



Delft University of Technology

**Document Version**

Final published version

**Licence**

CC BY-NC-ND

**Citation (APA)**

Chen, S., Sheng, T., Wei, T., Zhang, H., den Hartog, H., Rauch, W., & Kleidorfer, M. (2025). Mobilizing spatial capital through planner-mediated exploratory walks: a participatory approach to community renewal in Beijing. *Planning Practice and Research*. <https://doi.org/10.1080/02697459.2025.2521352>

**Important note**

To cite this publication, please use the final published version (if applicable).

Please check the document version above.

**Copyright**

In case the licence states "Dutch Copyright Act (Article 25fa)", this publication was made available Green Open Access via the TU Delft Institutional Repository pursuant to Dutch Copyright Act (Article 25fa, the Taverne amendment). This provision does not affect copyright ownership.

Unless copyright is transferred by contract or statute, it remains with the copyright holder.

**Sharing and reuse**

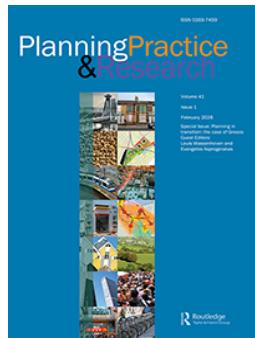
Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

**Takedown policy**

Please contact us and provide details if you believe this document breaches copyrights.

We will remove access to the work immediately and investigate your claim.

*This work is downloaded from Delft University of Technology.*



## Mobilizing spatial capital through planner-mediated exploratory walks: a participatory approach to community renewal in Beijing

Shiyang Chen, Tong Sheng, Tao Wei, Haoran Zhang, Harry den Hartog, Wolfgang Rauch & Manfred Kleidorfer

**To cite this article:** Shiyang Chen, Tong Sheng, Tao Wei, Haoran Zhang, Harry den Hartog, Wolfgang Rauch & Manfred Kleidorfer (03 Jul 2025): Mobilizing spatial capital through planner-mediated exploratory walks: a participatory approach to community renewal in Beijing, *Planning Practice & Research*, DOI: [10.1080/02697459.2025.2521352](https://doi.org/10.1080/02697459.2025.2521352)

**To link to this article:** <https://doi.org/10.1080/02697459.2025.2521352>



© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 03 Jul 2025.



Submit your article to this journal 



Article views: 1159



View related articles 



CrossMark

View Crossmark data 

# Mobilizing spatial capital through planner-mediated exploratory walks: a participatory approach to community renewal in Beijing

Shiyang Chen <sup>a,b</sup>, Tong Sheng<sup>c</sup>, Tao Wei<sup>d</sup>, Haoran Zhang<sup>b</sup>, Harry den Hartog <sup>e</sup>, Wolfgang Rauch  and Manfred Kleidorfer <sup>a</sup>

<sup>a</sup>The University of Innsbruck, Innsbruck, Austria; <sup>b</sup>China Academy of Urban Planning & Design, Beijing, China; <sup>c</sup>Beijing Municipal Institute of City Planning & Design, Beijing, China; <sup>d</sup>Communication University of China, Beijing, China; <sup>e</sup>Delft University of Technology (within the Abe Bonnemaerstel), Delft, The Netherlands

## ABSTRACT

Current urban renewal in China lacks effective public engagement, limiting the agency enabled by the 'Responsible Planner' mechanism. This paper explores how exploratory walks mediated by planners support problem identification and co-production of interventions. By analysing spatial capital through the spatial distribution of four forms of capital, it examines and operationalizes spatial (in)justices in community renewal. Two case studies in Beijing's historical and commercial districts reveal capital imbalance, empowering participants to potentially mobilize spatial capital to address spatial disparities co-creatively. The paper highlights the practical value of walking research and provides an actionable model for participatory planning and long-term policymaking.

## ARTICLE HISTORY

Received 6 November 2024  
Accepted 12 June 2025

## KEYWORDS

Participatory planning;  
exploratory walk; responsible  
planner; spatial capital;  
urban renewal

## 1. Introduction

### 1.1. Spatial justice

Rather than viewing space as a static backdrop of social activities, the 'spatial turn' emphasizes the active role of spatiality of (in)justice which influences society and social life (Soja, 2010). Ensuring spatial justice increasingly serves as a guiding principle in the field of spatial planning (Kunzmann, 1998). Drawing on David Harvey's notion of the 'Right to the City', urban residents, especially marginalized groups, should be engaged democratically and equitably in shaping urban renewal and the development processes, with planners translating these principles into practice (Harvey, 2015). Community participation and localized planning are essential for achieving spatial justice, especially within urban renewal models that aim to alleviate the unequal spatial distribution of power, capital, and opportunities, thereby promoting genuinely sustainable and equitable urban development (Currie & Sorensen, 2019), and ultimately realizing the vision of 'designing for all'. However, as Soja argues, identifying and understanding the underlying processes that produce spatial inequities remains far more complex (Soja, 2010). Spatial capital serves as a potential analytical

**CONTACT** Shiyang Chen  [Shiyang.Chen@uibk.ac.at](mailto:Shiyang.Chen@uibk.ac.at); [shiyang.chen07@gmail.com](mailto:shiyang.chen07@gmail.com)

© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

framework to elucidate the processes behind spatial injustice, such as gentrification, and is a meaningful tool to enhance resilience in communities (Callaghan & Colton, 2008; Centner, 2008; Lévy, 2014; Marcus, 2007; Tomay & Berger, 2024).

### **1.2. *Participatory planning approach***

In the context of urban renewal, climate crisis response and post-COVID recovery, public participation has gained increased attention for its potential to generate synergistic benefits within constrained urban environments (Khatibi *et al.*, 2021; Zhang *et al.*, 2021; Champlinet *et al.*, 2023). Recent decades have witnessed a notable surge in participatory practices, aligned with the rise of grassroots citizen participation movements. Arnstein's 'A Ladder of Citizen Participation' (Arnstein, 1969) laid the theoretical foundation for public participation, and the participatory planning theory (Smith, 1973; Habermas, 1984; Healey, 1999) provides important methodological support. The UN's New Urban Agenda embraces a participatory approach by 'providing safe and equal access for all, and by providing equal access for all to physical and social infrastructure and basic services, as well as adequate and affordable housing' (United Nations, 2017). There is a wide spectrum of procedural activities and support instruments to operationalize participatory planning, yet gaps remain in approaching inclusive and effective participation.

### **1.3. *Responsible planner***

In architectural practice, the tension lies between client-centric compliance and ethical imperatives (Till, 2009, 2005). Chinese urban planners are faced with a similar situation: The typical top-down process empowers local authorities to determine the degree and procedure of public participation and make spatial decisions (Xu *et al.*, 2024). Like what Till states about the architect's ethical duty (Till, 2009), cities like Beijing, Shanghai, Shenzhen, and Chengdu, are exploring an institutionalized model, community planner system, to deploy 'Delegated Planner', 'Community Planner', or 'Responsible Planner' to act as a mediator and third-party consultant to identify the needs of local communities and help them to shape interventions for urban renewal planning (Wang & Ma, 2019).

### **1.4. *Gaps in planning practice***

Firstly, scholars have developed various measures under different definitions of spatial capital, trying to understand and explain the mechanism behind social injustice in the spatial dimension; however, there is a lack of operationalizable approaches to observing and mobilizing spatial capital through everyday practices.

Marcus deploys space syntax analysis to evaluate spatial capital by quantifying spatial integration, capacity, and diversity indices, revealing significant correlations (Marcus, 2007). UN-Habitat examines the spatial capital of 17 Saudi Arabian cities through a detailed study of street connectivity, operationalizing spatial capital through objective urban morphology (López Moreno & Orváñanos, 2015). On the other hand, qualitative approaches are used to study spatial capital. Rérat focuses on empirical phenomena such as residential location choices and mobility patterns through questionnaires and semi-structured interviews (Rérat, 2018). Horsch &

Ouvrard use in-depth interviews and ethnographic surveys to trace the evolution of spatial capital among architecture students (Horsch & Ouvrard, 2023). Despite advancements in methodology, either with quantitative approaches (like space syntax, focusing on spatial form) or with qualitative methods (like interviews with spatial agents), there is a lack of observation and recording of how spatial agents interact with physical locations in daily life, shaping the spatialized habitus and capital which leads to injustice.

Secondly, existing participatory planning in practice faces significant challenges rooted in both structural inequities and procedural limitations.

Conventional methods such as public councils and hearings often fail to ensure equitable stakeholder engagement due to entrenched power imbalances (Akbar *et al.*, 2020). Privileged stakeholders with greater temporal, material, and social capital tend to dominate participatory processes (Fung, 2015), while marginalized groups face exclusion due to resource constraints, power imbalances, or technical/verbal barriers (Feruglio & Rifai, 2017). Procedural constraints further restrict participants' agency and engagement. Technical jargon, complicated planning documents, and bureaucratic processes create barriers to comprehension, contributing to chronically low attendance at public hearings and disengagement from participatory mechanisms (Kweit & Kweit, 1984). Additionally, rigid procedural frameworks, coupled with the intricate nature of urban planning issues and institutional inertia, often erode public trust and interest in participation and further lead to the underrepresentation of vulnerable groups for a long time, diminishing both the efficiency and legitimacy of these processes (Duťu *et al.*, 2017; Zhang *et al.*, 2022).

Thirdly, responsible planners in China encounter challenges in embedding public participation in the existing top-down urban governance framework.

To achieve an equitable distribution of spatial resources, opportunities, and rights across various social groups, planners need to act as mediators between experts, officials, and communities (Forester, 1982). However, due to the government-led and citizen-passively-involved feature of urban planning in China, responsible planners often play a supporting and supervisory role. Additionally, planners tend to prioritize specialized technical skills over addressing the tacit and collective needs of the community (Till, 2009).

### 1.5. Objective and contribution

Faced with the gaps mentioned above, the key research question lies in how to address spatial injustice in urban renewal by examining spatial capital more collaboratively and effectively. This article aims to introduce and apply a novel participatory planning approach to observe, document, analyze and mobilize spatial capital in a co-creative manner for more equitable planning outcomes. This approach contributes to the application of spatial capital in urban planning practice, enabling planners to observe spatial practices in daily life and understand the underlying forms of capital that shape spatial agents' interactions with urban spaces. The results can inform policymakers of the structural drivers of spatial injustice and thereby support the formulation of long-term strategies. The paper offers an operationalizable framework for participatory planning under China's 'Responsible Planner' mechanism, engaging communities in urban renewal for addressing spatial (in)justice.

## 2. Methodology

### 2.1. Conceptual framework and hypothesis

Spatial justice concerns the equitable distribution of spatial capital (Lévy, 2014). Spatial capital, along with its exchange with other forms of capital, such as economic, cultural, social and ecological, shapes individuals' ability to benefit from and contribute to space, which thus influences spatial justice (Lévy, 2014). Moreover, building a sustainable and resilient community requires a balance of these forms of capital (Callaghan & Colton, 2008), ensuring that the spatial advantages do not disproportionately benefit certain groups while excluding others. In this context, analysing spatial capital through the spatial distribution of other forms of capital serves as a key lens to understand and operationalize spatial (in)justices in community renewal.

An effective participatory planning process is crucial to ensure spatial justice in urban renewal, where responsible planners can play a mediatory role in engaging and co-designing with local inhabitants. The walking method is a valuable tool for observing and understanding spatial injustices *in situ*, which helps planners and other participants directly tap into spatial practices and the underlying structures of habitus, as well as distribution of different forms of capital. Under such a conceptual framework, the paper is positioned as a plea to reintegrate exploratory walks as a critical planning tool.

Therefore, we hypothesize that to effectively address spatial injustices and enable participatory urban renewal, (responsible) planners must first conceptualize spatial capital as a means of understanding community dynamics; Exploratory walks serve as an effective methodological tool to observe, document, and activate different forms of capital (economic, cultural, social, and ecological) to understand and mobilize spatial capital in a co-creative manner.

The overall methodology with the conceptual framework is shown in [Figure 1](#).

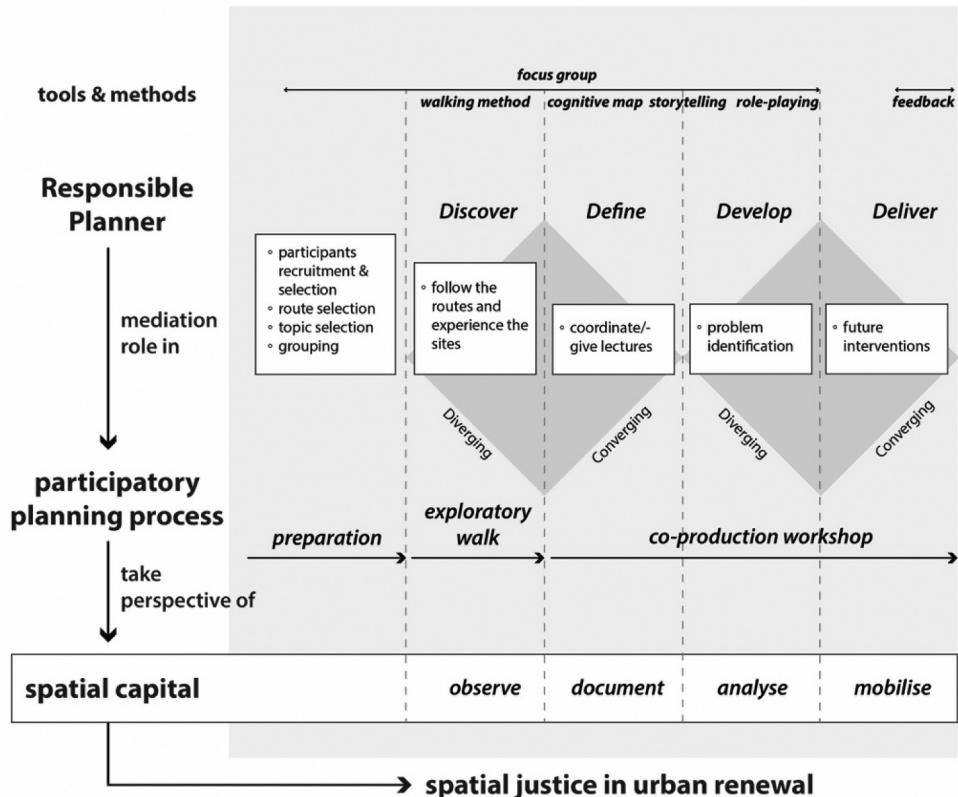
### 2.2. Detailed methods

#### 2.2.1. Spatial capital

Bourdieu differentiates three fundamental forms of capital (economic, cultural, social) and refers to symbolic capital as any form of capital that is socially recognized and valued within a certain context, with the effect of habitus as 'a socially constituted cognitive capacity' (Bourdieu, 1986). Building on Bourdieu's theory of capital and habitus, spatial capital has been evolving as a key concept for understanding the advantages and disadvantages experienced by spatial agents, as well as the power imbalance embedded in spatial configurations.

Ramos deduces from Bourdieu's theory of capitals, arguing that 'agents not only possess different forms of capital but also often combine and apply them synergistically to gain advantages in different social fields', which shapes spatial practices (Ramos, 2024). We adopt two perspectives, implicitly differentiated in Ramos's work, in our analysis to organize the literature on diverse definitions, meanings, and measures of spatial capital.

From the agent's perspective, spatial capital is 'a skill, resource or asset that enables agents to develop spatial practices' and the 'ability to capitalize on resources and skills for practices in geographical space' (Ramos, 2024). Such interpretation is closely connected to Bourdieusian symbolic capital. Centner uses 'spatial capital' with an



**Figure 1.** Illustration of the overall methodology.

explicit focus on how dominant groups reshape place, who claims it is a form of symbolic capital that originates from economic, social, and cultural capital, with the ability to take and make place (Centner, 2008). Mosselson develops the concept of spatial capital, following Centner, as 'the ability to take and make place, but also as the ability to successfully navigate, inhabit and engage with space' (Mosselson, 2020). Mosselson argues spatial capital is 'subsumed and enacted through one's habitus', engaging 'with the day-to-day realities of a space and understand[ing] its inner workings and multiple worlds' (Mosselson, 2020). Lévy uses spatial capital in a narrow sense, as a "species" of social capital, non-reducible to other species; it falls into the agent-based interpretation, as 'a significant component of an actor's social capital' which 'can be exchanged with other capitals' (Lévy, 2014).

From the location's perspective, spatial capital refers to the advantages endowed by a physical space itself, such as living in well-connected urban areas that facilitate access to economic, cultural, or educational opportunities, or businesses strategically using spatial knowledge for real estate and investment decisions (Ramos, 2024). Lévy similarly claims 'a space may also have spatial capital in terms of stock and flows', e.g. a city can leverage its location to strengthen connections with other areas while enhancing its appeal to various spatial actors (Lévy, 2014). Marcus provides one of the earliest attempts to quantify spatial capital as an outcome of urban form (Marcus, 2007). Marcus argues

that spatial capital can serve as a measurement of urbanity for evaluating social performativity of urban form and its influence on land-value (Marcus, 2007).

Building on Centner's spatial capital concept (Centner, 2008) and Ramos's location-based perspective (Ramos, 2024), this research conceptualizes spatial capital as a collective resource and service embedded in communities, which the physical location possesses, originating from other forms of capital and enabling spatial agents to gain advantages. Adapted from the framework of 'community capital' (Callaghan & Colton, 2008), we adopt four basic forms of capital forming communities' spatial capital which will be spatialized and analyzed throughout the participatory planning process. We also follow Mosselson's spatialized perspective on habitus, assuming disposition and practice are deeply influenced by experiences in particular physical spaces (Mosselson, 2020).

**2.2.1.1. *Economic capital.*** This is capital that can be directly converted into money and is often institutionalized as property rights (Bourdieu, 1986). In the participatory process, it is linked to areas where economic investments are apparent, such as commercial zones, high-end residential areas, and well-maintained amenities.

**2.2.1.2. *Cultural capital.*** Bourdieusian cultural capital refers to three forms: embodied (long-lasting dispositions of the mind and body), objectified (cultural goods), and institutionalized (educational qualifications) (Bourdieu, 1986). Here, we adapt the term from its original agent-based definition, shifting the focus to the advantages embedded in physical space. Cultural capital in this context is prominent in culturally significant sites like historical buildings, cultural centers, and public art installations.

**2.2.1.3. *Social capital.*** This is composed of social obligations, connections, or any other relationships that have developed around shared values, norms, and trust (Callaghan & Colton, 2008). This type of capital can be transformed into economic capital under specific conditions and may be institutionalized as a title of nobility (Bourdieu, 1986). In the case studies, social capital is observed through social interactions and networks in public spaces like parks, squares, and community centers.

**2.2.1.4. *Ecological capital.*** It refers to the stock of natural resources that provide valuable services and contribute to human well-being and economic activities (Costanza *et al.*, 1997). It encompasses stocks such as geology, soil, air, water, and all living organisms, and services like flood regulation, atmospheric gas exchange, and erosion control, which is magnified by its contribution to other forms of community capital (Callaghan & Colton, 2008, Missemer, 2018). In this research, the emphasis is not on the direct utilization of natural resources for industrial mass production within capitalism, but rather on the intrinsic value and effects that the ecological services can bring to the communities.

**2.2.1.5. *Habitus.*** Bourdieu defines it as 'a system of dispositions' in a permanent manner or 'schemata or structures of perception, conception and action' in a long-lasting manner (Rooksby, 2017). According to Bourdieu, habitus and lifestyle both are closely linked in people's behavior 'in a sense very systematic' when they occupy 'a similar or neighboring position in social space'. Mosselson adapts the Bourdieusian concept and defines the developers' habitus as 'the set of socially inculcated dispositions, motivations

and practices that inform social action and shape the processes through which they redevelop the inner-city'. Such spatial habitus enacts spatial capital to take and make place successfully (Mosselson, 2020). Tomay & Berger further apply Bourdieusian concepts of habitus, dispositions, and practices to spatiality, providing a possibility to 'distinguish between urban and rural habitus' and reflecting the reinforced social injustice (Tomay & Berger, 2024). Since habitus is not easily verifiable or observable (Mosselson, 2020; Sköldberg & Alvesson, 2009), in our approach, we observe the spatial practices or lifestyles of local inhabitants shaped by spatial habitus (Tomay & Berger, 2024) to understand the underlying spatial capital and spatial injustice.

### **2.2.2. Exploratory walk**

Walking research, alternatively coined as 'commented walk' (Thibaud, 2001), 'mobile interview', 'walk-along', 'walking fieldwork', etc. (King & Woodroffe, 2019), is characterized by researchers organizing interviews during the walking events together with the participants at given locations or along certain routes (Kinney, 2017). 'Exploratory walk', as a walking research method, enhances the attributes of participatory action research in mobile activities, enabling 'co-walkers' to explore the relations between physical space and people's everyday life, exchange knowledge and opinions (Bazuń & Kwiatkowski, 2022), as well as deepen the understandings of habitus and spatial capital. The approach has the following benefits in urban planning practice:

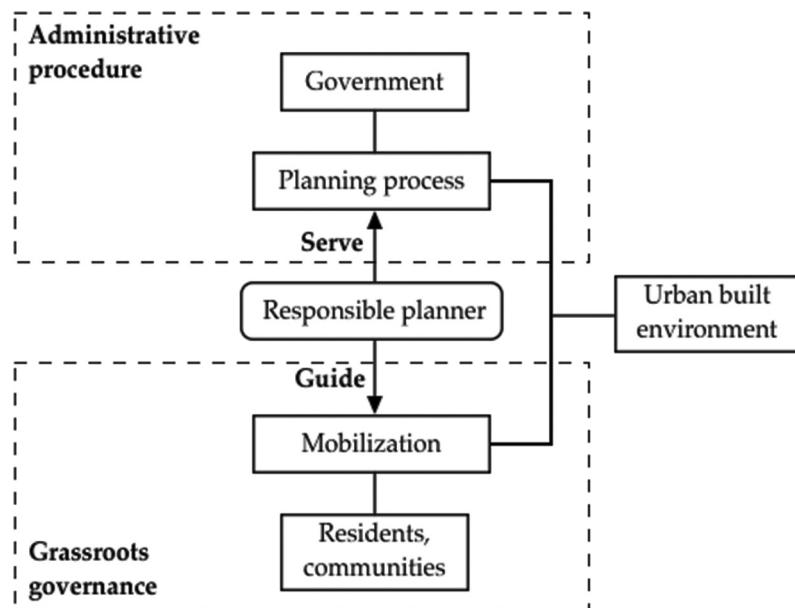
- (1) Exploratory walk enables more effective and comprehensive observations of the physical space and spatial practices to identify potential design problems (Bazuń & Kwiatkowski, 2022). Through exploratory walks, the researchers become partners with the participants, enabling more continuous observation of spaces and facilitating in-depth interviews (O'Neill & Roberts, 2019). The uncertainties encountered during the walk also provide opportunities for researchers to observe affective states and dispositions of participants and residents (Bazuń & Kwiatkowski, 2020). The observatory results from the walking research, either factual material (sensory observation of urban spaces and identification of problematic areas) or strategic material (identification of certain needs and potentials) (Evans & Jones, 2011; Piga, 2021) can form the basis for documenting and analyzing the distribution of different forms of capital in the community. This, in turn, can inform spatial interventions that mobilize the imbalanced capital to enhance the community's resilience.
- (2) Exploratory walk contributes to just planning (Harvey, 1992) through the process of co-production by involving both technical specialists and life-experienced inhabitants (Kinney, 2017). Such events can enhance spatial justice by delivering inclusive participation during the decision-making processes (European Environment Agency, 2023). Such activities, with their 'inclusive and participatory' feature (O'Neill & Roberts, 2019), increase the chance and level of participation (Back, 2017) hence reducing the power imbalances during the planning process (Bazuń & Kwiatkowski, 2022).
- (3) Exploratory walk benefits the participants' agency and their sense of belonging to communities. Exploratory walk, as a form of pedagogy or a collective learning activity (Back, 2017), can provoke participants' motivation to engage due to the

familiarity of geographical locations (Bazuń & Kwiatkowski, 2022). Exploratory walk also offers participants opportunities for 'reflective learning' about the community (Moon, 2013, Piga, 2021), and forms good interpersonal relationships, as well as a sense of belonging (Bazuń & Kwiatkowski, 2022).

### 2.2.3. Responsible planner's mediation role

In the Global North, planning professionals are increasingly believed to act as mediators balancing interests amongst stakeholders (Forester, 2006) and help engage marginalized groups during the decision-making process (Fainstein, 2000; Suddaby & Viale, 2011; Tayebi, 2013). Despite the mainstream top-down planning structure in China, planners still can act as 'mediators' and 'activists' to enhance citizen participation (Zhang *et al.*, 2020).

The official initiative of the 'Responsible Planner' mechanism in the Chinese context provides great potential for planners to perform the role of mediators in urban renewal interventions and long-term maintenance. Since 2019, the government of Beijing assigned professional planners to cover all streets and towns, aiming to realize urban renewal and infrastructure construction in a shared co-governance manner (Tang & Zhang, 2023). The main responsibilities of such planners include facilitating communications among governments, markets, and the public, as well as providing independent technical opinions and consulting for planning, design, assessment of projects (BMCPNR, 2024). After years of rollout of the mechanism, an overall improvement in the living environment and urban quality through co-governance has been achieved in Beijing's core areas (Wang & Ma, 2019). The operational framework of the Beijing Responsible Planner System (Figure 2) facilitates the restructuring of power in the governance process, thereby paving the way for participatory planning and shared



**Figure 2.** Typical organizational structure of the Responsible Planner system in Beijing (adapted from Wang *et al.*, 2022).

decision-making within the top-down governance process (Zhu *et al.*, 2023). The idea of Responsible Planner aligns with Till's notion of the 'expert-citizen/citizen-expert' role of architects, 'moving between the worlds of expert and citizen', and 'engages with the world as organic intellectual, a new form of professional' (Till, 2005).

#### **2.2.4. *Participatory process of the planner-mediated exploratory walk***

The new approach we propose applies exploratory walks [49] combined with a follow-up diagnosis workshop to co-produce analysis of the findings and shed light on future intervention strategies (Bazuń & Kwiatkowski, 2022). The approach deploys planning professionals, or responsible planners in the Chinese context, as mediators in guiding the participants in the walking sessions, as well as providing knowledge sharing and coordinating diagnosis in the follow-up workshop sessions (KIRMİZİ, 2019). Bridging top-down planning structure and bottom-up grassroots initiatives, planners can facilitate observation, activation, education, and integration with participants to increase the chance of success (Kwiatkowski, 2016) and contribute to the dissemination of 'findings' (O'Neill & Roberts, 2019). Spatial capital is innovatively used as a lens to analyze the findings derived from the walking sessions. By mobilizing spatial capital, more effective and equitable future strategies can be developed. The participatory process follows the Double Diamond approach, with the steps Discover, Define, Develop, and Deliver (the Design Council, 2024). The Double Diamond approach helps planners to collaborate effectively and efficiently in interdisciplinary teams, especially when involving non-experts, owing to the high complexity of design problems (Kochanowska & Gagliardi, 2022; Stelzle *et al.*, 2017). It helps to make the planning process visible to the participants, leaving flexibility in problem identification and solution synthesis, as well as enabling 'reflective practice' (Kochanowska & Gagliardi, 2022).

The detailed procedure is shown in Figure 1. The full process includes three stages: preparation, exploratory walk session (Discover), and co-production workshop session (Define and Develop). The preparation stage covers participant recruitment, participant selection, route selection, topic selection, and grouping, balancing the representativeness and diversity of the participants. Grouping with pre-defined topics adopts the method of 'Focus Groups', a research technique that collects data through group interaction on a topic predetermined by researchers (Morgan, 1996). Such a method enables researchers not only to collect what participants think but also to delve into how and why they think in a particular way, thus providing more valuable insights as compared to other data collection methods (Kitzinger, 1995). During the planner-mediated walking session, participants follow certain pre-selected routes and experience the community dynamics. Moreover, by shooting pictures and videos, as well as by interacting with local inhabitants, the participants are encouraged to document the findings and observations on activities, animals, alleyway houses, waterfronts, etc., to gain diverse perspectives related to the planning topics and observe spatial habitus and various forms of capital. The co-production workshop starts with lectures shared by planning professionals and residents, followed by a discussion on problem identification and possible spatial and social interventions. During the discussion, methods such as role-playing and storytelling are employed (Hribernik *et al.*, 2011), prompting participants to immerse themselves in the perspectives of potential inhabitants (e.g. students, elderly individuals, staff members of

scenic spots) and imagine their experiences at the site. Cognitive mapping exercises are deployed to have participants draw their perceptions of the neighborhoods, which helps to highlight disparities in spatial capital among different groups and facilitate discussions on how these capitals can be mobilized (Hou *et al.*, 2021). Mapping and sketching serve as tools for participants to visualize and articulate their aspirations for the community's future. With the identified problems and collected insights for future interventions, planners can further refine and develop actionable plans. Such 'Deliver' can be either performed by co-creation during the workshop together with the participants or refined solely by planners after the workshop, depending on the types of planning projects.

### 2.3. Case study description

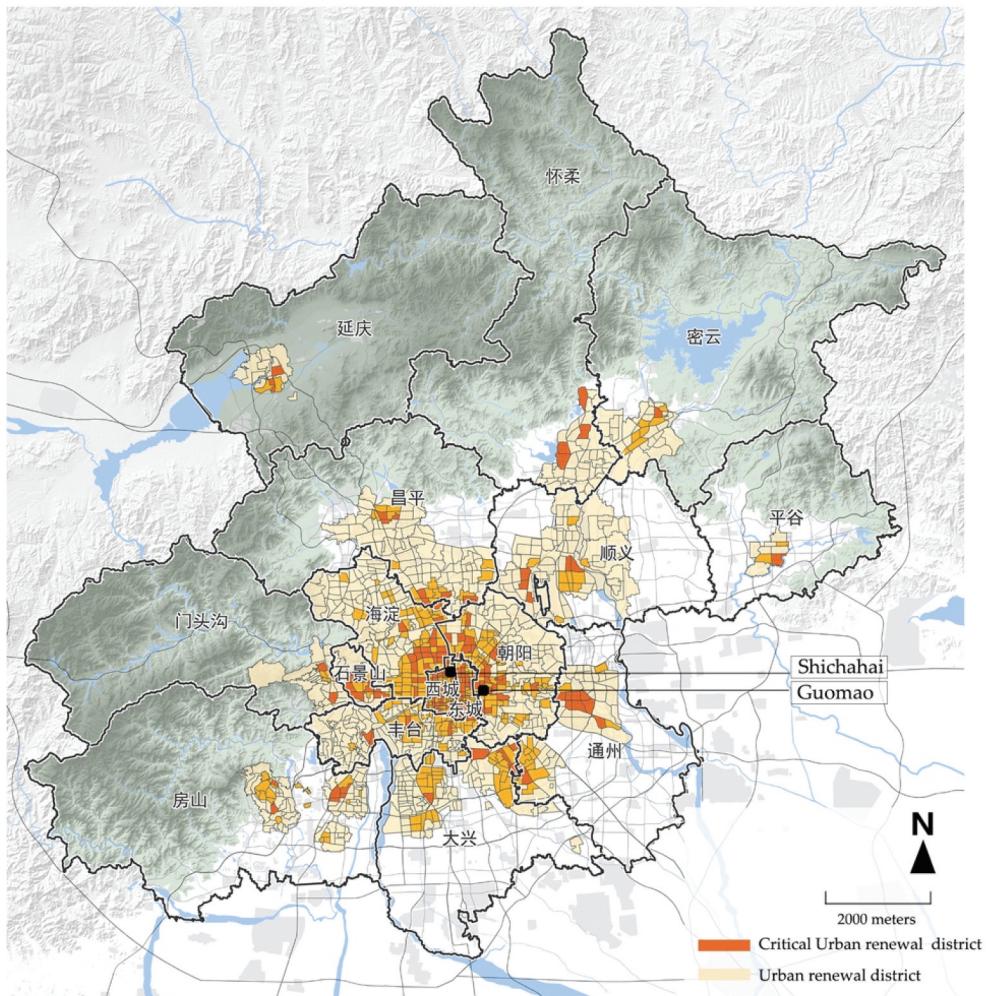
The proposed approach is applied in two critical urban renewal districts as identified in the Beijing Urban Renewal Sector Plan (Beijing Municipal People's Government, 2022) (Figure 3): one is Shichahai, a historic area with a strong local identity with high cultural capital and ecological capital, and the other is the China World Trade Centre (Guomao), a central business district known for its bustling commercial activities and symbolic capital of business elite affected by the globalization. All three stages in the approach are customized to the characteristics of the two sites and various co-design methods are used, while planners act as mediators in both cases.

#### 2.3.1. Shichahai

Shichahai is the largest historic and cultural district in Beijing, which sits at the northernmost part of World Heritage 'the Grand Canal' (UNESCO, n.d.-b) and next to 'the Central Axis of Beijing' (UNESCO, n.d.-a). Shichahai carries a rich inheritance combined with traditional residences, scenic tourism, and local commercial activities, as well as its unique natural landscape with 33.6 hectares of water bodies (Zhang *et al.*, 2018). As an important component of the construction of the cultural essence zone outlined in the 'Beijing Urban Master Plan (2016–2035)', how to balance tourism (economic capital) and the historic landscape (cultural and ecological capital) is the key to the urban renewal of Shichahai (Beijing Daily, 2022).

The case study of Shichahai (Table 1) was carried out on 10 October 2022. Given that Shichahai serves as a multifunctional public space, participants, recruited through social media posts, were carefully chosen to represent diverse age groups and occupations, aiming to gather insights from a broad spectrum of stakeholders. Considering the timeframe of the walking activity (around 1.5 hours), the participants were randomly sampled into two groups, the north line and the south line, to cover the whole waterfronts of Shichahai (Figure 4). The topics of 'living' and 'ecology' were introduced to the participants for observations along the walk and discussions in the subsequent co-production workshop.

The co-production workshop initially synthesized the findings from the walk, using cognitive maps sketched by participants (Hou *et al.*, 2021). Subsequently, planners facilitated discussions on the topics of 'living' and 'ecology'. Furthermore, four guests were invited to provide insights into various aspects: the community's history, traditional water management practices, Nature-based Solutions (NbS) for climate adaptation, and the historical evolution and prospects of canal systems in Beijing. The workshop



**Figure 3.** Urban renewal districts of Beijing and the locations of the two case areas.

concluded by gathering insights on urban renewal in the area and feedback from participants regarding the entire activity.

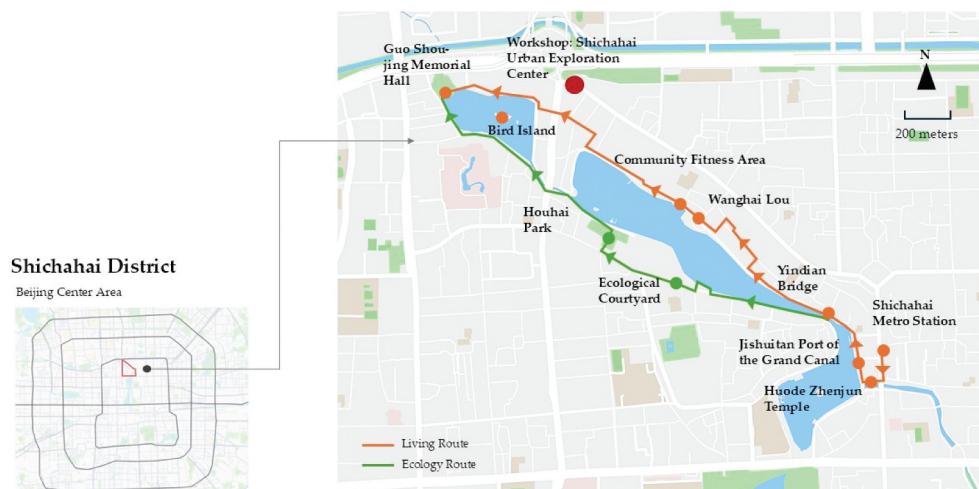
### 2.3.2. Guomao

Guomao is located at the heart of Beijing's central business district, at the intersection of Jianguomen Outer Street and the Third Ring Road. As a pivotal area in Beijing's urban renewal initiative, its revitalization is anticipated to drive economic vitality in the region (Beijing Daily, 2024). As outlined in *Beijing Commercial Service Industry Development Plan during the 14th Five-Year Plan Period* (Beijing Municipal Commerce Bureau, 2021), Guomao stands as one of the commercial districts aspiring to set trends and lead the international consumer wave by introducing flagship and concept stores of high-end brands. Additionally, Guomao is included in the planned central urban consumption cluster, which integrates fashion, art, social activities, and retail, thereby enhancing

**Table 1.** Summary of the design of two cases.

Case		Shichahai	Guomao
Spatial features		Historic, residential, ecological, tourism	
Preparation	Participants recruiting	18	23
Grouping		2 lines for walking (north and south) 2 topics for the workshop (living and ecology)	2 lines for walking (north and south) 2 topics for the workshop (conflict and synergy)
Walk		Around 1.5 hours along the lakeside of Shichahai.	Around 1.5 hours in Guomao area.
Workshop	Synthesizing findings	Participants share their findings along the way by mapping, including social activities, waterfront plants, animals, and memorable waterfront landscapes.	With participants' respective role tasks, they share their observations and experiences along the way by mapping.
	Lectures	1. 'A Resident's Memories About Water' (by a local resident); 2. 'Urban Solutions Based on Water Ecology' (by an ecologist); 3. 'Micro-Boutique Museums Integrated into the Community Space' (by a museum operator); 4. 'The Possibility of Commuting by Boat' (by an urban planner).	1. 'Meet in Youth-Friendly Communities'; 2. 'Planning and transformation of CBD in Beijing'; 3. 'Observations on cultural revitalization in Beijing'. (all by urban planners)
Insights and feedback		Participants propose their ideal waterfront landscape designs and interventions for social spaces based on observations.	Participants from both lines are reorganized into two new groups: the 'synergy' group and the 'conflict' group to discuss the insights.

international competitiveness and influence (Beijing Municipal Commerce Bureau, 2021). The government has made significant place-based investments to enhance facilities and improve access to the central business district (CBD), gentrifying the communities around Guomao and attracting wealthier and more educated groups (Zheng & Kahn, 2013). This has further increased housing and consumer prices in the area, leading to serious social

**Figure 4.** Walk routes of Shichahai case.

segregation from the original communities. Guomao needs a balanced distribution of spatial capital to alleviate the community segregation caused by gentrification.

The case study of Guomao (Table 1) was carried out on 8 July 2023. The participant recruitment process ensured a balance between local residents and non-local residents, encompassing diverse occupations and age groups, with the majority being under 40, reflecting the spatial characteristics of the site. Similar to Shichahai, for the walk in Guomao participants were divided into two groups (north line and south line) (Figure 5). The primary themes for Guomao were 'commercial' and 'youth-friendly' (State Council of China, 2022). Moreover, unlike in the previous case, each participant was given a role before departure. Before synthesizing findings from the walk, three urban planning professionals were invited to introduce topics such as youth-friendly community design, CBD planning and design in Beijing, and post-COVID cultural revitalization initiatives. Subsequently, all participants engaged in discussions by mapping the 'conflicts' and 'synergies' inherent in existing urban spaces concerning the realization of youth-friendly commercial areas.

### 3. Results

#### 3.1. Process

During the tour of both the north and south lines at Shichahai, social activities, and ecological elements were prominently featured (see Table 2). Participants encountered not only the vibrant cultural and tourism spaces but also the lively activities of residents around the lake. The southern route's ecological group focused on observing the relationship between people and nature in the Shichahai area, while the northern ecological group explored the design and functionalities of NbS in waterfront spaces.

The exploratory walk of Guomao began at the CBD Historical and Cultural Park. The north line passed 'Golden Sunset' (Jin Tai Xi Zhao, a historical landscape node), buildings of

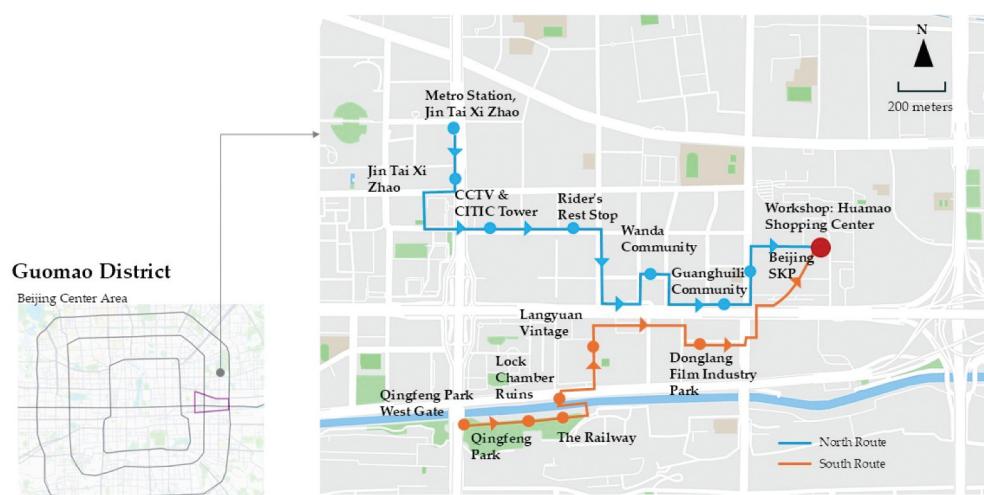


Figure 5. Walk routes of Guomao case.

**Table 2.** Some observations captured along the walk in Shichahai (all photos by participants).

Group	Photos	Explanation
North	   	<i>Beijing Municipal Park Regulations</i> prohibit swimming, fishing and other activities in non-designated areas.  The public space is used by residents for the purposes of physical exercise and musical performance.
South	 	Urban camping, outdoor chess playing, and other activities are captured in the public spaces.  Ducks are swimming leisurely in the lake beside the boat.
		The willow trees on either side of the route sway gently in the prevailing winds.  Peppers, pumpkins and other fruits and vegetables planted by the residents of Hutong are growing well.

China Central Television (CCTV) Headquarters and CITIC Tower, Rider's Rest Stop (a resting spot for nearby delivery riders, couriers, and sanitation workers), Wanda Community, Guanghuili Community and its surroundings (see [Table 3](#)). On the other hand, participants in the south line mainly visited artistic and cultural spaces, including a pocket park of 400 m<sup>2</sup>, the railway, Qingfeng Park, Langyuan Vintage (a cultural and creative hub renovated from an industrial heritage), Donglang Film Industry Park, Beijing SKP (a luxury department store) (see [Table 3](#)).

### 3.2. Outcomes

Through collective mapping and discussions on 'living' and 'ecology' of Shichahai ([Figure 6 \(a\)](#)), findings on residents' habitus can be synthesized, and implications for future



**Table 3.** Some observations captured along the walk in Guomao (all photos by participants).

Group	Photos	Explanation
North		CBD Historical and Cultural Park is located on the west side of Jintai Xizhao Metro Station. In the urban environment of high-rise buildings, people enjoy the natural atmosphere and scenery.
		The streets on both sides of the Guangmingli community are filled with many popular shops and small restaurants, providing an affordable consumption environment for low – and middle-income people in the gentrified Guomao district.
		Two landmarks of Beijing, CCTV building and CITIC Tower.
South		Jingdian No.1 Park originally was an empty lot on a street corner, which is now a place for entertainment after renovation.
		A defunct railroad line, now a popular photo-shooting hotspot, is hidden within the CBD.
		SKP is an experimental immersive department store.

interventions can be concluded. For example, many prohibition signs were spotted on the shore: no littering, no swimming, no climbing, no skating, etc. However, the signs did not stop local residents from swimming and performing other ‘prohibited’ activities, which indicates further considerations on which behaviors should be prohibited and how to meet residents’ needs.

The participants in the Guomao case marked locations on the map that they considered to be youth-friendly or non-friendly to the youth, providing evaluations and suggestions in accompanying notes (Figure 6(b)). Following the discussions, members of each group shared their perceptions of the city based on their experiences walking the streets or assuming the roles of different characters. During the sharing session, participants also observed that the same location could be perceived differently depending on



**Figure 6.** Mapping in co-production workshop in Shichahai (a) and Guomao (b).

one's role. For instance, the walking paths around Qingfeng Park were found to be unfriendly for individuals with mobility issues but highly suitable for sports enthusiasts.

Detailed insights on the status quo of the two communities and implications for future strategies are summarized in Table 4.

The observations collected from the participants reflect the disparity in spatial capital in these two cases, as illustrated in Figure 7.

Various forms of spatial capital are distributed throughout Shichahai. A wide range of activities can be observed as residents engage in public spaces that were not originally designed for these purposes or where such activities are even forbidden. The middle-aged and the elderly play instruments on the stone steps and engage in physical exercise in the pavilion; A group of people swim in the lake even if it is forbidden by the regulations; People play chess and picnic on walkways; some sit on the lakeside to rest or socialize. These practices resemble social capital, which can be accumulated by providing residents with appropriate spaces and revised regulations. A diverse array of small businesses can be observed along the waterfront, vividly showcasing the area's vibrant economic capital, which is rooted in its spatial advantages. While Shichahai's natural landscapes are a valuable feature in the densely urbanized city center, there is room for improvement in the quality of its ecological habitats. It is essential to carefully manage the interaction between visitors and wildlife to ensure their well-being. Additionally, the traditional practice of releasing goldfish into the lake, rooted in Buddhist and Daoist beliefs and intended to accumulate good karma, may have unknown effects on the local biotope, which highlights tensions between cultural and ecological capital. These present opportunities to enhance the ecological capital of Shichahai while seeking a balance with other forms of capital.

Guomao exhibits a drastic spatial capital disparity between its northern and southern sections. The south, characterized by Qingfeng Park and the waterfront, caters to diverse leisure and social needs, while the 22 Courtyard Street Art District and Langyuan Vintage Park foster a vibrant cultural scene. Bottom-up initiatives have transformed under-utilized areas into pocket parks, enriching local social capital. In contrast, the north's development is more centralized, hindering community-led revitalization. The construction on the northern side of the barbecue market has affected its business and residents' well-being. Nevertheless, efforts are found to resist gentrification such as preserving

**Table 4.** Summary of the main outcomes from the two cases.

Case	Focus group	Observation and documentation of space practices and habitus	Analysis of primary form(s) of spatial capital	Strategies to mobilize spatial capital
Shichahai	Living	1. The signs list various prohibited activities, yet local residents are seen enjoying many of them.	The sports and social activities carried out by the middle-aged and elderly residents, which are forbidden by park regulations, resemble a suppressed potential of social capital.	Redesign what behavior should be prohibited and how to fulfill residents' needs by providing relevant facilities. In such a way, social capital can be enhanced.
		2. A variety of modified vehicles is observed: shopping carts transformed into makeshift wheelchairs, all sorts of elderly scooters, electric bikes repurposed as garbage collection vehicles, and so on.	The diverse everyday vehicles reveal how local groups creatively adapt to the space according to their mobility needs, which on one hand forms the local social capital while on the other hand reflects a lack of institutional support for better access to spatial capital.	Improve the traffic management and redesign parking infrastructure to support more inclusive and efficient mobility, thereby enabling both residents and tourists to better access and utilize the spatial capital in the area.
		3. People of different ages, genders, and backgrounds communicate in the open public spaces of Shichahai.	The open public spaces of Shichahai facilitate spontaneous social interactions, which indicates a high level of accessible social and cultural capital embedded in the spatial configuration.	Use urban design for maintaining and facilitating communications in public spaces, thereby enabling inclusive social engagement and the cultivation of community ties.
		4. Small businesses are captured along the waterfront, including fruit carts selling persimmons, portrait, sketching booths, mini antique markets, candy-coated hawthorn carts, and stalls run by woodcarvers selling small toys, etc.	Informal yet flexible commercial activities demonstrate a dynamic interplay between spatial and economic capital.	Enable various vendors to gather to sell their goods, snacks, and local delicacies, creating a lively, all-age-friendly, and culturally rich environment to increase the potential economic capital and social capital.
	Ecology	5. A child hesitates to approach the water, expressing fear while walking on the boardwalk by the lake.	The behavior of the vulnerable user reveals a gap in the perceived safety or accessibility of the space, indicating a potential limitation in the spatial capital.	Create progressive, gradually submerging lakefront boardwalks, intermittent tidal flats, and sloping shallow beaches, allowing people to approach the water more naturally. In this way, the ecological capital of the site can be activated and made accessible.
		6. There are too few trees on Bird Island, making it look barren, which birds and ducks 'won't appreciate'.	The site's ecological capital is limited.	Improve the landscape design of the island to enhance ecological capital.
		7. The distance between human and animals is too close, causing insecurity for the animals.	The proximity between human and animals might undermine the ecological capital of the site.	Keep a certain distance between people and animals, and observation decks and telescopes could be set up.

*(Continued)*

**Table 4.** (Continued).

Case	Focus group	Observation and documentation of space practices and habitus	Analysis of primary form(s) of spatial capital	Strategies to mobilize spatial capital
Guomao	Synergy	8. The ritual of goldfish releasing is captured.	The behavior has cultural significance but raises concerns about environmental impacts. It highlights tensions between cultural and ecological capital.	Further research is needed on whether releasing fish impacts the local ecosystem. Specific areas for ritual activities can be designated as buffer zones to balance the two forms of capital.
		1. The Rider's Rest Stop ensembles care for manual workers, but the interior is too formal.	Significant economic capital but lack of social capital.	Improve the interior design and facilities to make users feel cozier, and also to enhance social capital of this area.
		2. The market is situated in an enclosed courtyard, currently undergoing construction on its northern side. Originally, the market aimed to provide a relaxed and enjoyable dining experience for all, reminiscent of casual street-side dining. However, the ongoing construction has resulted in poor air quality and noise disturbances.	The environment has the potential to accumulate more social capital and economic capital.	Improve accessibility to the market and adjust its operating hours to avoid construction times. Enhance the attractiveness of the market in this way and transform social capital into economic capital.
		3. Employees working near the southern boundary have the opportunity to walk in Qingfeng Park or along the Tonghui River, allowing them to relax, enjoy fresh air, and temporarily escape office life.	Abundant ecological capital attracts employees gathering in Qingfeng Park, which can potentially bring more social capital.	Use urban design to create more spaces in the park and along the river to maintain ecological capital while enhancing social capital.
		4. Many places have implemented the design methods and principles of child-friendly communities, such as the transformation of small spaces in the Baiziwan area, turning this area into a 'community living room,' which looks harmonious.	The sites have strong social capital as child-friendly design leads to more social activities with children and parents gathering there.	Upscale the practice of child-friendly design.
Conflict		5. Some sidewalks are discontinuous, and there are obstacles on the blind paths. The youth-friendly neighborhood should serve as an open social space, providing a safe and inclusive environment for everyone, considering the rights of people with disabilities as well.	Although the area has rich cultural capital, access to the spatial capital is limited to people with disabilities.	Improve the infrastructure for the handicapped to enhance social capital and ensure spatial justice.

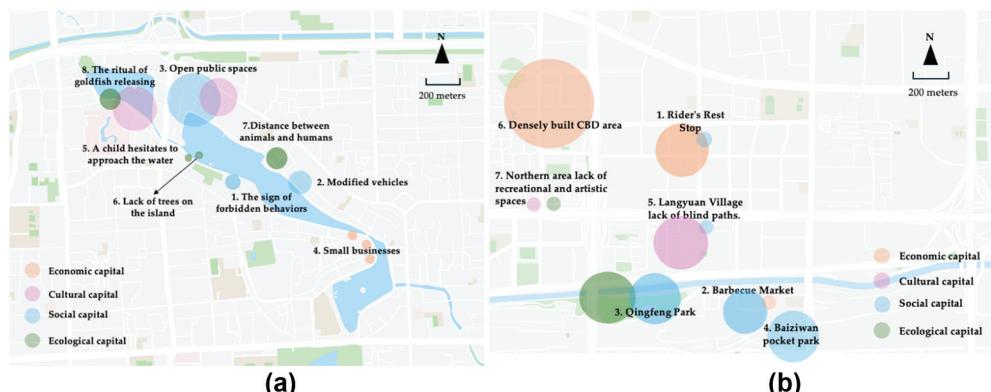
*(Continued)*

**Table 4.** (Continued).

Case	Focus group	Observation and documentation of space practices and habitus	Analysis of primary form(s) of spatial capital	Strategies to mobilize spatial capital
	6. The densely packed building in CBD causes feelings of oppression and constriction.	Economic capital is particularly prominent in the Guomao commercial zone.	Use nature-based urban design and landscaping to mitigate the impacts of grey infrastructure and bring more psychological benefits to enhance social capital and ecological capital.	
	7. The recreational and artistic spaces that appeal to young people are rarely found along the northern route.	Lack of cultural capital and ecological capital.		

affordable stores, providing rider rest stops, developing child-friendly communities, mitigating the impact on marginalized groups. The spatial inequality of Guomao underscores the need for balanced development strategies in its urban renewal process.

In light of the observed results, renewal strategies are proposed from the four dimensions of economic, cultural, social, and ecological capital. The economic capital of Shichahai can be enhanced through boosting economic opportunities for underrepresented groups, such as small business vendors. Shichahai also needs to strengthen its social and cultural capital by preserving and enabling residents' habitus. The ecological capital of Shichahai should be enhanced while seeking a balance with other forms of capital. As for Guomao, it is essential to balance the cultural capital of the north and south. An artistic ambiance can be fostered among the commuting residents in the northern area through the provision of state-of-the-art exhibition facilities and art venues. In terms of social capital, it is imperative to consider how space-use limitations and the habitus of people with disabilities and low-income groups influence their access to and engagement with space. This entails ensuring the walkability of blind sidewalks.



**Figure 7.** Spatial capital distribution in Shichahai (a) and Guomao (b). The circle size represents the significance of each form of capital, with numbering corresponding to those in [Tables 4](#).

Furthermore, both the south and north areas must prioritize the preservation and enhancement of the ecological capital in waterfronts and parks.

### 3.3. Feedback

Participant A reflected on their key takeaways from the event: '*I signed up for my mom, and she had a great time participating in the event. She noticed some details she hadn't paid attention to when strolling through the hutongs before and had a very different experience.*' Walking sessions also provide planners with an opportunity to '*observe and think about the day-to-day experienced spaces ... and perform continuous data collection ...*' (Planner J). The lectures given in the workshop are believed to fill the information gap during the walk session, as well as to disseminate technical knowledge of urban planning: participant D mentioned: '*After the street walk, we had a lecture by a professional teacher who filled in the missed information from the southern route and shared some inconveniences we usually encounter in this area. Despite the criticisms about Beijing's planning, listening to the sharing gave us hope for our city's improvement*'; participant F, a high school student, said, '*The subsequent speeches and discussions also taught me a lot.*' Planner D claimed '*In practical planning work, I often encounter difficulties in the downward transmission of urban planning, mainly because planning concepts are not adequately communicated to the public. However, such activities involve two-way interactions, not only promoting the dissemination of planning concepts but also fostering consensus on future urban development.*'

The role-playing also helps participants observe the sites from different perspectives. During the walk, attention is drawn to the marginalized and vulnerable groups, such as children's fear of water, the well-being of manual workers, the requirements of the handicapped, and the potential for creating child-friendly communities. Moreover, discussions on the relationship between humans and animals reflect considerations for environmental justice in the context of the Shichahai case. Planner Y also confirmed the benefit of such multi-disciplinary participation in discovering new perspectives to understand the city: '*... city walks with people from various age groups and different professional backgrounds provide fresh perspectives on urban spaces. This experience fosters empathy and encourages the incorporation of diverse viewpoints in future urban design and management*'.

Comments from participants B and C indicate their critical thinking on the prohibition of certain activities and the direction of future urban studies, respectively: '*Everything written on the "prohibited" signs has corresponding practices. Since affinity to water is inherent to humans, why not change our approach to management and guidance?*' (B); '*The pandemic has led to the diversified use of urban public spaces. The alley spaces around Shichahai can be seen as vivid examples of the diversified use of traditional Beijing spaces. Exploring the complex interactions among people, behaviors, activities, and public spaces can be an interesting direction for future urban studies, to see if there are hidden potential in the spaces surrounding our daily lives*' (C). Planners also benefit from such a learning process by exploratory walking and co-creating with the participants. Planner Z reflected on both problem identification and planning education, stating that the activity '*enables direct dialogue and observation with people, prompting reflection on issues that may have been overlooked in textbooks and drawings ... [and] allows planners to reappreciate the vitality of cities and how people creatively use spaces*,

*serving as supplementary education for planners.*' Planner J reflected on the improvement of future work in urban planning after experiencing the sessions: '*[I would] pay more attention to preliminary research and field surveys in urban planning, willing to collect the needs of people from different occasions and social backgrounds, find the possibility of the greatest common divisor, and achieve spatial diversity as much as possible*'. Good interpersonal relationships are also fostered during the walk (Bazuń & Kwiatkowski, 2022), as stated by participants A and E: '*It was inspiring for her to interact with a group of young friends. It feels great to be accepted by the young social force.*' (A); '*I'm very happy and honored to participate in this event ... Getting to know fellow strangers and becoming friends made me realize how outstanding and lovely everyone is*' (E).

Moreover, the role of planners, as mediators and beyond, is demonstrated in the case studies. Planner D said, '*My role in the activity was more like a platform builder ... I established a mechanism for communication and positive feedback. This included recruiting volunteers to develop activity themes based on the characteristics of the area and the season, selecting activity routes, and determining specific activity details while integrating some planning cases and planning concepts. I also gathered participants for the activity, using walking tours and public participation games to convey planning ideas and encourage them to actively express their understanding of the city.*' Planner Y outlined the dual roles during the process: **event designer** for '*preliminary site visits, coordination, and guest invitations*' and **guide** for '*assisting the walk and workshop sessions*'. Planner Z shared similar roles of both '*designing the activity with professional skill*' and '*guiding participants during the walk with professional perspectives*'.

## 4. Discussion

### 4.1. Key findings

The planner-mediated exploratory walk, proposed as a participatory approach, is effectively applied in two case studies in Beijing. The two cases exemplify two types of urban renewal with distinct spatial capitals: one in a historic area featuring natural landscapes and lively social activities, and the other in a modern CBD area characterized by fewer blue-green spaces but hosting various creative hubs.

Walking, as a diverging 'Discover' process, can significantly stimulate the observation of spatial practice and understanding capital (im)balance, which is demonstrated in both cases. Participants identified previously unnoticed details and observed unexpected social activities, which aligns with the previous research that exploratory walks can contribute to deeper and more continuous place-based insights amid uncertainties along the journey (Kwiatkowski, 2016; O'Neill & Roberts, 2019). Additionally, the walk sessions expose opportunities for collective learning and reflective learning (Bazuń & Kwiatkowski, 2022; Moon, 2013; Piga, 2021). The study extends existing exploratory walk practices (Bazuń & Kwiatkowski, 2020, 2022), by incorporating follow-up workshops for knowledge exchange and co-production for future interventions. Such a consecutive setting facilitates the exchange of views among participants from diverse backgrounds, increasing the level of participation. The case studies demonstrate the efficacy of

the responsible planner's mediation role in the participatory process, who can facilitate the observation, documentation, analysis, and further mobilization of spatial capital in pursuit of spatial justice in community renewal.

Exploratory walks facilitate to unfold the habitus of and the capital form distribution (economic, social, cultural, ecological) behind the spatial practice of a community's everyday life. The participatory planning process also complements Bourdieu's relative silence on the agency of the less privileged. Therefore, integrating spatial capital with participatory planning can overcome the 'misrecognition' and stimulate the agency of both planning professionals and various stakeholders to co-create urban spaces after understanding the underlying capital imbalance. Such integration helps bridge the gap between rational planning ideals and the practical, everyday experiences and needs of urban communities, thus leading to more just urban renewal.

#### 4.2. *Reflections*

Several challenges emerged during the case studies. Firstly, the representativeness of the recruited participants is questioned, as noted by Planner M: '*Those who participate in such activities are often already interested in urban planning or have a high level of community involvement, so they may not fully represent the entire community*'. Secondly, further exploration is required to facilitate the 'code-switching' process between 'experts' and 'non-experts'. Both Planners Z and Y mentioned the importance of introducing '*educational entertainment*' into the sessions to better communicate with and engage non-professional participants. Thirdly, the effectiveness of integrating insights from co-production workshops into official urban plans remains to be assessed, with Planner M expressing concerns that '*due to the limited influence of these activities, the insights generated during them may lead to some community improvements; but without integration into larger planning decision-making processes, they may struggle to have a significant impact at the city level*'.

Moreover, this research conceptualizes spatial capital without considering social interactions among agents or the broader spatial scale in which communities are located. Future studies could further operationalize the two types of spatial dimensions of capitals outlined by Ripoll: the various ways physical space is appropriated underpinning all forms of capital and the spatial (particularly scalar) dimension of social fields, where capital is valued, mobilized, produced, and accumulated (Ripoll, 2024).

Nevertheless, the two case studies serve as initial applications of the planner-mediated exploratory walk method, highlighting the potential for further data collection and quantitative analysis in future implementations. Sustainable financial support for the method is also crucial for its broader application and potential upscaling. Furthermore, 'CityWalk' in China, a variation of citizen-led walking and conversations known as Jane's Walk, has been rapidly expanding (Jiang & Zhang, 2024). This presents an opportunity for responsible planners to integrate participatory planning with grassroots city walk initiatives, facilitating citizen science efforts aimed at addressing various urban challenges.

## 5. Conclusions

Our paper provides an operationalized participatory planning framework through exploratory walks and co-production workshops mediated by planners, which is tested for two cases in Beijing. Through the perspectives of spatial capital, derived from economic, social, cultural, and ecological capital, the habitus and capital forms are studied to deliver more equitable renewal planning.

We tested this for two urban renewal cases in Beijing, each with distinct forms of spatial capital: one in a historic area in the city center and the other in a modern commercial district. In the Shichahai case, collective mapping and discussions on 'living' and 'ecology' allowed for the synthesis of findings on existing spaces, forms of spatial capitals and the formulation of implications for future interventions. In the Guomao case, participants identified and mapped the synergies and conflicts in promoting youth-friendly development within commercial areas, providing evaluations and suggestions in written notes. During discussions, group members shared their perceptions of the spaces based on their experiences walking the streets or assuming the roles of different characters. Both case studies examined the empirical observation of spatial practices and habitus and mapped how various forms of spatial capital (economic, social, cultural, and ecological) are distributed. The imbalance of these capitals revealed the embedded spatial disparities and exposed opportunities for future interventions. This process empowers participants to collaboratively develop strategies with planners that mobilize spatial capital to address spatial injustice.

The benefits of our approach are (1) to stimulate observation of spatial practice and understanding of the underlying habitus and capital (im)balance; (2) to facilitate the exchange of views from a diverse range of stakeholders, including marginalized and underrepresented groups; (3) to increase the level of participation, stimulate the agency, and expose opportunities for collective learning, reflective learning, co-creating future spatial interventions for more just urban renewal, etc.; (4) to overcome the 'misrecognition' by integrating spatial capital with participatory planning and facilitate long-term policymaking. We found that mobilizing spatial capital can strategically leverage economic, cultural, social, and ecological resources to transform and improve urban spaces that balance economic growth, cultural preservation, social well-being, and ecological benefits. This study provides crystallized examples of planners as mediators in participatory planning of community renewal. Furthermore, this article serves as a stepping stone for broader applications and future research on integrating participatory planning with grassroots city walk initiatives in China and beyond.

## Acknowledgments

We thank the NGO Citipedia for supporting the events and all participants for their involvement in the two case studies. We are also grateful to the three anonymous reviewers for their constructive feedback. We would like to acknowledge Prof. Francis F. Steen (University of California, Los Angeles) for discussions on agency, Prof. Yanhong Kong (China Academy of Urban Planning and Design) for her review comments, Jingyi Liang (Aalborg University) for her suggestions on visualizing the conceptual framework, and Nathaniel R. Nagel for his input on spatial justice.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## ORCID

Shiyang Chen  <http://orcid.org/0009-0005-2609-0096>  
 Harry den Hartog  <http://orcid.org/0000-0003-1033-5739>  
 Wolfgang Rauch  <http://orcid.org/0000-0002-6462-2832>  
 Manfred Kleidorfer  <http://orcid.org/0000-0002-4001-1711>

## References

Akbar, A., Flacke, J., Martinez, J., & van Maarseveen, M. F. A. M. (2020) Participatory planning practice in rural Indonesia: A sustainable development goals-based evaluation, *Community Development*, 513, pp. 243–260. doi:10.1080/15575330.2020.1765822.

Arnstein, S. R. (1969) A ladder of citizen participation, *Journal of the American Planning Association*, 354, pp. 216–224. doi:10.1080/01944366908977225.

Back, L. (2017) Marchers and steppers: Memory, city life and walking, in: C. Bates & A. Rhys-Taylor (Eds) *Walking Through Social Research*, pp. 21–37 (New York: Routledge).

Bazuń, D., & Kwiatkowski, M. (2020) Exploratory walk as a method of studying urban tourism space: A case of Charles Bridge in Prague, *Journal of Spatial and Organizational Dynamics*, 82, pp. 92–106

Bazuń, D., & Kwiatkowski, M. (2022) Exploratory walk and local cohesion— The concept and application, *Mobilities*, 174, pp. 565–584. doi:10.1080/17450101.2021.1999775.

Beijing Municipal Commerce Bureau (2021, August 12) The Beijing municipal development plan for the 14th five-year period on the development of the commercial service sector. [https://gzw.beijing.gov.cn/xxfb/ghjh/202204/t20220429\\_2696971.html](https://gzw.beijing.gov.cn/xxfb/ghjh/202204/t20220429_2696971.html)

Beijing Municipal Commerce Bureau, (2021) Notice on Issuing the “Beijing Commercial Service Industry Development Plan during the 14th Five-year Plan Period”. [https://sw.beijing.gov.cn/zwxx/fzgh/ndgh/202109/t20210902\\_2482508.html](https://sw.beijing.gov.cn/zwxx/fzgh/ndgh/202109/t20210902_2482508.html)

Beijing Daily (2022) Safeguarding Shichahai, June 16. [https://www.beijing.gov.cn/renwen/jrbj/202206/t20220616\\_2742456.html](https://www.beijing.gov.cn/renwen/jrbj/202206/t20220616_2742456.html)

Beijing Daily (2024) Chaoyang Implements Five Major Urban Renewal Actions: Guomao, Sanlitun, and Tuanjiehu to Create Boutique Districts, March 8. [https://www.beijing.gov.cn/ywdt/yaowen/202403/t20240308\\_3583437.html](https://www.beijing.gov.cn/ywdt/yaowen/202403/t20240308_3583437.html)

Beijing Municipal People’s Government, (2022) Notice of the Beijing Municipal People’s Government on Issuing the “Beijing Urban Renewal Sector Plan (Beijing Urban Renewal Plan during the 14th Five-year Plan Period)”. [https://www.beijing.gov.cn/zhengce/zhengcefagui/202205/t20220518\\_2715630.html](https://www.beijing.gov.cn/zhengce/zhengcefagui/202205/t20220518_2715630.html)

BMCPNR, (2024) Measures for the Implementation of the Responsible Planner System in Beijing, BMCPNR[2024] No. 56. <https://www.beijing.gov.cn/zhengce/zhengcefagui/202403/W020240315556498042166.pdf>

Bourdieu, P. (1986) The forms of capital, in: J. G. Richardson (Ed) *Handbook of Theory and Research for the Sociology of Education*, pp. 241–258 (New York: Greenwood Press).

Callaghan, E. G., & Colton, J. (2008) Building sustainable & resilient communities: A balancing of community capital, *Environment, Development and Sustainability*, 106, pp. 931–942. doi:10.1007/s10668-007-9093-4.

Centner, R. (2008) Places of privileged consumption practices: Spatial capital, the dot-com habitus, and San Francisco’s internet boom, *City & Community*, 73, pp. 193–223. doi:10.1111/j.1540-6040.2008.00258.x.

Champlin, C., Sirenko, M., & Comes, T. (2023) Measuring social resilience in cities: An exploratory spatio-temporal analysis of activity routines in urban spaces during covid-19, *Cities*, 135, p. 135. doi:10.1016/j.cities.2023.104220.

Costanza, R., d'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'neill, R. V., & Paruelo, J. (1997) The value of the world's ecosystem services and natural capital, *Nature*, 3876630, pp. 253–260. doi:10.1038/387253a0.

Currie, M. A., & Sorensen, J. (2019) Repackaged “urban renewal”: Issues of spatial equity and environmental justice in new construction, suburban neighborhoods, and urban islands of infill, *Journal of Urban Affairs*, 414, pp. 464–485. doi:10.1080/07352166.2018.1474081.

the Design Council. (2024). *Framework for Innovation*. <https://www.designcouncil.org.uk/our-resources/framework-for-innovation/>

Duțu, A., Diaconu, M., & Nisar, T. (2017) Community participation for an open public administration: Empirical measurements and conceptual framework design, *Cogent Business and Management*, 41, pp. 1287980. doi:10.1080/23311975.2017.1287980.

European Environment Agency. (2023). *Delivering justice in sustainability transitions*. doi:10.2800/228718.

Evans, J., & Jones, P. (2011) The walking interview: Methodology, mobility and place, *Applied Geography*, 312, pp. 849–858. doi:10.1016/j.apgeog.2010.09.005.

Fainstein, S. S. (2000) New directions in planning theory, *Urban Affairs Review*, 354, pp. 451–478. doi:10.1177/107808740003500401.

Feruglio, F., & Rifai, A. (2017) *Participatory budgeting in Indonesia: Past, present and future, Making All Voices Count Practice Paper* (Brighton: The Institute of Development Studies and Partner Organisations). <https://hdl.handle.net/20.500.12413/12733>

Forester, J. (1982) Planning in the face of power, *Journal of the American Planning Association*, 481, pp. 67–80. doi:10.1080/01944368208976167.

Forester, J. (2006) Making participation work when interests conflict: Moving from facilitating dialogue and moderating debate to mediating negotiations, *Journal of the American Planning Association*, 724, pp. 447–456. doi:10.1080/01944360608976765.

Fung, A. (2015) Putting the public back into governance: The challenges of citizen participation and its future, *Public Administration Review*, 754, pp. 513–522. doi:10.1111/puar.12361.

Habermas, J. (1984) *The Theory of Communicative Action: Jürgen Habermas*, trans. by Thomas McCarthy (Boston: Beacon Press).

Harvey, D. (1992) Social justice, Postmodernism and the city, *International Journal of Urban and Regional Research*, 164, pp. 588–601. doi:10.1111/j.1468-2427.1992.tb00198.x.

Harvey, D. (2015) The right to the city, in: R. T. LeGates & F. Stout (Eds) *The City Reader*, pp. 314–322 (London: Routledge).

Healey, P. (1999) Institutional analysis, communicative planning, and shaping places, *Journal of Planning Education and Research*, 192, pp. 111–121. doi:10.1177/0739456X9901900201.

Horsch, B., & Ouvrard, P. (2023). Learning from spatial capital in architectural education tools and perspectives: The case of the Nantes school of architecture, France. *Educating the Cosmopolitan Architect: ACSA/EAAE Teachers Conference*, June 2023, Reykjavík.

Hou, Y., Qu, Y., Zhao, Z., Shen, J., & Wen, Y. (2021) Residents' spatial image perception of urban green space through cognitive mapping: The case of Beijing, China, *Forests*, 1212, p. 1614 doi:10.3390/f12121614.

Hribernik, K. A., Ghrairi, Z., Thoben, K.-D., & Hans, C. (2011). Co-creating the Internet of Things-First experiences in the participatory design of Intelligent Products with Arduino. International Conference on Concurrent Enterprising (IEEE), Aachen. <https://www.researchgate.net/publication/252050606>

Jiang, J., & Zhang, L. (2024) Citywalk in China: Analysis of regional and route characteristics, *Journal of Asian Architecture and Building Engineering*, p. 1–12. doi:10.1080/13467581.2024.2397106.

Khatibi, F. S., Dedekorkut-Howes, A., Howes, M., & Torabi, E. (2021) Can public awareness, knowledge and engagement improve climate change adaptation policies?, *Discover Sustainability*, 21, doi:10.1007/s43621-021-00024-z.

King, A. C. & Woodroffe, J. (2019) Walking Interviews, in: P. Liamputong (Ed) *Handbook of Research Methods in Health and Social Sciences*, Vol. 1, pp. 1269–1290 (Singapore: Springer).

Kinney, P. (2017) Walking interviews, *Social Research Update*, Summer 2017(67), 1–4.

KÍRMÍZÍ, M. (2019) Building and dwelling: Ethics for the city, *Journal of Urban Studies*, 10(28), pp. 1264–1267. doi:10.31198/idealkent.671693.

Kitzinger, J. (1995) Qualitative research: Introducing focus groups, *BMJ*, 3117000, pp. 299–302. doi:10.1136/bmj.311.7000.299.

Kochanowska, M., & Gagliardi, W. R. (2022) The double diamond model: In pursuit of simplicity and flexibility, in: D. Raposo, J. Neves & J. Silva (Eds) *Perspectives on Design II: Research, Education and Practice*, pp. 19–32 (Switzerland: Springer International Publishing).

Kunzmann, K. R. (1998) Planning for spatial equity in Europe, *International Planning Studies*, 31, pp. 101–120. doi:10.1080/13563479808721701.

Kweit, M. G., & Kweit, R. W. (1984) The politics of policy analysis: The role of citizen participation in analytic decisionmaking, *Review of Policy Research*, 32, pp. 234–245. doi:10.1111/j.1541-1338.1984.tb00117.x.

Kwiatkowski, M. (2016) Exploratory walks as an example of networking research, *Rocznik Lubuski*, 422a, pp. 137–148

Lévy, J. (2014) Inhabiting, in: R. Lee, N. Castree, R. Kitchin, V. Lawson, A. Paasi, C. Philo, S. Radcliffe, S. M. Roberts & C. W. J. Withers (Eds) *The SAGE Handbook of Human Geography: Two Volume Set*, pp. 45–68 (London: SAGE Publications Ltd).

López Moreno, E., & Orvañanos, R. (2015) , *Spatial capital of Saudi Arabian cities: Street connectivity study for the City Prosperity Initiative* (Nairobi: UN-Habitat). [https://unhabitat.org/sites/default/files/documents/2019-05/spatial\\_capital\\_for\\_saudi\\_arabian\\_cities.pdf](https://unhabitat.org/sites/default/files/documents/2019-05/spatial_capital_for_saudi_arabian_cities.pdf),

Marcus, L. (2007). Spatial capital and how to measure it: An outline of an analytical theory of the social performativity of urban form. *Sixth International Space Syntax Symposium*, İstanbul, 1–5.

Missemer, A. (2018) Natural capital as an economic concept, history and contemporary issues, *Ecological Economics*, 143, pp. 90–96. doi:10.1016/j.ecolecon.2017.07.011.

Moon, J. A. (2013) *A Handbook of Reflective and Experiential Learning: Theory and Practice* (London: Routledge).

Morgan, D. L. (1996) Focus groups, *Annual Review of Sociology*, 221, pp. 129–152. doi:10.1146/annurev.soc.22.1.129.

Mosselson, A. (2020) Habitus, spatial capital and making place: Housing developers and the spatial praxis of Johannesburg's inner-city regeneration, *Environment and Planning A: Economy and Space*, 522, pp. 277–296. doi:10.1177/0308518X19830970.

O'Neill, M., & Roberts, B. (2019) *Walking Methods: Research on the Move* (London: Routledge).

Piga, B. (2021). *Experiential Walks for Urban Design*. <https://link.springer.com/10.1007/978-3-030-76694-8>

Ramos, É. (2024) The contribution of Pierre Bourdieu's thought to the socio-spatial perspective in geography: Space, spatial practices, and spatial capital, *GEOUSP*, 282, pp. e213809. doi:10.11606/issn.2179-0892.geousp.2024.213809.

Rérat, P. (2018) Spatial capital and planetary gentrification: residential location, mobility and social inequalities, in: L. Lees & M. Phillips (Eds) *Handbook of Gentrification Studies* (Cheltenham & Northampton: Edward Elgar), pp. 103–118.

Ripoll, F. (2024) Overcoming the dualism between "society and space", with and beyond Bourdieu, *Progress in Human Geography*, 483, pp. 332–351. doi:10.1177/03091325231222561.

Rooksby, E. (2017) *Habitus: A Sense of Place*, 2nd ed. (United Kingdom: Routledge).

Sköldberg, K., & Alvesson, M. (2009) *Reflexive Methodology: New Vistas for Qualitative Research*, 2nd ed. (Los Angeles: Sage Publications).

Smith, R. W. (1973) A theoretical basis for participatory planning, *Policy Sciences*, 43, pp. 275–295. doi:10.1007/BF01435125.

Soja, E. W. (2010) *Seeking Spatial Justice*, Vol.16, 1st ed. (Minneapolis: University of Minnesota Press).

State Council of China. (2022, April 2). *China Will Launch a Pilot Project to Build a youth-Oriented City*. [https://www.gov.cn/xinwen/2022-04/02/content\\_5683296.htm](https://www.gov.cn/xinwen/2022-04/02/content_5683296.htm)

Stelzle, B., Jannack, A., & Noennig, J. R. (2017) Co-design and co-decision: Decision making on collaborative design platforms, *Procedia Computer Science*, 112, pp. 2435–2444. doi:[10.1016/j.procs.2017.08.095](https://doi.org/10.1016/j.procs.2017.08.095).

Suddaby, R., & Viale, T. (2011) Professionals and field-level change: Institutional work and the professional project, *Current Sociology*, 594, pp. 423–442. doi:[10.1177/0011392111402586](https://doi.org/10.1177/0011392111402586).

Tang, Y., & Zhang, L. (2023) From elite action to multi-actor governance: Institutional construction and practice progress of the responsible Planner System in Beijing, *Urban Planning International*, 38(2). doi:[10.19830/j.upi.2020.410](https://doi.org/10.19830/j.upi.2020.410).

Tayebi, A. (2013) Planning activism: Using social media to claim marginalized citizens' right to the city, *Cities*, 32, pp. 88–93. doi:[10.1016/j.cities.2013.03.011](https://doi.org/10.1016/j.cities.2013.03.011).

Thibaud, J.-P. (2001) Les parcours commentés, in: M. Grosjean & J.-P. Thibaud (Eds) *L'espace Urbain En Méthodes*, pp. 79–99 (Marseille: Éditions Parenthèses).

Till, J. (2005) The negotiation of hope, in: P. B. Jones, D. Petrescu, & J. Till (Eds) *Architecture and Participation*, 1st ed., pp. 23–41 (London: Routledge).

Till, J. (2009) *Architecture Depends*, Vol.55 (Cambridge, MA: MIT press).

Tomay, K., & Berger, V. (2024) Inclusion or exclusion? The spatial habitus of rural gentrifiers, *Social Inclusion*, 12, p. 12, doi:[10.17645/si.7787](https://doi.org/10.17645/si.7787).

UNESCO. (n.d.-a). The Central Axis of Beijing (including Beihai). (accessed 25 April 2024). Available at <https://whc.unesco.org/en/tentativelists/5802/>

UNESCO. (n.d.-b). The Grand Canal. Available at <https://whc.unesco.org/en/list/1443/> (accessed 25 April 2024)

United Nations. (2017). *New Urban Agenda*. <https://habitat3.org/wp-content/uploads/NUA-English.pdf>

Wang, B., Liu, Z., Shi, S., & Deng, Y. (2022) Reflections on the effectiveness, challenges and System construction of China's responsible Planner System, *Planners*, 3812, pp. 5–12

Wang, J., & Ma, J. (2019). Exploration and reflection on the practice mode of the responsible planner system in Beijing core area from the perspective of urban renewal. *IOP Conference Series: Materials Science and Engineering*, 592(1), p. 012131. doi:[10.1088/1757-899X/592/1/012131](https://doi.org/10.1088/1757-899X/592/1/012131).

Xu, H., Meng, M., Zhu, F., & Ding, Q. (2024) The role of local officials in promoting public participation during local urban planning processes: Evidence from Chinese cities, *Land Use Policy*, 141, pp. 107108. doi:[10.1016/j.landusepol.2024.107108](https://doi.org/10.1016/j.landusepol.2024.107108).

Zhang, J., Zhang, J., Yu, S., & Zhou, J. (2018) The sustainable development of street texture of historic and cultural districts—A case study in Shichahai district, Beijing, *Sustainability (Switzerland)*, 107, p. 2343 doi:[10.3390/su10072343](https://doi.org/10.3390/su10072343).

Zhang, L., Hooimeijer, P., Lin, Y., & Geertman, S. (2020) Roles and motivations of planning professionals who promote public participation in urban planning practice: Two case studies from Beijing, China, *Urban Affairs Review*, 564, pp. 1237–1262. doi:[10.1177/1078087419895116](https://doi.org/10.1177/1078087419895116).

Zhang, S., Mackee, J., Sing, M., & Tang, L. M. (2022) Mapping the knowledge Domain of affected local community participation research in megaproject-induced displacement, *Sustainability*, 1422, pp. 14745. doi:[10.3390/su142214745](https://doi.org/10.3390/su142214745).

Zhang, W., Zhang, X., & Wu, G. (2021) The network governance of urban renewal: A comparative analysis of two cities in China, *Land Use Policy*, 106. doi:[10.1016/j.landusepol.2021.105448](https://doi.org/10.1016/j.landusepol.2021.105448).

Zheng, S., & Kahn, M. E. (2013) Does government investment in local public goods spur gentrification? Evidence from Beijing, *Real Estate Economics*, 411, pp. 1–28. doi:[10.1111/j.1540-6229.2012.00339.x](https://doi.org/10.1111/j.1540-6229.2012.00339.x).

Zhu, L., Huang, Y., Xie, L., Wang, Z., & Zhang, Y. (2023) Dilemma and solution: A study on the System of responsible Planner from the perspective of New institutionalism, *Planners*, 393, pp. 51–56.