

TRANS-URBAN-EU-CHINA

Transition towards urban sustainability through socially integrative cities in the EU and in China

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General information

The book articles have been prepared by various teams of authors. They deal with different aspects of socially integrative cities (see excerpts below). After an internal review, each article has been peer-reviewed by external reviewers. The review process has been organized by MDPI publishers in close cooperation with the lead editor, Bernhard Müller. MDPI has finally published the book as an open access online publication.



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Towards Socially Integrative Cities

Perspectives on Urban Sustainability in Europe and China

♠ Bernhard Müller, ♠ Jian Liu, ♠ Jianming Cai, ♠ Paulina Schiappacasse, ♠ Hans-Martin Neumann and ♠ Baojun Yang (Eds.)

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Excerpts from the book

Foreword (written by the lead editor)

Since the Joint Declaration on "The EU-China Partnership on Urbanisation" in 2012, there has been a rapidly growing number of systematic joint research activities on sustainable urbanisation between European and Chinese partners. The "EU-China Sustainable Urbanisation Flagship Initiative" identified four priority areas of mutual interest for EU-China research and innovation collaboration, i.e., sustainable development and urban planning, nature-based solutions for cities, green urban mobility and sustainable energy solutions for cities.

Within this framework, the TRANS-URBAN-EU-CHINA research and innovation action started in 2018 with two parallel objectives. On the one hand, it was to support policy makers, urban authorities, real estate developers, public service providers and citizens in China to create socially integrative cities in an environmentally friendly and financially viable way. On the other hand, it was to help urban stakeholders in Europe to reflect and eventually reconsider their own approaches towards sustainable urbanisation. Real world methods, instruments and good practice examples from Europe and China, e.g., in terms of social inclusiveness, cultural dynamics, environmental friendliness and economic viability, constituted a basis for comparative analysis.

Fourteen project partners of excellence conducted the project. With eight European and six Chinese expert organisations on socially integrative cities, TRANS-URBAN-EU-CHINA combined the best of both worlds to create new insights, practices and role models in sustainable urban development. The Chinese team of partners from government agencies and academia were able to exert a direct impact on society through their national responsibilities for regional and urban planning, research and education. The European partners played a similar role through their positions among European knowledge organisations.

The project started from the fact that cities are places of social innovation and engines of economic growth. They attract dynamic groups of society, they provide vast opportunities of interaction, communication and exchange of knowledge, and they thereby lay the foundation for attracting large shares

of R&D investment and an innovative service sector. Social integration plays a special role here as it directly links with economic prosperity of cities, a just access to infrastructure and services, and a fair distribution of wealth and its amenities. This is true for urban development in general, but especially relevant for China as, promoted by various levels of government, the country is transitioning from a less urban to a more urbanised society with increasingly intensified land use and higher quality of life.

This book shares the impactful original research results of the project. It is the collaborative product of many stakeholders. It is one of the project's main comprehensive academically oriented results. All partners participated in its elaboration in a joint initiative. Mixed author teams, involving European and Chinese experts are responsible for the individual chapters. Texts were internally reviewed by the editors as well as further coordinated with the help of the respective work package leaders who secured additional quality control. In this regard, special thanks goes to: Michele Bonino and Maria Paola Repellino from Politecnico di Torino (POLITO), Turin, Italy; Hans-Martin Neumann from the Austrian Institute of Technology (AIT), Vienna, Austria; Stefanie Rößler from the Leibniz Institute of Ecological Urban and Regional Development (IÖR), Dresden, Germany; Andrea Ricci from the Institute of Studies for the Integration of Systems (ISINNOVA), Rome, Italy; as well as Annemie Wyckmans and Wang Yu from the Norwegian University of Science and Technology (NTNU), Trondheim, Norway. All papers underwent an external peer-review process, organised by the publisher before final acceptance. We would like to thank the publisher, MDPI, for supporting the editors, and more than thirty reviewers for their critical reviews of the different chapters and useful comments.

We are confident that this online open access book provides new insights into recent urban development trends in China and Europe, and contributes to further discussions about ways to manage the transition towards urban sustainability through socially integrative cities. We would like to thank all concerned parties who made this book possible. Special thanks goes to the European Commission, which supported the activities of TRANS-URBAN-EU-CHINA through the European Union's Horizon 2020 research and innovation programme under grant agreement No. 770141. Of course, the material presented in this book reflects only the authors' views. The European Union is not liable for any use that may be made of the information contained therein.

Bernhard Müller, Dresden, March 2021 (For the editors of the book)

From Chapter 1, Section 3 (written by the editors)

Overview of the Book Chapters

On the background of the recent policy directions in Europe and China, this book can make timely contributions to the actual discussions about future perspectives of urban sustainability in both parts of the world. It touches on a number of central issues of the New Leipzig Charter and the Urban Agenda of the EU, on the one hand, and the New Urbanisation Policy and the 14th Five-Year Plan of the People's Republic of China, on the other hand. It deals with experiences and options to create socially integrative cities in Europe and China in a participatory way as a contribution to make cities more sustainable. It presents major original research results of a joint project of researchers and practitioners from fourteen European and Chinese institutions. It is multi- and interdisciplinary in nature, and it looks at a multitude of facets of the socially integrative city from different angles. The individual chapters can be grouped roughly into four parts.

Conceptual Basis, Urban Expansion and Land Management

The first set of chapters provides an overview of and insights into the conceptual basis of the book. The socially integrative city is framed by discussions in academia and practice, and it is defined in a comprehensive way as an element of urban sustainability. The management of urban growth processes in Europe and China and the principles of land management are presented as basic conditions shaping urban development.

Schiappacasse, Müller and Cai look for a common understanding and a suitable definition of socially integrative cities in Europe and China. First, they discuss the general relevance of the topic. Second, they trace respective approaches in Europe and China back to their origins. Third, based on expert group discussions, they present a comprehensive understanding of socially integrative cities, which comprises twelve characteristics grouped into five dimensions: collaborative urban planning and design; favourable urban environment and living conditions; vital local economy and labour market; solidary socio-cultural development and social capital; and supportive institutional development and urban finance. Subsequent chapters refer to this general concept.

Schiappacasse, Müller, Cai and Ma look at ways to manage urban expansion in Europe and ask whether, from these experiences, new impulses can be derived for people-centred urban development in China. On the one hand, the article reviews urban expansion processes in China and Europe and looks at some European approaches oriented towards limiting urban expansion and promoting social integration. On the other hand, the authors show that European experiences, including model projects of participatory planning, may be inspiring for shaping future urban development and socially integrative urban expansion in China.

Finally, Suering, Ortner and Weitkamp focus on the importance of land in urban development. They deal with the role of land management for socially integrative cities. Their paper analyses land development in general, as well as related instruments and mechanisms in Europe. The authors are especially interested in instruments which can be used by municipalities for managing and shaping local land use. They demonstrate how these instruments may influence the provision of affordable housing as well as technical and social infrastructure.

Socially Integrative Urban Regeneration

A second set of articles focuses on socially integrative urban regeneration in cities. After an overview of policies and strategies in Europe and China, detailed aspects are discussed, such as community building through public engagement, challenges of place making and the role of education and life-long learning. Finally, a view on heritage preservation and its impact on social integration in urban regeneration concludes this part.

In their paper, *Rößler, Cai, Lin and Jiang* provide an overview of urban regeneration in China and Europe and its relation with social integration. The article focuses on the current framework, challenges and experiences of socially integrative urban regeneration in both parts of the world. In order to understand the specific challenges as well as potentials of urban regeneration strategies, the authors consider different pathways, origins and practices. This includes a comparative view on terms and definitions used in the debate as well as the current practice of urban regeneration. Drawing on the concept of socially integrative urban development, challenges of urban regeneration in China and experiences in Europe are described.

Valler, Korsnes, Liu and Chen look into community building through public engagement. They emphasise the role of public participation in the regeneration of neighbourhoods. However, they also demonstrate that the extent to which such processes are anchored in communities varies greatly. They attribute this to the groups of actors involved. Thus, they focus on the question of who participates in community building in Europe and China. The analysed cases show that there are different levels of participation in Europe and China. The authors argue that a wide variety of actors should be involved early in local planning in order to ensure that residents have a say in the definition of the issues at hand.

Hamama, Repellino, Liu and Bonino discuss place making in post-industrial cities in China and Europe. Based on a literature review and selected case studies from China and Europe, the chapter embraces two transformative factors, people and places, to shed light on the processes behind the social and spatial transformation of urban spaces, the integration of the marginalised communities and the promotion of community participation in the preservation of the architectural and cultural heritage. The

authors conclude that despite tremendous efforts to engage local communities in producing high-quality urban spaces, a number of challenges, such as gentrification, economic disparities and geographic segregation, are still hindering the realisation of socially integrative cities.

Patrizi, D'Aniello, Polenta and Xu look into the role of educational museums for creating socially integrative cities in Europe and China. They show how the idea of the "educating city" can help to find effective ways of social integration which have the potential to promote the well-being of individuals and the community. The authors analyse case studies of educational museums in Europe and China. They demonstrate that museums, as non-formal education spaces and an expression of collective identity, can play an important role in connoting a city as an educating city.

Sauarlia and Wang focus on the role of heritage in creating socially integrative cities. The authors look at the critical role of communities in the transition of historical urban districts. The authors compare two cases, i.e., a district in Trondheim, Norway, and one in the city of Xi'an, China. Both examples show that communities play an important role in transforming urban areas. The authors conclude that community building in urban transition is a key element for preserving the value of historical districts and neighbourhoods.

Urban Transformation and Evidence-Based Decion Making

A third set of articles looks into issues of urban transformation and evidence-based decision making. Transformation is understood as a complex set of interactions. Community platforms for information and dialogue can become effective instruments to facilitate transition processes. Community interaction and development as well as other features of transformative capacity can help to narrow gaps between planning and implementation. Advanced methods, such as social cost—benefit analysis (SCBA), may support social integration. Additionally, it is demonstrated that the use of multiple data sources can speed up the digital transition in cities and provide decision support for social integration.

Sharir et al. embrace complexity theory for discussing transition processes towards socially integrative cities. They understand the city as a living organism in which resources, knowledge and people are closely interconnected. The authors point out that community building is a key factor for making cities more attractive for residents, businesses and visitors. Digital technology can contribute to establish lively online communication among inhabitants. The case of Tel Aviv in Israel can be taken as a good practice example for facilitating transformation processes.

Meyer et al. focus on capacity building for urban transformation. They discuss factors which influence the efficiency and consistency of urban planning in implementation, taking smart cities as an example. Case studies reveal that certain measures to enhance transformative capacities are critical across Chinese and European cities. For example, stakeholder involvement and the cooperation within a multi-actor community is key to reduce the gap between planning and implementation, both in China and Europe. Importantly, however, the case studies show that while there are commonalities regarding the role of certain transformative capacity building measures, the way these measures are expressed differs between Chinese and European cities and always embodies the local context.

Ricci, Enei and Ma present social cost—benefit analysis (SCBA) as an instrument to support urban planning and governance for enhancing social integration. SCBA techniques can be used for monetary valuation of impacts for which market prices may not be available. The quantification through SCBA techniques may help to better reflect the value which society attaches to non-market goods and services, enabling urban planners and policymakers to consider the net social welfare effects of urbanisation processes.

Liu et al. deal with a specific facet of attempts to enhance the quality of life and well-being of people. They take the mitigation of air pollution as an example. In their contribution, the authors present a study on interrelationships between air pollution, transportation, industries and social activities in Tianjin. The analysis identifies factors which have an impact on air quality in the city. A cost model for the reduction in air pollution provides insight into causal factors that may be taken into account while

making decisions to lower air pollutants. With this example, the authors also demonstrate how multiple data sources can be used to establish decision support for planning socially integrative cities in an evidence-based way.

Replicability and Urban Laboratories

The final set of articles deals with questions of the replicability of experiences and the role of concrete urban experiments in so-called urban living laboratories. Methods to explore the replication potential of urban solutions for socially integrative cities are discussed, and the potential of urban living laboratories for nurturing open urban innovation in Chinese cities is scrutinised. Several examples are discussed, and conclusions regarding the enhancement of social integration in cities are drawn.

Paolucci describes a new method for estimating the replication potential of urban solutions for socially integrative cities (the SITEE replicability method). The author starts from the experience that a certain solution, which may be successful in a given context, does not necessarily work in a different context, bringing the same benefits. For example, measures successfully pursuing social integration in Europe may face various difficulties when implemented in a Chinese context. Thus, a thorough analysis of the replication potential is required. On this background, the author describes a new method for estimating the replication potential of urban solutions in different contexts, combining quantitative data with qualitative information collected from local stakeholders according to five dimensions: Socio-Cultural, Institutional, Technological, Environmental and Economic (SITEE). The multi-dimensional analysis allows describing and understanding the complexity of different contexts and helps to identify the most relevant factors that may limit or facilitate replication.

Finally, Wyckmans et al. discuss urban living labs as instruments of open innovation. Urban living labs, which are becoming increasingly popular in Europe, are still rather new in China. However, on-the-ground experiences in the cities of Wuhan, Tianjin and Jingdezhen, based on close interaction between local stakeholders and European and Chinese experts, demonstrate the potentials of urban living labs in China. The authors suggest applying open innovation-based principles so that urban living labs can function as meeting arenas to support communities' diversity, significance and connectedness, where participants can experiment with practical ideas and solutions towards a more cohesive, inclusive and sustainable everyday life.

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