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Challenges in managing public spaces in work unit communities in China: A case study of Xiangshao village

Sheng Song [a,*], Krzysztof Nawratek [b], Fangjie Guo [c]

[a] School of Architecture, Changsha University of Science & Technology, Changsha, PR China
[b] School of Architecture, University of Sheffield, Sheffield, United Kingdom
[c] School of Computer Science and Cyber Engineering, Guangzhou University, Guangzhou, PR China

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ABSTRACT

Public space management has gained rising attention across the world in recent years. However, existing studies have mainly focused on Western countries. The research on public space management in China is scarce. This paper investigates the issues and challenges associated with managing public space and how stakeholders deal with challenges that affect the effectiveness of public space management in the Chinese context. This qualitative research is built on observations and interviews from a specific case, including three groups of stakeholders: the community, the property management company, and the residents. The research found three challenges of the current practice: the difficulty of accepting new policies, the influence of the governance structure, and the process dimensions of management. These challenges are intertwined together and hinder the effectiveness of day-to-day maintenance and long-term management. This paper proposes a benchmark that will contribute to the theoretical development of public space management and will be a valuable tool for similar research across different contexts. The research findings suggest that the coordination and cooperation between different stakeholders and the establishment of a holistic management approach offer the potential for an effective and future-proof public space and environment.

1. Introduction

The public space is an important element of the urban landscape, playing a vital role in the functioning of cities and the improvement of the quality of life of citizens. The design and use of public spaces have aroused much attention in the academic debate for a long history (Madanipour, 1999; Carmona, 2010; Song et al., 2023), whereas the management of public spaces is neglected in theory and practice (Carmona, 2019; Dempsey & Burton, 2012; Duivenvoorden et al., 2021). An investigation showed that about 1,000 publications concerned the topic of public space management by the end of 2019, among which merely 58 studied the challenges in this field (Duivenvoorden et al., 2021).

Tibbalds (2001: p.7) points out that "after-care" is integral to improving the environment in towns and cities. He appreciates the important role of public space management and argues that the lack of management may cause a decline in the quality of public spaces, often resulting in a littered, polluted and unsafe environment. Similarly, Loukaitou-Sideris (1996) considers that poor management

should take the blame for the deterioration of public spaces such as plazas, parks and public housing estates. In 2002, a survey in England revealed that users' perceptions of streets related to the management and maintenance of the space, rather than to the original design and construction (Carmona & De Magalhaes, 2006). A large number of evidence suggests that a step change is needed to increase awareness of public space management.

Banerjee (2001) argues that three factors – privatization, globalization and the communications revolution – have a major influence on the demand and supply of public spaces in the twenty-first century. The broad economic, societal and technological transformations have propelled changes in public spaces in many aspects such as space production, reproduction and management. The development of public space management is related to the evolution of urban regeneration as well, aiming to improve the quality of the space in this process and bring vitality to urban settings (De Magalhaes & Carmona, 2009). In the current era, many public spaces across different countries are formed through the contributions of a wide variety of actors and stakeholders, including local governments, public organizations and private enterprises (Banerjee, 2001; Madanipour, 2010). Public space management concerns not only the preservation of existing spaces but also the coordination of various uses and constant changes in the long-term use of spaces after the initial design.

An array of research examines public space management in multiple aspects regarding processes, principles, models and challenges, mostly in North America and European countries (O'Flynn, 2007; De Magalhaes & Carmona, 2009; Said & Temples, 2023). So far, public space management in the Global South remains less examined. However, voices in the comparative urbanism literature call for researchers to make the "comparative gesture" to carefully consider experiences from different cities in the world, and that new empirical research can "theorizing back" to existing theories and methods, which helps to better understand urban processes and generate theories (Ren & Luger, 2015; Robinson, 2011; Ward, 2010). Some scholars argue that although problems and challenges in managing public space are universal, the solutions are context-specific (Carmona & De Magalhaes, 2006; Duivenvoorden et al., 2021). It is, therefore, necessary to make the same observations about public space management in the under-investigated contexts to illustrate such concerns fully.

To echo this "comparative turn" (Robinson, 2011), this paper applies the comparative lens to explore how public space management in the work unit evolved during the social transition period in China. Scholars have argued that the Chinese urban transition possesses similar characteristics to Western patterns. Friedmann (2005) contends that China's urbanization is driven by internal forces while foreign capital plays an important but complementary role. Logan and Fainstein (2008) interpret Chinese cities' transformation through comparative studies resting on four theoretical frameworks: modernization, global dependency, the developmentalist state, and the market transitional process. Wu (2008) further recombines the elements in these four theoretical frameworks and proposes a hybrid theory to explain China's transition, combining Western theories and the Chinese historical, political, economic, and social contexts. Thus, to mimic Ren and Luger (2015), the Chinese city, considering its many "layers, surprises, diversities and paradoxes", can serve as a "good" case to critically reflect on wider theoretical analyses from contextual particularities.

This paper takes a qualitative approach to achieve a deep understanding of managing public space in current China. The aim is to offer a wider perspective that could help identify universal challenges or solutions in public space management by understanding what issues and challenges are associated with managing public space and how stakeholders deal with challenges that affect the effectiveness of public space management in the Chinese context. It sheds light on how international experiences of public space management are relevant to China; what the recent challenges are according to different stakeholders within the governance structure; and how public spaces are currently managed through the lens of a specific community.

This paper is divided into five thematic sections. In what follows, we first outline the debate on public space management, followed by depicting managing public space in the Chinese context. Next, we describe methods employed in this research with a brief description of the case study context. We then provide the key findings and discussion to illustrate the barriers and challenges that affect the use and functionality of the public space, and further propose the benchmarking of public space management. Finally, the conclusion is presented.

2. Literature review

2.1. Theoretical dimensions regarding the management of public space

Public space management is defined as "the set of processes and practices that attempt to ensure that public space can fulfill all its legitimate roles", while considering the interactions and effects of multiple functions that can be accepted by all the users (De Magalhaes & Carmona, 2009). It implies two principal components: a) the process of managing public space, and b) the actors and stakeholders involved in this process.

Much of the existing literature has explored public space in terms of physical attributes, use patterns and production of spaces. However, research on the procedural dimensions of how public spaces are shaped and managed after the design scheme has been completed remains insufficient. Zamanifard et al. (2018) point out that one possible reason is that public authorities took the most responsibility for the provision and management of public space in the past, as Webster (2007) comments that governments are viewed as the "rightful supplier" of urban public spaces in general. Since the end of the twentieth century, the private sector has engaged in shaping publicly accessible spaces and has substantially changed public space provision and maintenance. For example, a new paradigm of public administration called "new public management" (NPM) emerged in Australia and New Zealand to respond to the reforms of the bureaucratic paradigm of public administration three decades ago (O'Flynn, 2007). The NPM paradigm calls for a more market-oriented approach to management and argues for a break from "monopolistic forms of service provision" and the need for a wide variety of service providers (Stoker, 2006). Similarly, in New York City, businesses and civic organizations created "privately

owned public spaces" that remain accessible and useable for the general public and received extra floor space in turn (Melik & Krabben, 2016). Various stakeholders and forms of relationship between them bring complexity to the procedural aspects of public space management.

According to who is mainly in charge of the provision of management practice, public space management can be categorized into three models: state-centered model, market-oriented model and user-centered model (CABE Space, 2004: pp.32-39; Dansoh et al., 2020; De Magalhaes & Carmona, 2009). The latter two fall under the umbrella of devolution of responsibility for the provision and management of public space, transferring away from authorities towards other social agents (Santagati et al., 2020). The state-centered model depends on public sector agencies to arrange and deliver public services, with minimum involvement of external resources such as the voluntary sector and private enterprises. So far, it is the dominant management model among international practices. Its major features include a hierarchical structure from policymakers to service users and a clear separation between service and use. The main advantage of this model is it establishes a definite, clearly understood framework of ownership, public rights and responsibilities. As this model draws a clear line between service providers and users, an important issue is coordinating users' different intentions, demands and actions in the public space management process.

The market-oriented model transfers the management responsibilities from public sector agencies to private entities. This model is informed by principal-agent theory, with a fundamental idea that governments contract as principals with agents to complete tasks in the public sector (Lane, 2005, p. 38). The principal – normally a public sector agency – sets out the services, delivery standards, obligations and legal requirements. The agent – usually a private entity – delivers those services for profit. Thus, the contract is an essential part of this model, setting out "requirements, monitoring, reward and incentive systems" to establish a legitimate relationship between the principal and the agent (O'Flynn, 2007). This model has been widely established in America and European countries. For example, in the United Kingdom, public space services including street cleaning, graffiti removal and tree pruning are delivered through private contractors (De Magalhaes & Carmona, 2009).

The third model – the user-centered model – may be the least developed among the three. It transfers management responsibilities and services to user-based agencies, such as interest groups, associations of users and voluntary organizations. The fundamental difference between the market-oriented and the user-centered models is that agencies in the latter model are not structured for the purpose of profitability and competitiveness. On the contrary, they have a key motivation for the quality of the public space. These agencies achieve their goals by developing formal or informal horizontal networks with similar organizations and the public and private sectors (De Magalhaes & Carmona, 2009). This model can be viewed as a product of the transition of urban governance: the retreat of the state and a trend towards the co-production of public services. The latter refers to the mutual production of public services between the state and citizens, sharing one or more elements of the production process (Mitlin, 2008). Moreover, co-production has been recognized as an approach to improving the delivery of public services due to the benefits of citizen engagement (Ostrom, 1996; Cornips et al., 2023).

De Magalhaes and Carmona (2009) propose that public space management comprises four interrelated processes: regulation, maintenance, investment and coordination. Regulation determines how public spaces can be used, and establishes a framework for mediating conflicts between different uses and users. The formulation, criteria and implementation of regulation are vital for public space management. Regular maintenance ensures the physical components of public spaces such as infrastructure, equipment and facilities perform their functions well. The purpose of maintenance is to keep public spaces to be "useable, uncluttered, clean and safe". The above two processes require financial and material resources. Day-to-day maintenance routines and space re-development need support from revenue or investment. The quantity of resources devoted to the process greatly influences the effect of regular maintenance and regulatory measures. Regulation, maintenance and investment are highly likely to involve a wide range of stakeholders, including people and organizations. It is, therefore, essential to coordinate different motivations, standpoints and interests of stakeholders to ensure the agents engaged in the process "pull in the same direction". They further argue that the four components apply to the aforementioned three models, whether managerial tasks are undertaken by public sector agencies, by community organizations or interest groups, or by private sector entities.

Previous studies have provided empirical evidence of the above-mentioned analytical framework. Bengston et al. (2004) point out that local governments in the United States traditionally managed development through the planning and regulatory tools of comprehensive plans, zoning ordinances, and capital improvement programs. However, the increasing costs of urban sprawl drove local governments to adopt a wide range of policy instruments, including regulation and incentive-based approaches, to manage urban growth and to protect open space. The experience of the peri-urban area of Turin (Italy) shows that maintenance plays an important role in land use management regarding enhancing green infrastructure and promoting sustainable settlement planning (Gottero et al., 2021). At the same time, De Magalhaes and Carmona's (2009) framework applies to non-Western contexts. For instance, De (2021) studies two urban parks in India and identifies that maintenance of facilities and environment and coordination among all the stakeholders can help to improve the users' satisfaction level and bring physical and social benefits to urban dwellers. More recently, Alvarado Vazquez et al. (2024) investigated public space management in Mexico by adapting this framework. Their research expands this framework and adds "context" and "social participation" dimensions to understand this issue in the Mexican context.

2.2. Managing public space in the Chinese context

In the Chinese context, public space management closely relates to the market economy, the work unit system, and its transition to the community system (Wu, 2002). The work unit (*danwei*) system is a means of institutional arrangement from the planned economy period in China, combining political, economic and social functions (Chai, 2014). A typical work unit includes workplaces, residences and social facilities such as shops, clinics, nurseries, canteens and assembly halls within one or several walled compounds (Lu, 2006).

Due to its integration of essential urban functions in close proximity, the work unit can be viewed as a social-spatial unit to organize the urban population (Bjorklund, 1986; Bray, 2005). The common physical features of the work unit include: a) a walled enclosure with gates; b) a well-organized internal circulation; c) close proximity of workplace and residence; d) provision of a wide range of social facilities; and e) a rationalist style of architecture (Lu, 2006). A work unit usually consists of one or more residences, termed residential quarters (*xiaoqu*), and all residents share public spaces and public facilities (Jiang & Huang, 2022). Under the planned economy system, the state owns most of the social resources and distributes them to individuals via the work unit system.

There are also a small number of people outside the work units, mainly elderly women and disabled people, who are marginalized due to an inability to work. The state organizes these groups of people through the household registration (*hukou*) system run by residents' committees (*juweihui*). However, compared to work units, residents' committees had little influence on urban social life in the Socialist period (Hua, 2000).

With the development of the market economy in China, the community has gradually replaced the work unit and has become the basic unit of urban political, administrative and social organization (Bray, 2006). In terms of the urban governance structure, there are four levels of administrative division in contemporary China, namely provinces, cities, districts and sub-districts (also known as street offices). Communities are grassroots organizations under the leadership of sub-districts and assist the sub-districts' work (Shieh & Friedmann, 2008).

Shequ – the Chinese word for "community", first appeared in the discourse of sociology in the 1930s. However, it was banned in the 1950s and not widely used again in China until the 1980s (Bray, 2006). In 2000, the Ministry of Civil Affairs of the People's Republic of China (PRC) released the *Opinions on Promoting Urban Community Construction in China* (*guanyu zaiquanguo tuijin chengshishequjianshe deyijian*). This clarified the definition of "community" in contemporary China as an entity of social life formed by people living in a certain geographical area, composed of the jurisdictional area of a residents' committee.[1] This official document illustrates two characteristics of the community. First, from a spatial perspective, the community is the smallest territorial unit of social organization instead of an administrative area. Second, a residents' committee is a self-governing organization at the grassroots level in a city, and does not belong to the governmental administration system. Arguably, communities are cellular units of the social structure in contemporary China, connecting individuals and resident groups and converging top-down administrative forces and bottom-up self-governance (*zizhi*) (Fig. 1).

A director of the residents' committee, also referred to as the community director, is the leader of this grassroots organization and is in charge of the community. In practice, the government extends its leadership and control into residents' committees and the Communist Party of China (CPC) sets local branches in residents' committees as well (Zhang & Yan, 2014). Although residents' committees are not part of the state administrative structure, the directors of residents' committees implement government policies and are familiar with the demographics, history and issues of the community.

Built on Madanipour's (1999) theory, public spaces in the work unit refer to outdoor spaces that are not privately owned and shared by all residents, including internal streets, green spaces, small squares and playgrounds. Historically, public spaces in work units were managed by the logistics department (*houqinbumen*) of the work unit in the planned economy period. For example, the logistics department of a state-owned electric power company is in charge of the environment cleaning, landscaping, security, housing maintenance and renovation, and fire safety of the work unit (Shen, 2006).

Since the 1980s, due to the Reform and Opening policy and the commodity housing development, the work unit has no longer been the sole public service provider, and new models of public space management and new agencies have emerged. In 1981, the earliest property management company in China was established in Shenzhen, conforming with the principal-agent relationship. As Zhang (2021) points out, this first attempt at property management was made by drawing on the experience of Hong Kong, while the theoretical framework and practice of property management in Hong Kong are derived from the UK. In the following years, the property management industry in Shenzhen developed rapidly and once became the leader of this industry across the country. By the end of 2002, there were more than 20,000 property management enterprises in China, employing over 2.3 million people (Shen, 2004).

In 2002, the State Economic and Trade Commission, the Ministry of Finance, and the other four ministries of PRC put forward the *Opinions on Advancing the Separation of Social Functions Shouldered by State-owned Enterprises (guanyu jinyibutuijin guoyouqiyefenli banshehuizhineng gongzuodeyijian)* to separate the work unit from providing public service and welfare, which are viewed as the driving force behind dismantling the work unit and marketization of social service and welfare (Chai et al., 2007; Zhang, 2006). The document clearly states: to gradually separate the public welfare departments such as primary schools, middle schools, hospitals and logistics services from the entities of enterprises, so as to free enterprises from performing social functions.[2]

In 2003, the State Council of the PRC released the *Property Management Regulations* (*wuye guanli tiaoli*) to: a) set rules and regulations for property management activities; b) ensure the legitimate rights and interests of property owners and property service enterprises; and c) improve the living and working environment of people. The state advocates the property owners to choose property service enterprises through an open, fair and just market competition mechanism.[3] This document defines the concepts of owners (*yezhu*), owners' congress (*yezhudahui*), owners' committee (*yeweihui*) and their respective rights and obligations. In addition, it clarifies the content and workflow of the property management activities, establishing the legal status of the privatized delivery of public space management dominated by contractual relationships (Shen, 2004). In short, owners can select and hire a property

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[1] See https://www.mca.gov.cn/zt/history/perfectCountry/20170600891687.html [accessed 9th June 2024].

[2] See http://www.sasac.gov.cn/n2588025/n2588119/c2695959/content.html [accessed 10th June 2024].

[3] See https://flk.npc.gov.cn/detail2.html?ZmY4MDgwODE2ZjNjYmIzYzAxNmY0MGRhZWJmMzA3Nzk [accessed 11th June 2024].
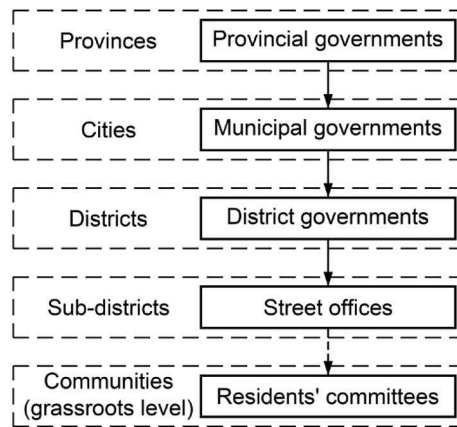
Fig. 1. The urban governance structure in contemporary China
Source: The authors.

management enterprise. The contracted property management enterprise shall manage the public spaces, buildings, facilities and equipment within the management area to keep the environment clean and maintain people's activities. The owners' congress is a collective decision-making body composed of all the owners. The owners' committee is elected by the meeting of the owners' congress and consists of a singular number of five to eleven persons, who are also owners. The owners' committee is responsible for implementing decisions of the owners' congress, participating in the management activities, supervising the property management company, and putting forward suggestions, etc. Meetings of the owners' congress shall also be informed to the relevant residents' committee. In practice, private enterprises, residents and local governments engage in management activities and improve the level of public participation.

More recently, more actors and stakeholders have been encouraged to foster their involvement in the provision of public services. In 2012, the 18th National Congress of the CPC set the goal of devolving social governance to the grassroots level, emphasizing the importance of self-management (*ziwoguanli*), self-service (*ziwofuwu*), self-education (*ziwojiaoyu*) and self-supervision (*ziwojiandu*) of the general public in the community, and strengthen the construction of grassroots management and service system.[4] In 2013, the Ministry of Civil Affairs and the Ministry of Finance of PRC released the *Opinions on Accelerating the Promotion of Community Social Work Services* (*guanyu jiakuaituijin shequ shehuigongzuo fuwu de yijian*), aiming to establish a system for providing social services led by the government and with broad public participation (Xu & Liu, 2024). Fig. 2 visualizes the aforementioned key laws and regulations regarding public space management in contemporary China.

3. Methodology

This research employed a qualitative case study approach. As the case study is appropriate to answer "how" questions (Yin, 2009, p. 11), the purpose of selecting a case study approach in this research is to answer "how" stakeholders deal with challenges in managing public space. Participant observation and semi-structured interviews were used in data collection to understand the public space management practice through first-hand experience. The case was chosen because it was typical in that it represents changes in public space management during the social transition period in China, and how stakeholders deal with challenges in the process. The case thus had the potential to produce valuable information that may enrich the outcome of the research.

3.1. The research area

Xiangshao village located in Changsha city in China's central region was chosen as the case study site for this research. It is situated in the center of the old town of Changsha, covering an area of 0.18 square kilometers. Surrounded by four urban main roads, the community has a good public transport system and abundant public facilities around, including shopping centers, hospitals, banks, a primary school and a middle school (Fig. 3).

Xiangshao village was originally built in the 1950s. It is the staff dormitory area of Changsha Railway Bureau (*tieluju*). In total, there are nearly one hundred five-to-six-floor buildings constructed with red bricks. More than seventy dormitory buildings were labeled with numbers. It was a walled residential quarter (*xiaoqu*) with access control in the past. From the 1950s to 2005, the public space in the village and the lives of the residents were managed by the logistics department affiliated with the Changsha Railway Bureau. In 2005, the Changsha Railway Bureau was abolished and revamped into the Changsha Railway Office (*banshichu*), affiliated to Guangzhou Railway Group. Xiangshao village became a residential quarter of the Erlipai community and transformed into an open form without walls or gatekeepers. Subsequently, the management of Xiangshao village was transferred to the Erlipai community.

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[4] See https://www.gov.cn/ldhd/2012-11/17/content_2268826_4.htm [accessed 11th June 2024].
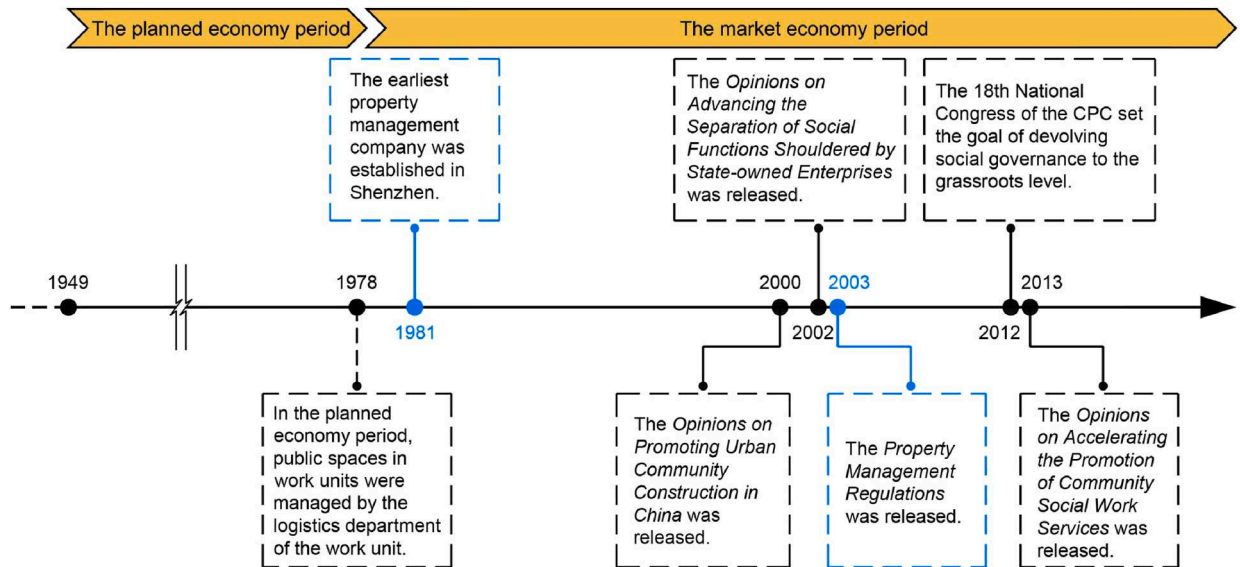
Fig. 2. The timeline regarding public space management in contemporary China.
Source: The authors.

Fig. 3. The aerial view of Xiangshao village.
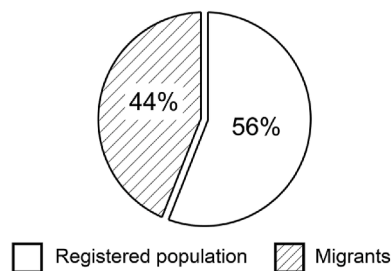Source: Based on the Google map, analytically drawn by the authors.

Fig. 4. Proportion of registered population and migrants in the community.
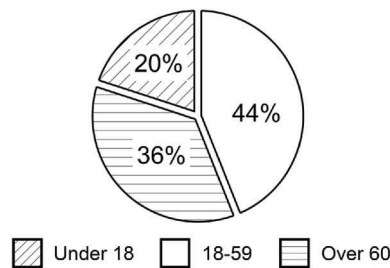Source: An interview with the director of the residents' committee.

Fig. 5. Proportion of different age groups in the community.
Source: An interview with the director of the residents' committee.

There are 3,500 households in the community. The total population of the community was approximately 9,100 until the end of 2023, among which the registered population was around 5,100, approximately 56 % of the total population. The other part was approximately 4,000 migrants, accounting for 44 % (Fig. 4). Regarding age group, the majority were people from 18 to 59 years old, accounting for approximately 44 % of the total population. Elderly people over 60 were around 3,200, accounting for 36 %. The lowest proportion was those under 18, only reaching 20 % (Fig. 5). In the past, most residents were employees of the Changsha Railway Bureau. For this reason, the residents had strong social networks with each other. However, a mixed demographic composition formed from the 1990s onwards. The main reasons include: a) some employees resigned from the work unit and sold their flats; b) other employees bought new properties and moved out; and c) migrant workers came to the community, rented flats, and became residents.

3.2. Data collection and analysis

This research adopted participant observation and semi-structured interviews, which offered different perspectives on the socio-spatial dimension of public space management. The observation method mainly deals with information on time, location, people, activities or events, and processes, whereas interviews help to provide information addressing reasons behind the observed phenomena. Three undergraduate students assisted with collecting data from the 3rd to the 24th June, 2023.

Participant observation was implemented to collect data in "real-life settings" through observing or participating in the activities or events within the community (DeWalt & DeWalt, 2011). It involved: a) detailed observation of the main features of the area; and b) focused observation of the layout of public spaces, spatial distribution of public facilities, and the recurring activities and events. Observations were conducted across different time frames, including weekdays and weekends, daytime and evenings, to ensure what was observed was representative.

Semi-structured interviews were implemented to confirm the occurrences, patterns and reasons through the face-to-face conversations between the researchers and the participants (DeWalt & DeWalt, 2011, p. 29). We chose to interview different stakeholders to be involved in the practice of public space management, so as to depict different perspectives and achieve a deep understanding of challenges. We conducted two rounds of interviews during the three weeks. The first round was the "informal conversational interview" (Turner, 2010) to obtain a general picture of how the public space was managed in the community. Residents were happy to talk with us and share their opinions. In total, we had 47 conversations in the first ten days of the fieldwork, including talks with the director of the residents' committee and two managers from the property management company. When we invited them to conduct the second-round formal interview, however, many residents declined to get involved due to the risk of personal identity disclosure. This dilemma was reported by other researchers as well (Torres de Oliveira & Figueira, 2018). Consequently, fourteen formal interviews were conducted in the second round. The participants consisted of the director of the residents' committee, a manager from the property management company, and twelve residents. Among the residents, seven were employees of the Changsha Railway Office, whereas the other five were migrants. A detailed description of the interviewees is presented in Table 1.

During the fieldwork, notes and records were made as often as possible to keep the information as reliable as possible. Issues including the process of public space management, stakeholders involved in the practice, barriers and challenges in public space management, and how different stakeholders deal with the challenges were covered. Each interview lasts for 25–50 minutes. The transcripts of interviews were managed in NVivo software. By using the content analysis strategy, the relationships and themes were identified (Bengtsson, 2016).

3.3. Reflection on the fieldwork and the validity of the data

In retrospect, three factors, including the "insider" status, the researchers' academic credibility, and the researchers' performance in the field, had a marked impact on the data collection process and the validity of the data.

"Insider" refers to researchers having similar aspects of race, language and culture to the study group or researchers and participants sharing related experiences and cultural heritage, which can make researchers accepted within the study group (Sherif, 2001; Ganga & Scott, 2006). The first author is a local citizen of Changsha and is familiar with the research settings. This "insider" role brought advantages to the fieldwork, including ease of access to the field, approach to residents, and more accurate understanding of the conversation and its deep meanings. At the same time, using the local language on some occasions served as a tool to shorten the

Table 1
Overview of interviewees.

Identification Number	Gender	Age	Position	Years in Community	Level of education	Income status
01-D	Female	40–50	Director of the residents' committee	7	Bachelor's Degree	Medium
02-M	Male	50–60	Manager of the property management company	9	Bachelor's Degree	Medium
03-R	Male	Over 60	Retired employee	35	College Diploma	Medium
04-R	Male	Over 60	Retired employee	30	College Diploma	Medium
05-R	Female	Over 60	Retired employee	30	College Diploma	Medium
06-R	Male	Over 60	Retired employee	32	College Diploma	Medium
07-R	Female	50–60	employee	26	Bachelor's Degree	Medium to high
08-R	Female	40–50	employee	18	Master's Degree	Medium to high
09-R	Male	40–50	employee	21	Bachelor's Degree	Medium to high
10-M	Female	20–30	Migrant	3	Master's Degree	Medium
11-M	Female	20–30	Migrant	2	Master's Degree	Medium
12-M	Male	30–40	Migrant	5	College Diploma	Low
13-M	Male	50–60	Migrant	8	High School Diploma	Low
14-M	Female	30–40	Migrant	6	Bachelor's Degree	Medium

Note: "Income status" refers to the criteria released in 2023 by the National Bureau of Statistics of PRC. All surveyed urban households were sorted in ascending order according to the Per Capita Disposable Income (PCDI). The lowest 20 % of the households are considered low income, followed by low to medium (20 %), medium (20 %), medium to high (20 %), and high income (20 %). In 2023, the mean values of the five income groups were 17,478, 32,202, 46,276, 65,430, and 110,639 yuan, respectively. See https://data.stats.gov.cn/adv.htm?m=advquery&cn=C01.
Source: Computed by the authors.

distance with the residents when conducting formal and informal interviews. Additionally, fluency in the local language made the interview go smoothly, resulting in participants, especially the elderly, often providing extra information.

Second, the researchers' academic credibility helped to build trust between the researchers and the participants. Before the fieldwork, the first contact with the community was by telephone, when the researchers introduced their research aims, institutional affiliation, and academic credibility to the director of the residents' committee. This opportunity for communication allowed the researchers to project themselves as trustworthy and responsible, and worthy of spending time and effort from the researched. As past research points out, a favorable group reputation has a positive effect on better achievements and performance (Podolny, 1993; Keh & Xie, 2009). In the course of the fieldwork, it became increasingly clear that the researchers' academic credibility was instrumental in convincing the participants that the information would be reported unbiasedly and objectively. In turn, the participants were willing to share their experiences without reservation, which improved the validity of the data.

Third, the researchers' performance as eager learners enabled them to "get in" the research settings and "get along" with the research participants (Lofland et al., 2006). Even though the researchers had some prior knowledge, they took on the role of someone who was "ignorant" and therefore needed to be "taught" (Lofland et al., 2006). This performance, by staying humble, having an open mind, and being willing to ask questions, took in new information that went beyond merely being directly related to research queries. Indeed, the participants shared valuable information and insights when the researcher(s) displayed honesty, courtesy and persistence. This in-depth data compensates for the limitations of a small sample size to some extent and promotes the validity of the data and collaborative sense-making.

4. Findings and discussion

The research findings reveal that major challenges in managing public space relate to policies and regulations, governance structure, and process dimensions of management. Built on the data analysis, three challenges are outlined as follows. First, acceptance of the change in management model from the general public lags behind the policy shift. Participants believed the mode of closed-off management (*fengbiguanli*) would be a better approach, although it is contradictory to the policies and regulations formulated by the central government. Second, the governance structure including power, stakeholders, and the way it is organized, exerts great influence on the effectiveness of the public space management. Third, process dimensions of management, such as insufficient investment and the disconnect between design and management, are obstacles that need to find a way to overcome for successful management.

4.1. Advocacy of gated communities and closed-off management

All participants agreed that the mode of communities, e.g., gated or open, was an influential factor that affected public space management. Among them, residents stated the strongest desire to support gated communities. One resident, who is also an employee of the work unit, complained about the current management and conveyed his desire to reconstruct a gated community.

> In the past, this residential quarter was managed by the work unit with access control. Outsiders could not come in at will, and the environment was clean and safe. At present, the residential quarter has become an open community and is managed by the residents' committee. Although there is a property management company, to be honest, their services are of poorer quality than those provided by the work unit. Look, anyone can walk through the community. Some people throw rubbish away along the street. In addition, many outside vehicles parked in the community overnight, occupying the owner's parking space. I think it is better to reconstruct a gated community to reduce chaos.

In the same vein, four migrants interviewed were in favor of the gated community, stating that closed-off management gave them a sense of safety. One female migrant confirmed:

> I moved here two years ago because the rent here is affordable and the public transportation around is convenient. It only takes about 20 minutes to reach my work company by bus. The management of the community is not very good. As an open community, outsiders go back and forth. Many vendors do business in the community, which makes noise. It is annoying, especially in the evenings. I am in favor of closed-off management. As a woman, I do not like strangers appearing too much in the neighborhood, which makes me feel unsafe. As a tenant, I have the same rights as the owners. I hope that the environment of the community will be better.

It is striking that the director of the residents' committee expressed her aspiration for gated communities. The director stated:

> Xiangshao village was handed over to the community in the form of an open community. To be honest, it is challenging to manage an open community. For us, gated communities are easy to manage. How do you define responsibility spatially if there are no walls or no borders? It is difficult for us to carry out our work [without gating].

For the director of the residents' committee, the mode of gated communities is not only a type of living environment but also a spatial representation of urban governance in contemporary China. Clear boundaries established by physical gates, walls and fences help define the responsibility and the distribution of public resources. With respect to residents, the reason mainly results from fears of strangers, through-traffic, burglaries, interruptions from salespersons and pedlars, and outsiders using the public facilities within the community (Fig. 6). This finding supports extant research investigating the popularity of gated communities in contemporary China (Miao, 2003; Tomba, 2010).

This finding contradicts the government's expectations. The Chinese central government held a conference on urban issues (*zhongyang chengshigongzuo huiyi*) in December 2015. Following the conference, an official document was released in February 2016, declaring the forbiddance of the construction of any new gated communities and the opening up of existing ones stage by stage. The aim was to establish the concept of "narrow road width and dense road network" and improve road accessibility by realizing the public use of internal roads in gated communities. The central government intended to solve the urban traffic issues and optimize land use by transforming gated communities to urban blocks in city forms. Although the document was intended to promote human-centered urbanization, the implementation has not been realized and underwent criticism by the general public. So far, there have been few reports of "open communities" being built. Participants interviewed also stated three main reasons for doubt: a) people have no sense of adaptability to urban blocks because gated communities have been widely accepted as standard living environments in China for a long time; b) the central government did not conduct any public participation in the policy-making process, and the public was forced to accept the document; and c) the ownership of existing public resources in gated communities lacked definition after opening up.

Gated communities originated in the US, and have been the subject of scholarly debate due to some negative effects such as social segregation and inequality in Western countries (Atkinson & Flint, 2004; Blakely & Snyder, 1997). However, the gated community is a dominant residential form in Chinese cities and its Chinese name is *fengbixiaoqu*, which possesses different characteristics from its Western counterpart. In the Chinese context, spatial gating has historical precedents: the enclosed ward during the Imperial era (Gu, 2001), the work unit compound in the Socialist era (Lu, 2006), and gated communities are the spatial units for urban governance in

Fig. 6. Pedlars occupy the internal street in the community to do business, causing noise and traffic congestion.
Source: The authors.

contemporary China (Bray, 2006; Lu et al., 2020). These cultural and social circumstances explain the preference for gated communities in China. Hence, there is still a long way to go before gated communities can be opened up under the current circumstances. The debate on closed-off management and open management will continue for a period of time.

4.2. The influence of governance structure on the management

The research finds that the devolution of power and self-governance (*zizhi*) play important roles in public space management. Self-governance is strongly supported by residents because it brings benefits to them and they believe that they could improve their living environment and social environment by participating in management activities.

It is necessary to take a look at residents' self-governance. In 1989, the Law of *Urban Residents Committees of the People's Republic of China*[5] (*zhonghua renmin gongheguo chengshi juminweiyuanhui zuzhifa*) was enacted and municipal governments all over the country adopted this policy to establish the legal right of urban residents to self-governance through their residents' committees (Qian et al., 2019). As stated in the law, a residents' committee is a grassroots organization in which the residents manage the community affairs via self-management (*ziwoguanli*), self-education (*ziwojiaoyu*) and self-service (*ziwofuwu*). A residents' committee consists of five to nine members (including a director), who shall be elected by all the residents of the community who have the right to vote or by a representative of each household. However, Zhang and Yan (2014) point out that governments still apply socio-political control during the electoral process through residents' committees through the nomination of key members (e.g., the director) who are members of the CPC.

In practice, there are both formal and informal channels of decision-making in terms of community management. The residents' council (*juminyishihui*) is the formal channel for self-governance within the framework of urban governance in contemporary China. In 1996, the first residents' council in China was set up in Jing'ansi sub-district in Shanghai. It was then defined as a non-governmental organization to make suggestions on the major work of the residents' committee. In 1998, the Jing'ansi sub-district issued a document and decided to establish residents' councils in each community within the sub-district, stating the residents' council as the grassroots self-governing organization (Liu, 2003). The experience of Shanghai has had a wide influence on other Chinese cities. By 2009, 500 urban communities across the country had been commended by the Ministry of Civil Affairs for promoting self-governance in the form of the residents' council (Tang & Xie, 2020). In 2017, the State Council of PRC released the *Opinions on Strengthening and Improving Urban and Rural Community Governance* (*guanyu jiaqianghewanshan chengxiang shequzhili de yijian*), requiring that key community affairs should, in principle, be negotiated and solved by residents under the leadership of the branch of the CPC and the grassroots self-governing organization.[6] This document confirms the residents' council as an important measure of self-governance at the grassroots level.

The informal channel of decision-making also deserves attention. The research findings reveal that community volunteers, hobby groups organized by residents themselves, and chat groups on social media expand the means of self-governance. Community volunteers are recruited from residents, including the registered population and migrants. Volunteers engage in community management activities such as maintaining environmental sanitation, organizing cultural events, helping vulnerable groups, and mediating conflicts between residents. They meet with the residents' committee regularly to discuss community affairs. Hobby groups such as square dancing groups, Taichi teams, or rope skipping teams spontaneously engage in community management. Since they use public spaces frequently, they report issues and urge the residents' committee to solve them. In addition to in-person communications and meetings, volunteers, hobby groups and owners use social media to communicate, discuss and negotiate community affairs. It is noted that any suggestions or proposals put forward through informal channels need to go through the procedures of the residents' council before they can be formally approved (Fig. 7).

The informal decision-making channel can be categorized into the wider spectrum of informal governance, which involves endeavors led by non-state actors through spontaneous and unauthorized activities (De Andrés et al., 2019). However, the conception and practice of informal decision-making in China are different from Western models. In Western countries, informal governance takes on a look as grassroots actors challenge formal institutional arrangements, often involving community protests and social movements for the right to the city (Bailey & Pill, 2015). In our case, the collective actions of the residents are rather constructive than violent. The use of social media is to expand their discursive power rather than to oppose the government's arrangements. The common goal of different actors may not relate to the changes of the political process, instead, it emphasizes the improvement of the community environment and quality of life. To some extent, this informal decision-making channel belongs to the state co-production agenda (Wu, 2022) and, therefore, remains subject to the institutional structure and is under institutional regulation (Zhao et al., 2023).

The residents' council can be viewed as an "intermediate organization" between the residents' committee and individuals (Kim et al., 2021). The residents' council receives the guidance and support of the residents' committee. It has a set of rules and procedures for decision-making. Members of the council are elected by residents, with one representative elected for every 50 households.

The director of the residents' committee introduced the working process of the residents' council in general. First, one proposer presents a proposal on an issue, with three to five representatives as his/her seconder. Issues often relate to public space and its

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[5] The law was enacted by the Ministry of Civil Affairs of the PRC in 1989 and came into force on January 1, 1990. The law was issued to strengthen the construction of urban residents' committees. It clarifies the residents' committee as a grassroots self-governing organization, assisting the local government or its agencies in administering public affairs and public welfare related to the interests of residents. See https://zyzx.mca.gov.cn/n1025/n1032/c31393/content.html [accessed 23rd February 2025].

[6] See https://www.gov.cn/gongbao/content/2017/content_5204888.htm [accessed 23rd February 2025].
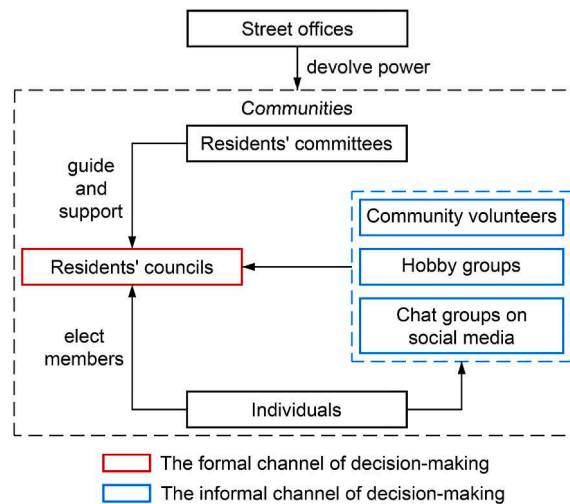
Fig. 7. The formal and informal channels of decision-making in the community
Source: The authors.

maintenance, such as parking space management, building facade leakage, community garden renovation, demolitions of illegal constructions, etc. Second, the team members need to collect opinions from residents in the community and obtain the consent of more than two-thirds of the residents. Third, after being reviewed by the residents' committee, the detailed project plan can be formally proposed by the proposer in the consultation meeting. Fourth, the proposer shall make a statement of the proposal at the meeting, while other representatives will ask questions and debate about the proposal. Only more than half of the representatives agree that the project will get approval. Finally, transforming into the actor, the proposer is responsible for the implementation of the proposal and will give feedback on the project at the next meeting (Fig. 8).

A participant showed us five yellow benches at the south entrance of the community and told us how these pieces of furniture were built. Initially, it was an underused space without any facilities. In 2021, a resident proposed to add benches there to provide seating for elderly people and meet their needs for socializing. The proposal soon got approval at the meeting of the residents' council. However, the owners' committee (*yeweihui*) has not been established, and there is no public maintenance fund, so the question of who pays for the benches becomes a problem. The residents' committee, representatives of the residents' council, and the property management company had several rounds of communication and consultation to discuss the fundraising issue. Finally, the residents' committee applied for a special fund of 4,000 yuan from the superior street office, and the residents raised 2,000 yuan by themselves. After more than five months, the benches were finally built and residents had a place for sitting, chatting and socializing (Fig. 9).

However, one major issue has been identified as well. Who are the members of the residents' council? The director of the residents'
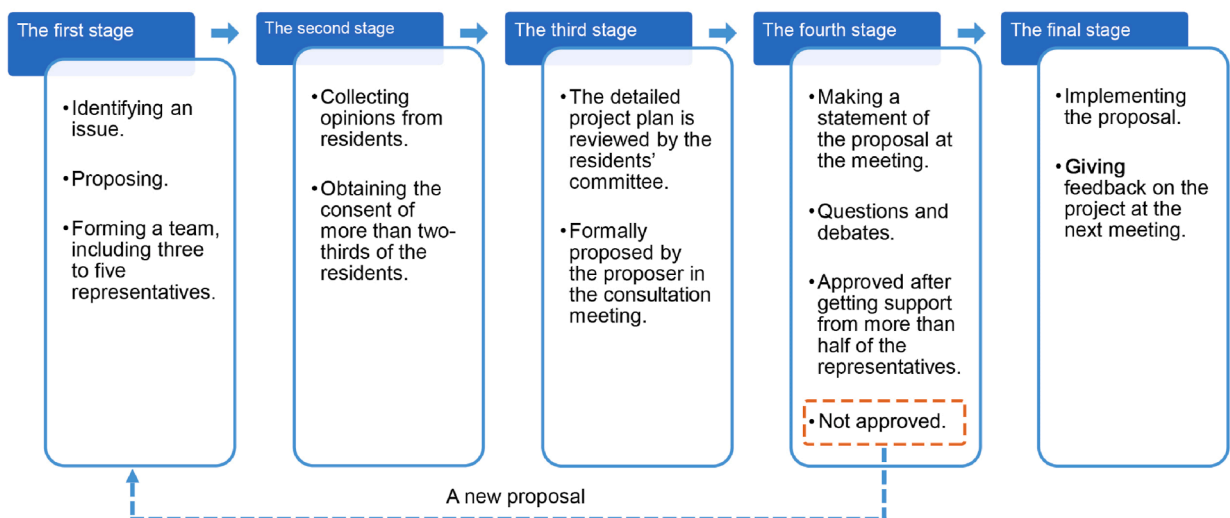

Fig. 8. The working process of the residents' council
Source: The authors.

Fig. 9. Stakeholders managed to add benches to improve the physical space and create a social space in the community
Source: The authors.

committee confirmed the unevenness in terms of the population constitution.

Most members of the residents' council are registered population. Tenants are less involved in community management activities. This does undermine community cohesion. The residents' council is a new approach to community management. Governments need to develop relevant measures to let migrants and the floating population participate in community affairs.

Experienced members of the CPC, retired employees of the work unit, and community volunteers are more eager to engage in management activities. By contrast, migrants show little interest in it, partly because they have a low level of place attachment. This situation makes it more difficult for migrants to solve their problems, resulting in a potential for social segregation and social injustice. Previous studies show that residents' community participation is positively associated with the presence of public space and social cohesion (Strzelecka et al., 2010; Zhu, 2015). By encouraging migrants to take part in managing public space, both physical and social ties with the community may be fostered. The enhanced attachment to a public space, thereby, can enable long-term use and maintenance of the public space.

4.3. Process dimensions of management

There are general consensuses regarding the key challenges associated with the process of managing public space, which can be categorized as insufficient financial resources and a disconnect between design and management.

When being asked what the main challenge facing public space management was, both the director of the residents' committee and the manager of the property management company indicated insufficient financial resources. The director of the residents' committee disclosed that the municipal government has provided a limited level of financial support.

In 2016, the community was going to carry out public space renovation, which was the "shantytown renovations" *(penggai)* project launched by the central government. Eventually, our community did not implement it partly because the municipal government ran out of budget. In 2023, the state started to renovate old urban residential communities across the country, and our community has been shortlisted. However, the municipal government's budget is still limited, and not all the selected communities will necessarily be renovated. So, we are now trying our best to enter the implementation stage.

The barrier that the manager faced was different. This property management company was founded in 1997 and is a large enterprise in the city. The company can provide basic services, including maintenance of buildings, mechanical and electrical equipment, water pipes, and public facilities, and special services including security, environmental sanitation, landscaping, fire management, etc. However, many service items are not provided anymore due to the low service fee. The manager stated:

The contract was signed in 2019. Because the owners' committee (*yeweihui*) of the community has not been established, the first party is the Guangzhou Railway Group, our company is the second party. The service fee was 50 cents per square meter, which was the lowest price in Changsha at that time. The service scope included all items. Five years have passed, and the fee rate has not changed. You know, the labor and operating costs have increased sharply. Now, we have to narrow down the scope of our service and provide only a few basic services in the community.

The above information reveals that the amount of financial resources greatly affects the effectiveness of management, including public space initiatives and day-to-day maintenance. In recent years, many practices in China have proved that it is difficult to rely solely on government financial support or the marketization of service delivery to sustain the management of old communities. It also involves residents' ability to pay and their willingness to pay for long-term maintenance. For example, in many old communities, residents' income is generally low, and no public maintenance funds are available. Due to the long history of the work unit system, residents lack the awareness of paying for management services. The potential solutions depend on the coordination and participation of the government, the market and society, enabling a joint promotion combined with the government's fallback responsibilities

(*zhengfudoudi*), proper service value enhancement, and community empowerment (Liu et al., 2020; Yang, 2015).

The other challenge is the disconnect between design and management. In the Chinese context, public space management is viewed as the "end phase". Participants indicated that a sectoral division was an important reason for the lack of linkage between design and management. The main reasons can be summarized as follows. First, the design phase has a relatively short duration. Designers can investigate the site and get to know residents' needs in a limited time, resulting in a rough understanding of issues in the community. Second, planners/designers are not aware of the changes public spaces have undergone during the use phase, because users are not involved in the creation phase. Third, the maintenance crew has to postpone the solutions for unexpected problems that are caused by changes during the period of use, because designers do not involve themselves in the use phase.

During the fieldwork, we observed how diverse people's behaviors are and how dynamic the public space is. Residents intensively use public spaces every day. They sit on benches to rest, chat with neighbors, bargain with pedlars, or wander around. Young mothers, on many occasions, bring their babies to sunbathe in fine weather (Fig. 10). Meanwhile, a disconnect between design and use was observed. For instance, the lack of seating constrained the residents' rest and social needs. A group of residents (re)appropriated public spaces for playing Taichi or square dancing, where the place was designed as a parking lot or a sidewalk. The manager confirmed the challenges produced by this sectoral separation.

> The (re)appropriation of public spaces brings benefits to residents. However, it causes some problems. For example, a group of *dama* (elderly women) usually perform square dancing at the small garden located at the center of the community. The place is relatively small and cannot accommodate them to do this activity. But they insist on staying there and performing dancing on the lawn, which increases our burdens in maintaining greenery and extra costs.

The manager's statement discloses unexpected work, cost and time caused by the split between design and management phases. This challenge has led to discussions about what "design" could do to facilitate long-term management. In the Chinese context, "design" has been viewed as a "product" for a long time, emphasizing the production of physical spaces that meet the requirements of clients. Similar to their Western counterparts, planners/designers adopt a technical perspective in the production of space, including understanding the rules and regulations, analyzing the site and environmental conditions, developing potential scenarios, and formulating a final solution for a specific task (Madanipour, 1997). This strategy has worked well over the past three decades, resulting

Fig. 10. Behavioral mapping of residents in the community
Source: The authors.

in the rapid urbanization period in China. However, it may no longer fit the current urban regeneration period due to urban diversity and the growth in civil awareness of multiple stakeholders (Hui et al., 2021). It is time, therefore, to rethink the content and the role of "design" in public space management. Madanipour's (1997) argument may give a hint that "design" could be seen as a "process" through which planners/designers could combine "technical, social and expressive" concerns to shape and manage the built environment. Planners/designers are called to be interested and actively engaged in this "process and its product".

Observations about a recent renovation project in the community revealed that a level of public participation existed, allowing residents to take part in the design phase. The residents' committee conducted public participation in the project because: a) it was required by the law and the local government; b) to seek the support of the majority of the residents (*qunzhong*) in the implementation; and c) to avoid potential conflicts in the future. The main forms of public participation include notifying the public of the project, collecting public opinions, meeting with residents' representatives, and reporting public opinions to the design company and the superior government. In general, it is a linear process that ensures the completion of the project. However, residents complained about these forms, although they admitted that the current level of participation was higher than in the past. Residents were dissatisfied to be merely informed and consulted in the process. They requested to participate in the early stages of the project. They conveyed that the government should involve them at the early decision-making stage, rather than asking them for their opinion after the project was approved by the government itself.

This dilemma may come from Chinese culture. As Li et al. (2012) point out, participation in China mainly means participation in the implementation of institutional policies and schemes, while participation in the West mainly focuses on policy development itself. Over the past fifteen years, public participation has become a critical factor in China's urban renovation and renewal projects. In 2008, the *Urban-Rural Planning Law* clearly stated the fundamental requirements for public participation in the planning and design process. In 2014, the central government issued the *New-type Urbanization Plan (2014–2020)*, which prioritizes public participation and consolidates social governance at the community level to achieve positive interactions between the government, residents and society. Previous studies have examined interactions between diverse stakeholders and their influence on Chinese urban regeneration projects (Sonn et al., 2017; Zhang & Li, 2016), indicating that community participation in China is different from Western models. The former combines top-down and bottom-up approaches, and the local government has more clout (Li et al., 2020; Zhang & Li, 2016). As scholars suggested, the collaborative design workshop composed by governments, residents, designers and social groups could be a useful tool to encourage public participation at the community level, promoting interaction and cooperation between stakeholders through consultation and negotiation that help to consider management aspects from the beginning of the design stage (Li et al., 2020; Shen et al., 2018).

4.4. Proposed benchmark of public space management

In this sub-section, we take a step further by proposing a benchmark of public space management in an attempt to "theorize back" to existing theories. Building on and expanding previous studies and our observations, we conceptualize a benchmark against which public space management can be compared and measured to claim a more universal framework applicable to diverse local or international contexts. It is noted that this benchmark would require a testing process, which could later be refined and adapted to a specific case or context. We identified the major elements and categorized them into four easy-to-use components of benchmarking: provision, coordination, process and context.

Inspired by De Magalhaes and Carmona's (2009) three models of public space management, we propose "provision" as the first component of the benchmark. It expresses who is mainly responsible for planning and delivering the public space management. Madanipour (2010) points out that contributions of diverse stakeholders, such as public organizations, private enterprises and users, have shaped numerous urban public spaces worldwide. As the private sector has been involved in public space delivery or management for three decades, governments are not solely in charge of public space provision anymore (Zamanifard et al., 2018). Historically, the debate on the public-private partnership in shaping public space has continued for many years. Some scholars argue that the private sector's involvement undermines the publicness of public space (Lefebvre, 1991; Sennett, 1992), whereas other researchers say that the public-private partnership opens up an opportunity for place-making and better management (Banerjee, 2001; Carmona, 2010; Li et al., 2022). Extensive discussions in the debate guide us in conceptualizing the benchmark. Which party – the state, the public, or the private – plays a leading role in public space management? What is the relationship between the various actors and stakeholders involved in the management, presenting hierarchical, principal-agent, or more networked features? How are their rights and responsibilities regulated in the management process? We need to examine these key points when understanding public space management.

Second, the private sector has increased engagement in shaping public spaces since the 1990s due to the inadequate funding from public authorities (Carmona & De Magalhaes, 2006; Zamanifard et al., 2018). Comprehending the functions, meanings, and aspirations of public spaces enables actors and stakeholders to prioritize the arrangements to improve conditions of their public spaces (Li et al., 2022). As more actors and stakeholders engage in public space management, their motivations, expectations and interests will likely be different or contradictory. Thus, coordination has become an important instrument for coping with conflicts between various stakeholders and can promote the effectiveness of management. Meanwhile, the decision-making channels, both formal and informal, are vital to the success of coordination. Regulation, prescriptive instruments, and incentives are formal management tools (De Magalhaes & Carmona, 2009; Zamanifard et al., 2018). Grassroots stakeholders, rather than governments, bring in informal channels. In line with Manzo and Perkins's (2006) argument, our case confirms that place attachment, voluntary collaborations, and community participation are all part of informal tools in managing public space. What regulations and measures are in place to coordinate the different needs of multiple stakeholders? How do formal and informal channels help to implement the management tasks? How do we

develop the management system to reconcile contradictions or conflicts among stakeholders? These are important guiding questions worth asking between researchers and the researched when analyzing public space management.

Third, the entire space production and regeneration process consists of a series of phases, from initial planning to use and future redevelopment. Carmona (2014) indicates that "design, development, space in use, and management" are four stages in what he terms "place-shaping continuum", which is represented as a continuous, integrated, and iterative process. These four stages act together and are decisive in determining the quality of public space. As our case shows, the disconnect between the design and management phases leads to (re)appropriation for purposes different from what was initially envisaged, and consequently impedes the effectiveness of management. It reconfirms that each phase in place-shaping is not isolated. Instead, each phase is closely related to other phases, and any decisions and behaviors in a phase could profoundly influence the follow-up phases. Therefore, we cannot isolate a certain phase and illustrate it alone when examining public space management. It is necessary to fully understand the decision-making and work content of each phase in the process, and its connection with the preceding and following phases. At the same time, to incorporate management expertise within the design stage from the beginning, to have awareness of resources and funding through the whole process, can help to shape public space physically, socially and economically (Carmona, 2014; Zamanifard et al., 2018).

Finally, we identify "context" as the fourth component of benchmarking. As stated in the literature review, De Magalhaes and
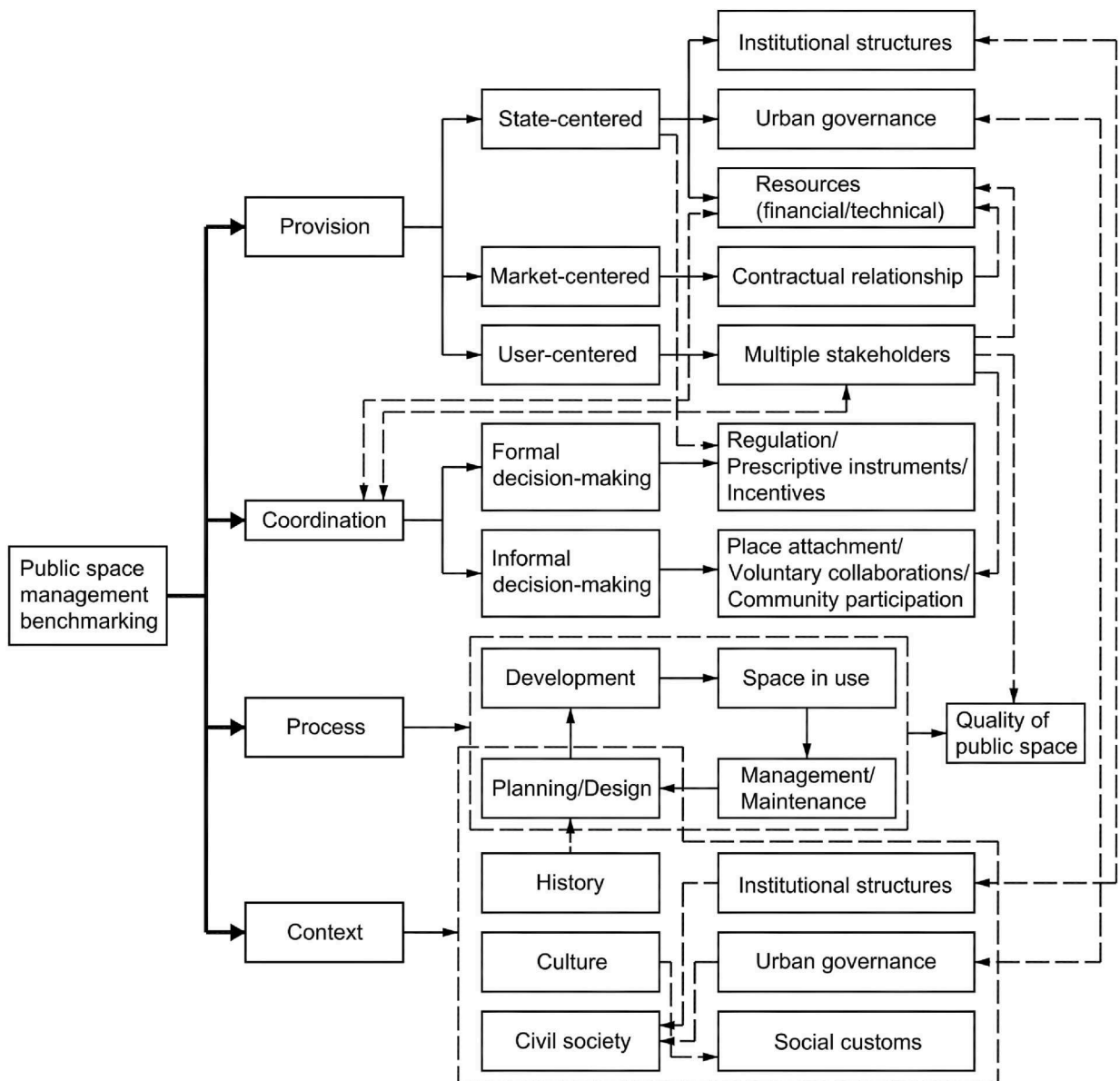

Fig. 11. Diagram of public space management benchmarking
Source: The authors.

Carmona's (2009) analytical framework has been widely adopted in the research of public space management. Nonetheless, research on applications of this framework in non-Western contexts emphasized the requirement to bring in the local context when examining public space management. For instance, Mandeli (2010) notes that socio-cultural and institutional contexts play important roles in public space management in Saudi Arabia, such as the hierarchical organizational structure, administrative reform of municipalities, and the deficiency of involvement of local authorities and other civil society stakeholders. Chitrakar et al. (2022) reveal that the political system and urban governance structure strongly influence public space management in Kathmandu (Nepal), possessing some contradictory features compared to the Western experience. One of the striking findings is that the control and commercial use of open spaces by local community groups results in the residents' lack of access to and use of these public spaces, which contradicts the viewpoint that community organizations function in the interest of the local people. Similarly, our case demonstrates that some contextual elements, such as the work unit system, the residents' committee, and the level of public participation, serve a vital function in managing public space in China. From a wider perspective, therefore, we stress the need for and importance of incorporating context in the benchmarking, such as political structure, urban governance, history, culture, planning and design system, social customs, and civil society. Fig. 11 illustrates the benchmarking. It is noted that there is no hierarchical relationship between the four components, and some elements are interrelated.

5. Conclusion

This paper aimed to investigate the challenges diverse stakeholders face in public space management in work unit communities in China. Built on participant observation and semi-structured interviews, we identified three obstacles to public space management: (1) the difficulty of accepting new policies; (2) the influence of the governance structure; and (3) insufficient financial resources and a disconnect between design and management.

These obstacles together pose a threat to the effectiveness of public space management. The public's nostalgia for the gated community makes it difficult for them to accept the form of the open community. Public spaces in the community that are accessible to outsiders increase the work of the community and the maintenance crew to ensure safety and keep the environment clean. Residents are skeptical about the open management mode, reducing their willingness to participate in community management activities. The formal and informal ways of decision-making within the governance structure create channels where residents can put forward suggestions, propose plans, consult and negotiate on the problems of the public space, and finally implement changes in practice. The population composition and the workflow of the residents' council play important roles in guaranteeing fairness and justice in public space management. The findings indicate that a lack of financial resources makes the objectives of changing environmental quality more difficult to achieve. In addition, government funds may not cover all aspects of public spaces, and community authorities have difficulties in attracting investment from other sources. A clear division between design and management leads to a deficiency in the cooperation between stakeholders who are involved in managing public space. As a result, design plans may not match the existing circumstances and would not be responsive to long-term use.

This paper uses a single-case approach and the data set has been culled from a specific community in China. At the theoretical level, De Magalhaes and Carmona's (2009) three models of public space management and their analytical framework enlightened us to elaborate on how public spaces were managed in the case study. Our case demonstrates that public space management in China has similarities and discrepancies with that in the West. In the Socialist period, the work unit took responsibility for public space management. With the development of the market economy in the 1980s, the mode of property management company was introduced from Hong Kong, recognizing and learning the market-oriented model of management from Western countries *de facto*. Since 2002, the state has adopted an open and clearer attitude and made sustained efforts to develop the market-oriented model. After the 18th National Congress of the CPC, a broad public participation involving more actors and stakeholders in the planning process and public space management was encouraged and fostered, following the Foucauldian concept of governmentality either with the name of "integrated community" (*wanzhengshequ*) or a manifesto of "co-building, co-governing and co-sharing" (*gongjian gongzhi gongxiang*) (Wang et al., 2025).

The discrepancy is twofold. First, the reasons for the endorsement of gated communities (*fengbixiaoqu*) and closed-off management are different from those in the West. As discussed in Section 4.1, the historical, cultural and social circumstances explain the preference for gated communities by the general public. As Tang (2017) argues, Chinese scholars borrow the term "gated communities" to communicate with Western academia, but this term is not precise in describing *fengbixiaoqu* in China. In view of the difference between the two, he suggests that *fengbixiaoqu* may be translated as "blocked urban neighborhood" or "blocked residential compounds" to claim its uniqueness. Second, decision-making in public space management exhibits an interplay between formal and informal channels within the urban governance structure. In our case, residents' collective actions are normally non-violent, with pragmatic goals that aim to improve public spaces and their quality of life. Similar to other cases in China, it shows the orientation of pluralistic society goals in the state, which reveals a different trajectory from its counterpart in Western countries rested on civil society (Wang et al., 2025; Zhao et al., 2023).

Scholars have argued the benefits of a rich single case that can be broadened out to contribute to knowledge production (Flyvbjerg, 2006; Ren & Luger, 2015). In terms of generalization, similar communities can be found in other old towns of Chinese cities, where they transformed from work unit compounds, and the work unit system still exerts considerable influence on public space management. Comparable aspects of public space management, including the governance regime, political programs, processes and stakeholders, can exceed a city's physical boundary and extent, and potentially go beyond the Chinese context and have relevance to other contexts, especially where top-down, government-led urban planning has a long history and where rapid urbanization is taking place. From a broader perspective, we propose a benchmark that could be a more universal framework to explain various public space

management practices in different contexts, highlighting provision, coordination, process and context as the four major components. The benchmark will contribute to the development of the theory of public space management and can serve as a reference framework that can be applied across different contexts. At the same time, we claim that this benchmark is open for others to test and develop, and would be further advanced through empirical research for refining and adapting the findings to specific contexts.

This research did not provide cut-and-dried solutions to these obstacles. Nevertheless, we suggest taking action to ensure the functionality and quality of public space. First, diverse stakeholders should explore ways to improve their interaction and coordination with each other in the planning, design and maintenance process of public spaces. In the planning and design phase, the collaborative design workshop can be used as a tool to tackle the disconnect between the design and management. Second, governments need to enhance their decision-making process to be more open and fairer and collect meaningful feedback from residents, to ensure residents' voices are heard in the decision-making process for the development of public spaces. Third, more endeavors are needed to raise awareness and a more comprehensive understanding of the management of public spaces is required among stakeholders in a considered and holistic manner. Future research could analyze what changes in the governance structure and process dimensions are needed to cope with the challenges faced by stakeholders. As this study found that property ownership was often involved when work unit compounds became urban communities, it would be interesting to study the influence of property ownership in public space management.

CRediT authorship contribution statement

Sheng Song: Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Krzysztof Nawratek:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Fangjie Guo:** Writing – review & editing.

Conflict of interest

No potential conflict of interest was reported by the authors.

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