
5. Reaven, M. (2020): 'Neighborhood activism in planning for New York City, 1945-1975', *Journal of Urban History* 46(6)1261-1289.
6. Sager, T. (2016): 'Activist planning: a response to the woes of neo-liberalism?', *European Planning Studies* 24(7)1262-1280.

83966

## Communities, participation, planning and development

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Over the 50+ years since Arnstein's (1969) Ladder of Participation, scholars have continued to analyse, discuss, debate and argue over approaches to, and typologies of, participation. Perhaps the only thing upon which they agree is that "Public participation is still very widely considered a 'good thing'" (Brownill & Inch 2019, p. 8). This paper builds on the rich history of literature considering participation in planning to situate strands of participative activity which have become particularly prominent over the last decade, focussing particularly on the UK. Activity including Neighbourhood Planning and Community-Led Housing development has been promoted by governments and activists alike as representing new, or enhanced, forms of participation that have the potential to re-shape structures of governance and power (Sturzaker & Nurse, 2020). Such activity is argued to better reflect the needs and preferences of communities, whether because it "deepens" democracy, or draws on attachment to place more effectively than "standard" forms of planning (Moore, 2021). In this paper we draw on the latest research on this activity to develop a typology of participation which fully considers the difference between state-framed and community-framed, and proactive vs. reactive, participation. Through this new typology and accompanying matrix, we highlight the differences between participative activity that is community-led but framed by the state, and that which is more clearly framed by the desires of the community itself. In turn we suggest that planners working with, for and on behalf of communities might more fully reflect on these differences and the implications they have for participation, democracy and planning.

Keywords: Engagement, Power, Place Attachment, Localism

### References

- Arnstein, S (1969) A Ladder of Citizen Participation. *Journal of the American Institute of Planners*, 35 (4). 216-224.
- Brownill, S. and Inch, A. (2019) Framing people and planning: 50 years of debate. *Built Environment*, 45 (1). 7-25.
- Moore, T. (2021) Planning for place: Place attachment and the founding of rural community land trusts. *Journal of Rural Studies*, 83. 21-29.
- Sturzaker, J. & Nurse, A. (2020) *Rescaling Urban Governance: Planning, Localism and Institutional Change*. Bristol, Policy Press.

84279

## How participatory urban micro-regeneration in China is portrayed and disseminated in mass media

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Urban micro-regeneration is a regeneration method based on the urban texture and style, respecting the order and law of the city itself, emphasizing diversified participation, and creating a more belonging space and influential culture for the region. Its practitioners include governments, public welfare organizations, developers, designers and planners, and community residents. While updating the space, it often has high social value. Such sociality makes such projects, on the one hand, need the exposure of the media to attract more social forces to participate; on the other hand, the renewal project conforms to the social value orientation and is also an excellent news material for the media, becoming a window for the communication between the planning and design industry and the public. The media play a significant role in forming and influencing people's attitudes and behavior.

As information sources, there is a lack of awareness among planning and design practitioners of the role of mass media. Previous research has often focused on understanding popular perceptions without embarking on a search for marketing tools to influence public perceptions. By examining how participatory urban micro-renewal projects in Beijing and Shanghai, China, are portrayed and disseminated in the mass media, this study discusses whether mass media can be used as a tool to promote participatory urban landscape renewal, while promoting awareness of mass media among those in the landscape industry.

The study analyses the research variables in terms of both the process of news dissemination and the framing of news texts, drawing on communication model theory and framing theory. The research variables include source, host, medium, news genre, news topic, news source, and textual content.

The findings provide evidence on social perceptions of urban landscape regeneration and the role that mass media can play in increasing public willingness to engage in urban regeneration. Mass media deepens the public's understanding of the landscape sector and can be used as a tool to advance urban regeneration activism. Designers need to be proactive in their responsibility as communicators and use mass media well.

Keywords: Participatory urban regeneration; Mass media; communication; Social values;

### References

Ajzen, Icek. "Values, Attitudes, and Behavior." Springer Link, edited by Samuel Salzbom et al., Wiesbaden, VS Verlag für Sozialwissenschaften, 2012, pp. 33–38.

陈晓彤, et al. "社区微更新研究的进展与展望" 经济社会体制比较, no. 03, June 2019, pp. 185–191.

Janoušková, Svatava, et al. “Sustainable Development—a Poorly Communicated Concept by Mass Media. Another Challenge for SDGs?” *Sustainability*, vol. 11, no. 11, 6 June 2019, p. 3181.

Schuck, Andreas R. T., and Alina Feinholdt. “News Framing Effects and Emotions.” *Emerging Trends in the Social and Behavioral Sciences*, 15 May 2015, pp. 1–15.

田维钢, and 谢润嘉. “中美媒体对中美贸易摩擦报道的框架分析: 以《人民日报》和《纽约时报》为例” *中国新闻传播研究*, vol. 4, Aug. 2020.

85276

## “Invisible city” – Informal and creative small scale interventions in Tartu.

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Marek Krajewski (2013) defines the phenomena of “invisible city” as part of an urban landscape which is unnoticed because of its hidden and vernacular character or on purpose unseen by urban authorities. Krajewski describes those areas, creating typology based on their function, for example, small gardens in front of balconies, meeting points in wastelands areas, handmade advertisements, "DIY" playgrounds, etc. Beata Gawryszewska (2018) is focusing on informal and vernacular gardening in Warsaw and shows their importance in identity creation as well as place attachment. Following that, the authors decided to study the “invisible city” of Tartu. We hypothesize that those interventions are part of the urban cultural landscape, which from the definition is connected to the relationship between culture, man and the landscape (Bernat 2011) while being indwelled and built by people (Heidegger 1997). Using a technique inspired by the so-called urban flaneur and supported by the LocusMap phone application we collected 360 geo-localized pictures of places of informal small-scale interventions. We studied the characteristics and specificity of those interventions in Tartu, assessing their structure, action and image aspects (Van den Brink et al. 2017, Kuhlmann and Prominsky 2007) followed by cluster analysis, and comparison of them to results of Marek’s Krajewski team from Poland. Moreover, we are broadening this knowledge by looking for types of landscapes that are associated with particular types of interventions, for example, soviet area block housing courtyards, wastelands, etc. - by proceeding with spatial analysis in GIS. Additionally, we carried out the questionnaire which showed the attitude of people who answered (62 answers) towards those interventions. We believe that ‘invisible city’ as part of the grassroots movement (not organized or not officialized as well as not yet well recognized) is enriching the cultural landscape of the city of Tartu, and has an important role in the active creation of the surrounding and giving specific identity. Moreover, our methodology has the potential to be a tool for future studies of this phenomenon in other cities, however, it should be respectively adapted for bigger cities.

Keywords: invisible city, grassroots activism, self-organization, informal design interventions

### References

Bernat, S. (2011) Słowo wstępne. In. Plit, J. (Ed.), *Niematerialne wartości krajobrazów kulturowych/ Intangible values of cultural landscapes*, Commission of Cultural Landscape of Polish Geographical Society, Sosnowiec, p. 11-12

Gawryszewska, B.J. (2018) Zielona zmiana w krajobrazie miasta. Wernakularne ogrody miejskie jako konsekwencja przemian wizerunku, funkcji i znaczenia zieleni w przestrzeni publicznej,

„Societas/ Communitas” 2018, 2 (26), p. 121–141.

Heidegger, M. (1977) *Budować, mieszkać, myśleć / Bauen, Wohnen, Denken*, Czytelnik, Warsaw

Krajewski M. (2013) *Niewidzialne miasto*. Fundacja Bęc Zmiana, Warszawa.

Kuhlmann, F., Prominski, M. (2007) *Assessing Contemporary Cultural Landscapes*. In. *ECLAS Conference proceedings, Landscape Assessment – From Theory to Practice: Applications in Planning and Design*, Belgrade

Van den Brink, A., Bruns, D., Tobi, H., Bell, S., (Eds.) (2017). *Research in Landscape Architecture: Methods and Methodology*, Routledge, Abingdon

84393

## Just talk? Approaching Bottom-up Practices of Local Actors to Address Environmental-Related Challenges in Southern Chile

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Worldwide actors from the civil society form more and more networks to address increasing social and ecological challenges. Indeed, such bottom-driven activities of self-organized interest-based communities gain importance in several countries. In Southern Chile, civil networks organize themselves to tackle environmental degradation, that affects the communities directly and which is neglected by policymakers due to vaguely defined responsibilities. As a result emerge newly created common spaces through communication, action and a conceptual interpretation of reality.

In any spatial planning, communication is an essential part of the process. The contribution of communicative interaction to the construction of spatial concepts, with all its consequences, is yet an area that has not been systematically researched. For example, approaches such as Keller's sociology of knowledge approach to discourse (SKAD) or Christmann's communicative construction of space were applied at the local level, such as in urban quarters, and predominantly in Europe to understand communicative efforts made by local actors to solve local problems.

This paper proposes to include such research experiences and observe the communication of local actors on a regional scale focussing on environmental issues based on action theory and constructivism. The assumptions made are tested on the region of the Llanquihue lake in Southern Chile, where a regional network addresses degradation of public spaces between and in the cities and the shore of the lake by self-organization and by intruding the public administration. The degradation is caused by massive touristic use and the lack of regional planning responsibility outside the city borders. Focusing on Chile by taking into account a theory framework based on communication proves to identify a new problem-solving and understanding view on Latin American environmental issues.

**Keywords:** Networks, Self-organization, Spatial development, Communication, Social constructivism, Chile

### References

- Berger, Peter L., und Thomas Luckmann. 1967. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books.
- Bustos Gallardo, Beatriz, Michael Lukas, Caroline Stamm, und André Torre. 2019. „Neoliberalismo y gobernanza territorial: propuestas y reflexiones a partir del caso de Chile“. *Revista de geografía Norte Grande* 183(73):161–83. doi: 10.4067/s0718- 34022019000200161.
- Christmann, Gabriela. 2016. „Das theoretische Konzept der kommunikativen

Raum(re)konstruktion“. S. 89–120 in Zur kommunikativen Konstruktion von Räumen, herausgegeben von G. Christmann. Wiesbaden: Springer VS.

Keller, Reiner. 2008. „Diskurse und dispositive analysieren. Die wissenssoziologische Diskursanalyse als Beitrag zu einer wissensanalytischen Profilierung der Diskursforschung“. *Historical Social Research* 33(1):73–107.

Valenzuela, Esteban, und Claudia Toledo. 2017. „Pugna por gobernanza urbanometropolitana en Chile: resistencia de agencias y reforma intergubernamental con poder regional“. *Revista Urbano* 20(35):18–31. doi: 10.22320/07813607.2017.20.35.02.

84424

## Including and performing activism in the spatial planning practice: observations and reflections from two Latvian towns

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To perform spatial planning in a communicative, inclusive, and receptive to diversity of needs manner is clearly preferable and is supported by many theoretical and empirical contributions. The extent to which this approach is realized in practice might either induce bottom-up activism as a reaction on a formal top-down process steered towards acceptance of or choosing among predefined solutions, or what is also recently seen, can be adapted by the spatial planners to experiment with the ideas or to test the solutions for the complex cases. We studied two Latvian towns – namely Bauska and Cēsis, which recently introduced improvements in certain public spaces with the different methods and different degree of public involvement. In both cases implemented physical changes have not only solved previous challenges, but also caused new discussions which need to be addressed not the least by spatial planners.

One town, Bauska, renovated streets in the historic center rather technically and even limiting the extent of renovation because of lack of funding. In addition, the proposed project idea had weak involvement of the local community and active inhabitants. The project, among other things, was intended to assist in solving fundamental challenges the neighborhood is facing - increase of car traffic, decline of population, decrease of uses and abandonment of buildings.

The other town, Cēsis, opted for an experiment with one of the main city squares that was used solely as a roundabout and introduced temporary solutions to shape desirable aspects of the square design, which could be established later in a substantive reconstruction project. However, the shift from the car traffic roundabout to public space and the acting of towns' employees as activists at first faced opposition from local inhabitants.

After analysing we discuss challenges which accompany activism in spatial planning and tools available for local municipalities to introduce interventions in the public space and ensure public participation in the process. Later possible solutions for both cases are suggested on how to balance mismatches in the communicating and performing activism in spatial planning bottom-up or top-down.

Keywords: activism, public space, temporary use, participatory planning

### References

Arnstein, S. R. (1969). A Ladder of Citizen Participation. *Journal of the American Institute of Planners*. Vol. 8, pp. 219-224.

Soja, E. W. (2010). *Seeking spatial justice*. Minneapolis: University of Minnesota Press.

Hernberg, H. (2020). Mediating 'Temporary Use' of Urban Space: Accounts of selected practitioners. In M. Chudoba, A. Hynynen, M. Rönn, & A. E. Toft (Eds.), *Built Environment and Architecture as a Resource* (pp. 211-239). (The NAAR proceedings series; Vol. 2020, No. 1). Nordic Academic Press of Architectural Research.

Höpner, C., Frick, J., Buchecker, M. (2007). Assessing psycho-social effects of participatory landscape planning. *Landscape and Urban Planning*. Vol. 83, pp. 196-207.

85137

## A Room of our Own- How does a 'Digital Twin' virtual and physical space produce a co-production participation model?

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This research proposes a new way of participation that takes place over a blundering platform, digital and physical, and enables an inclusive decision making along with a dynamic problem-solving process. Co-production has been recognized as an adaptive model for addressing the political and economic power relationships between the local communities and local government. We claim that this kind of unique participation model also needs a new space that supports it. In the past year, we designed and developed an innovative technological space with a high level of data visualization which encourages an interactive co-production participation model.

In this congress, we will present our applied research '3S- Smart.Social.Strategy' which is located in the Hadar neighborhood of Haifa, Israel. Our research promotes a co-production model, in partnership with the Haifa-local municipality, Shahaf Foundation- a philanthropic partnership for local communities and the Technion- Israel Institute of technology. At the center of the research is the innovative environment developed with physical and digital elements complementing each other. The digital environment is based on a Digital Twin platform which demonstrates real-world complexity via a 3D virtual model. The physical environment facilitates immersive interaction with the Digital Twin to enable data-driven decision-making. Utilizing mixed methods of immersive and interactive technologies, we develop new methods of gathering and displaying data that shed light on socio-economic issues. This interactive platform pioneer a new urban management and planning system based on a co-production model and encourages civic participation between participants with different backgrounds and skills. To illustrate how our new digital and physical space promotes a co-production model, we will describe a specific case study of creating adaptive and flexible policymaking for the elderly population of the Hadar neighborhood.

Keywords: co-production, Digital twin, Immersive environment, digital space, collaborative policymaking, elderly population

### References

- Cardullo, P., & Kitchin, R. (2019). Smart urbanism and smart citizenship: The neoliberal logic of 'citizen-focused' smart cities in Europe. *Environment and Planning C: Politics and Space*, 37(5), 813–830. <https://doi.org/10.1177/0263774X18806508>
- Lember, V., Brandsen, T., & Tõnurist, P. (2019). The potential impacts of digital technologies on co-production and co-creation. *Public Management Review*, 21(11), 1665–1686. <https://doi.org/10.1080/14719037.2019.1619807>

Rosen, J., & Painter, G. (2019). From Citizen Control to Co-Production: Moving Beyond a Linear Conception of Citizen Participation. *Journal of the American Planning Association*, 85(3), 335–347. <https://doi.org/10.1080/01944363.2019.1618727>

Sadowski, J., & Bendor, R. (2019). Selling Smartness: Corporate Narratives and the Smart City as a Sociotechnical Imaginary. *Science Technology and Human Values*, 44(3), 540–563. <https://doi.org/10.1177/0162243918806061>

Verrest, H., & Pfeffer, K. (2018). Elaborating the urbanism in smart urbanism: distilling relevant dimensions for a comprehensive analysis of Smart City approaches. <https://doi.org/10.1080/1369118X.2018.1424921>, 22(9), 1328–1342. <https://doi.org/10.1080/1369118X.2018.1424921>