POLITECNICO DI TORINO
Repository ISTITUZIONALE

Quality Improvement of Urban Public Space from the Perspective of the Flâneur

Original
Quality Improvement of Urban Public Space from the Perspective of the Flâneur / Wang, L.i., Liu, X., Zheng, H., Caneparo, L.. - In: LAND. - ISSN 2073-445X. - 13:6(2024). [10.3390/land13060808]

Availability:
This version is available at: 11583/2989559 since: 2024-06-15T07:10:07Z

Publisher:
MDPI

Published
DOI:10.3390/land13060808

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)

19 November 2026

land

MDPI

Article

Quality Improvement of Urban Public Space from the Perspective of the *Flâneur*

Li Wang [1,2,3], Xiao Liu [1,2,4,*], Hao Zheng [5] and Luca Caneparo [3]

1 State Key Laboratory of Subtropical Building and Urban Science, South China University of Technology, Guangzhou 510640, China
2 School of Architecture, South China University of Technology, Guangzhou 510640, China
3 Department of Architecture and Design, Politecnico di Torino, 10125 Torino, Italy
4 Energy Saving Technology Research Institute, South China University of Technology, Guangzhou 510640, China
5 Department of Architecture and Civil Engineering, City University of Hong Kong, Hong Kong, China
* Correspondence: xiaoliu@scut.edu.cn

Abstract: As the quality of public space has become significant for urban development, the creation of high-quality public spaces is becoming increasingly important. Since the implementation of urban renewal policies, an increasing number of buildings have emerged, creating new types of public spaces. Compared to original public spaces, new public spaces are more open, flexible, and diverse. The design of public spaces is closely related to users and the *flâneur* can precisely serve as a user and observer to conduct in-depth research. So, our study was conducted under the identity of the *flâneur*, focusing on two cases in Guangzhou. The *flâneur* completes the data collection through two methods. Static research involves observing and taking photos, whereas dynamic research involves interviews and questionnaires. This study analysed three aspects: the group category, behavioural diversity, and activity time and evaluated the public space using the NPS scale. The study found that the recommendation rate of new urban public spaces is higher than that of original public spaces. The study also found that original public spaces need to be improved in four ways: equipping furniture facilities, improving traffic congestion, increasing blue-green spaces, and establishing artistic spaces. New urban public spaces need to make efforts to create more interactive spaces and increase stagnation points.

Keywords: original public space; new public space; quality improvement; NPS satisfaction scale; dual perspective

check for updates

Citation: Wang, L.; Liu, X.; Zheng, H.; Caneparo, L. Quality Improvement of Urban Public Space from the Perspective of the *Flâneur*. *Land* **2024**, *13*, 808. https://doi.org/10.3390/land13060808

Academic Editor: Fabrizio Battisti

Received: 19 May 2024
Revised: 2 June 2024
Accepted: 5 June 2024
Published: 6 June 2024

Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Rapid growth of the global economy has led to the vigorous development of urban and architectural designs. Urban construction has shifted from large-scale incremental construction to quality improvement, and the focus has gradually shifted to improving the quality of urban public spaces. The accessibility, convenience, and interaction of public spaces have thus become important factors in building a better global city [1]. Public space design should consider the needs of its internal users and explore the path of high-quality development [2]. The public space is shared by all users [3], and its quality is an important factor in the development of a city [4]. Public spaces in our study only refer to open public spaces, including squares, streets, green spaces, leisure spaces near pools, and open or semi-open coffee and book stalls. They do not include public buildings such as museums or art galleries because these public spaces can only be accessed by buying tickets and are not open every day.

After the implementation of urban renewal, urban public spaces are increasingly being renovated, for example, in Zaha Hadid's project and Leeza Soho and Riken Yamamoto's project Jianwai SOHO. An increasing number of "non-square box" buildings are flooding

into urban areas, bringing new vitality to public spaces. This new public space consists of two parts: one is formed between the interface of the new and traditional buildings, and the other is the public space within the new building complex. Therefore, we call these transformed spaces new urban public spaces (created by new nonlinear and super-scale buildings) [5], whereas we call the others original urban public spaces [6]. Original urban public spaces are different from historical urban areas [7], which place greater emphasis on cultural relics and historical sites.

Given this background, the improvement of public space quality must consider two issues. On the one hand, the proportion of new urban public spaces has increased, and the openness, sharing, and diversity of new public spaces will be examined. They are attractive, but are they really of high quality? Practical problems also exist, such as idle space. On the other hand, what about the use of original urban public spaces? How can we improve their spatial quality?

To address this issue, many scholars have undertaken a wide range of practices and research studies. Some Chinese scholars and designers have focused on elevating the image of the facade or pavement transformation. However, they have paid less attention to the user's behavioural experience and the interaction between humans and space, and there has been a lack of follow-up evaluation after the completion of the renovation project [2]. However, foreign scholars have shifted their research from space design to improving the quality of urban public spaces [8,9], focusing particularly on the relationship between public spaces and their users [10–12]. According to Carr et al., a real urban public space should be responsive and should meet the needs of users, including relaxation, engagement, and discovery [13].

Many perspectives and methods based on environmental behaviour studies have been applied to improve the quality of urban public spaces [14–18]. When studying the relationship between the environment and people, scholars have cleverly borrowed the concept of *flâneur* [19], mentioned by Walter Benjamin [20], and extended and it into urban spatial design. The *flâneur* is defined as "someone who walks around not doing anything in particular but watching people and society" in the Cambridge Dictionary [21]. *Flâneur* is derived from French, and the earliest definition can be traced back to 1638 from the verb *flanner*, which means to walk around [22,23]. In The Arcades Project, *flâneur* means "the wanderer, the stroller" [24]. The word seems to have nothing to do with architecture, but its relationship with the urban image merits consideration. Contrary to the mainstream urban struggler [25], the *flâneur* is an outcast and idle person, yet is the protagonist in Benjamin's novel perspective. Owing to the profitless quality and non-exclusivity of this community, the *flâneur* has many advantages as a researcher.

Using a dual research perspective of observing and being observed, we conducted a novel and in-depth analysis of the specific issues of urban public spaces [26], which also provided expansion ideas for this study. There is currently a growing trend in the application of the *flâneur* in architecture and planning [27]. Bairner fully affirmed the social significance of wandering and considered various ways for pedestrians to participate in society [28]. Minnaard believed that the *flâneur* refers to moving and watching simultaneously, rather than doing nothing [29]. Scholars have also explored the photography capabilities of the *flâneur* on the streets, such as through the Capture Application of Google Street View [30]. However, previous studies have generally not considered the changes in urban public space after the landing of new buildings and have overlooked the behaviour and regular patterns of different groups over time in public spaces [31]. Moreover, a series of practical problems in the new urban public spaces also need to be addressed through research, such as the waste of public space or popular dislike due to monotonous design. Currently, the quality of many new urban public spaces must be re-examined and improved [6]. Therefore, it is necessary to clarify the current use of public spaces through more rigorous field research and consider the future development directions of the two public spaces by comparing their usage.

Based on this, two cases were selected. The Tiyu Xilu urban public space is an example of an original space, while the Zhujiang Xincheng urban public space is an example of a new space. By exploring the characteristics of the *flâneur*, this article draws on their dual perspectives [26] and explores the relationship between urban public spaces and their users through dynamic and static research, covering several aspects such as the types and behaviours of the group, correlation between the behaviours and time, and a survey on NPS satisfaction. By comparing choice preferences, regular time patterns, and other results, this study provides constructive information for the optimisation of the two types of urban public spaces, contributing to the continual improvement in the creation of public spaces and attractions.

2. Literature Review

2.1. Research Status of "Quality of Urban Public Space"

The "urban public space" refers to the public space enclosed by roads, buildings, or structures in a certain area. "Spatial quality" refers to the quality of the space in many dimensions [32]. Good urban public spaces are essential for social and psychological health [33,34]. New public spaces are emerging and old ones are being adapted to meet contemporary needs [35]. Our research focuses on the quality of public spaces, mainly focusing on node spaces such as squares or green spaces. The public space, without being the location for a specific activity, is part of a larger continuum of social life, which is characterized by its urban quality [30]. This study analysed academic achievements over the past 10 years, focusing on relevant papers published in the last three years. Research on "the quality of urban public spaces" has passed through the following stages.

Initially, the creation of public space was not prioritised in modern urban design [6], as it was viewed as secondary to the design of roads and buildings [36]. Later, some scholars realised the relationship between public spaces and the surrounding buildings. Reith and Orova discovered that creating public spaces requires collaboration with the surrounding buildings [37]. Teixeira et al. studied the connections between spaces on the ground floor and public space [38]. Subsequently, street space, as an important traffic space in the urban public space, has gradually received attention [39,40]. Sun et al. confirmed that street greening affects the quality of public spaces [41]. Cao and Duncan confirmed that attractive streetscapes would extend the walking distance of users [42]. Green spaces were then considered by scholars. Green spaces have potential healing and health benefits [43]. Entities such as green belts, forests, and green squares all play a certain healing role [44,45]. Simić et al. demonstrated the importance of green space by discussing green infrastructure [46]. Barron et al. proposed eight practical interventions for green spaces [47]. With the arrival of the health era, the environment and healthfulness of the public space then became a research hotspot [48], through which blue-green spaces are mentioned as positive elements of the environment [49]. Several evaluation studies have been conducted on blue-green spaces [50,51].

Recently, people's behaviours and experiences have been increasingly considered, resulting in the integration of public spaces and human perception in urban space studies [52]. Lu and Zhu used the Guanggu urban public space in China as a case study to analyse the number, type, and frequency of residents' activities [53]. Kumar and Rajak studied the distribution of open space, focusing on the interactions between people and open spaces [54]. Ding et al. analysed the urban public space from the perspectives of psychological and visual perception, and they also studied the relationship between pedestrian numbers, pedestrian behaviour, and healthy communities [55]. Pawlowicz and Szafranko focused on residents' preferences and their impact on developers [56].

We analysed the focus of research on the quality of urban public spaces over the past three years and identified the following five keywords. Blue-green space, street space, flexible space, human behaviours, and the perception of space are also the key areas we focus on when considering the perception of public space use, so these studies provide good assistance and reference for our research. In terms of research content, studies have

entered the fields of human behaviour, experience, and perception of public spaces, which is also a problem that this study attempts to address using a novel perspective. Our analysis was conducted based on the characteristics of these two types of urban public spaces.

2.2. The Perspective of Flâneur

Scholars have different opinions on the *flâneur* and its application [57–59]. According to Bauman, the *flâneur* represented uncertainty and fragmentation [60]. Fontana and Cabarrocas advocated using the role of the *flâneur* to discover urban architecture from a new perspective [26]. Paek explored the location of commercial streets and their impact on the surrounding environment through the *flâneur* and *mimesis*, two concepts proposed by Benjamin [27]. Arnold studied the importance of dynamic vision and emphasised that public spaces must be in conversation with the public [31]. Although the *flâneur* originated in literature and philosophy and has had limited applications in architecture or planning before [61], it is feasible to use the *flâneur* perspective to study urban space, and there has thus been a gradual increase in this approach in recent years [62].

The application of the *flâneur* in urban research can be divided into three stages: (a) The introduction of the *flâneur*: Unlike its origin in the concept of wandering [63], the *flâneur* has become a key figure in understanding the relationship between individuals and cities [64]. The relationship between observing and being observed is a dialectical perspective that has been gradually applied to urban spatial design [65]. Aleksandra et al. emphasised that urban public spaces must see others and be seen, and the *flâneur* provides this perspective [66]. (b) The application of the *flâneur*: The *flâneur* was introduced as an interdisciplinary research method and has gradually been more widely applied [67–70]. Some academics have developed the *flâneur* as an application program that allows users to discover problems in urban design while strolling [71]. Some scholars have regarded themselves as *flâneurs* and made observations to find the urban changes [72]. For example, Martins observed the city and activities of residents by walking around using interactive records [73]. (c) The in-depth development of the *flâneur* perspective: Thibault and Tarasti discussed the relationship between sports and public space from the perspective of sports behaviour [74]. Argin et al. explored the changes in vision and walking rhythm caused by the use of smartphones in public spaces from different perspectives of a rover [75,76]. Zhang and Zhuang discussed the relationship between the *flâneur* and environment–behaviour studies [77] and how the *flâneur* is applied to the study of urban public space [78]. They believed that the *flâneur* reflects a multidisciplinary knowledge framework similar to environment–behaviour studies. The research methods employed in these studies influenced this study. However, they did not make a detailed study of the quality of urban public spaces from the *flâneur* perspective and thus lack case application and verification, which is the novel contribution of our research.

In sum, the perspective of the *flâneur* is gradually being applied to the study of urban public spaces. It has dual practices and research significance, starting from urban spaces, human behaviour, and reflection on urban changes. This will also promote the cross-evolution of sociology, literature, and philosophy with architecture and planning (Figure 1). This study will combine the perspective of the *flâneur* with the research methods of environment–behaviour studies to explore the specific problems of the quality of urban public space (Figure 2).

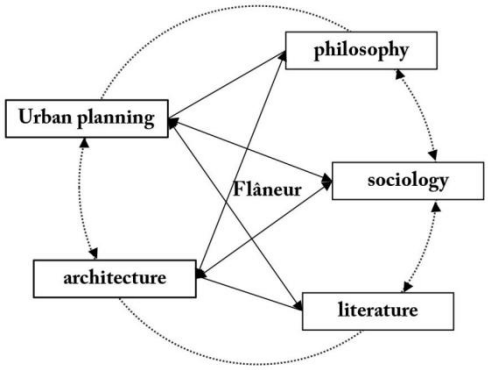


Figure 1. The intersection of the *flâneur* and various disciplines.

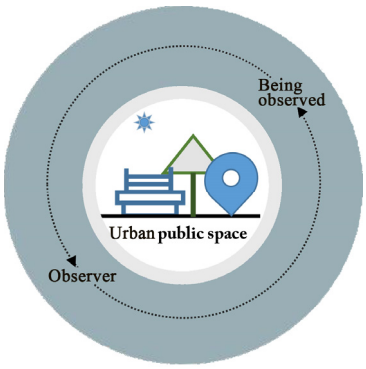


Figure 2. The *flâneur* perspective.

3. Research Methodology

3.1. Research Object and Research Scope

The Tiyu Xilu urban public space is an original typical case, whereas the "Zhujiang Xincheng" is a new case; for convenience, we refer to the former as Case A and the latter as Case B. Both are located in Tianhe District, Guangzhou City, Guangdong Province, China. They are similar in size and feature a pedestrian street spanning north and south through the centre of them. Case B was located approximately 900 m south of Case A (Figure 3), and its geographical environments, including lighting, temperature, and humidity, are comparable. Therefore, these two cases are suitable for comparative research.

Case A is composed of commercial streets, office buildings, and residential buildings. The commercial streets are dominated by restaurants, supermarkets, and clothing stores, with many small shops rich in Guangzhou's local characteristics (Figure 4). There is a pedestrian street spanning north and south in the centre, where residents often rest and relax. In summary, the district has both commercial and living environments and is a suitable example of an original case in Guangzhou.

Case B comprises new buildings such as the Guangzhou Library, Opera House, and K11 Art Centre (Figure 5). However, its interface is not as complete as that of Case A (Figure 6a,b). The ground floors of buildings are often overhead or designed in combination with surrounding pedestrian overbridges, and the public spaces are new and diverse. Therefore, it is a suitable example of a new typical case (Figure 6c,d).

This study focuses on a comparison of the quality of public spaces in the two regions, which will be explained through the interaction between the behaviour of users and public spaces.

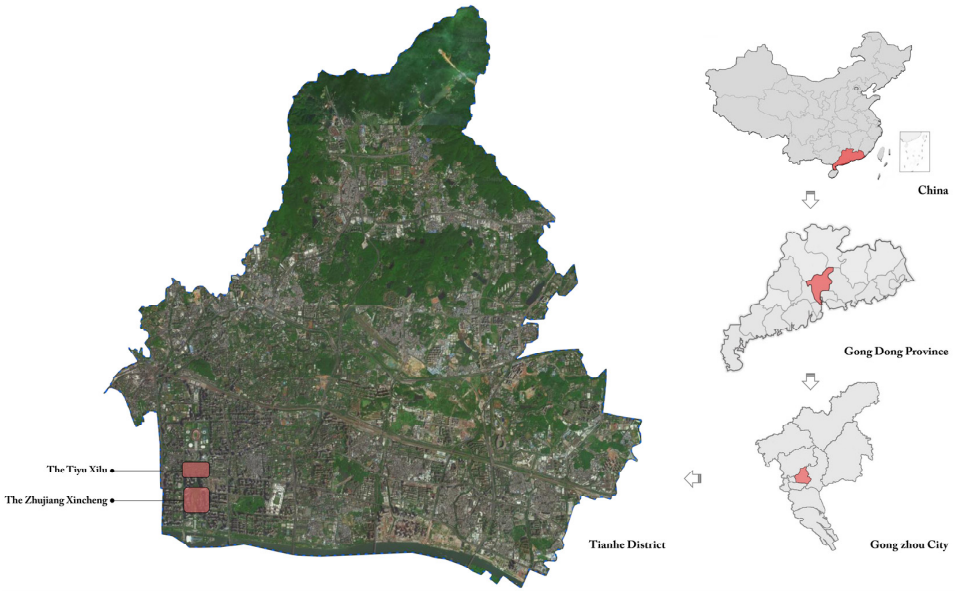


Figure 3. Geographical location.

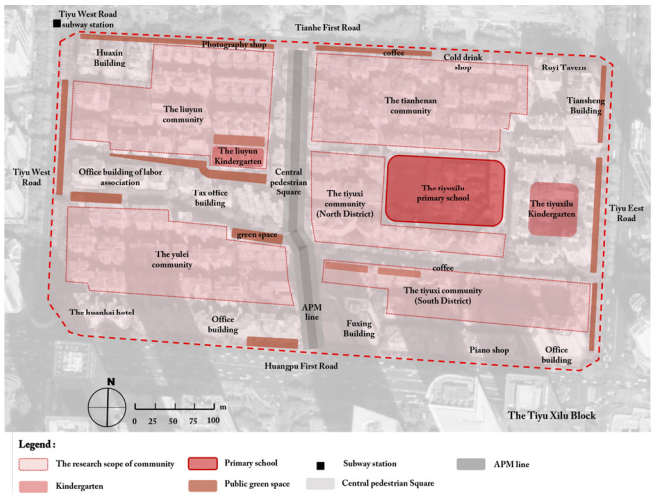


Figure 4. The research scope of Case A.

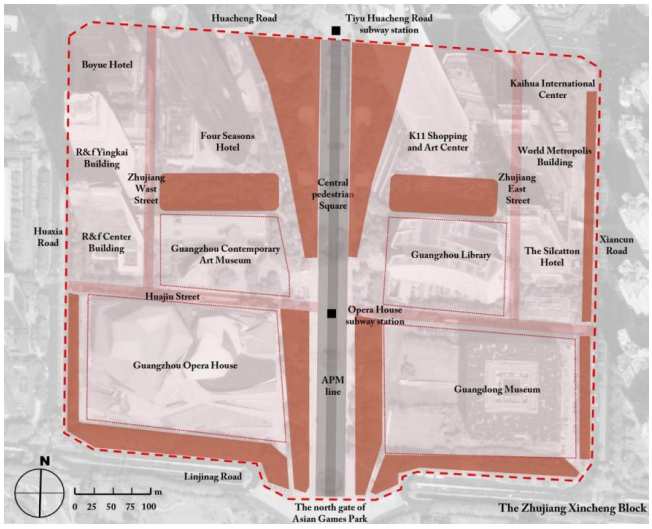


Figure 5. The research scope of Case B.



Figure 6. Comparison of public space images. (**a**,**b**) Urban public space of the Tiyu Xilu. (**c**,**d**) Urban public space of the Zhujiang Xincheng.

3.2. Research Method Based on the Behavioural Characteristics of the Flâneur

The path of the *flâneur* is random and aimless. So how does the *flâneur* observe space and discover the truth?

First, there is the "External gaze": When people visit a city and only take a quick look, the story hidden behind the city will not be discovered, and many truths will be overlooked. The "external gaze" must abandon traditional linear cognition and continue to pursue the meaning hidden behind the surface.

Second, in the landscape of daily urban life, there is an emphasis on overturning inherent thinking patterns and grasping changes in the movement of time through spatial images [79].

Third, if the *flâneur* is interested in a certain event, he/she can observe it. If the *flâneur* is interested in someone, he/she can continuously observe them, leading the *flâneur* into an unknown world and allowing for the exploration of novel spatial environments.

According to the behavioural characteristics of the *flâneur*, this study employs three research methods, as follows (Figure 7).

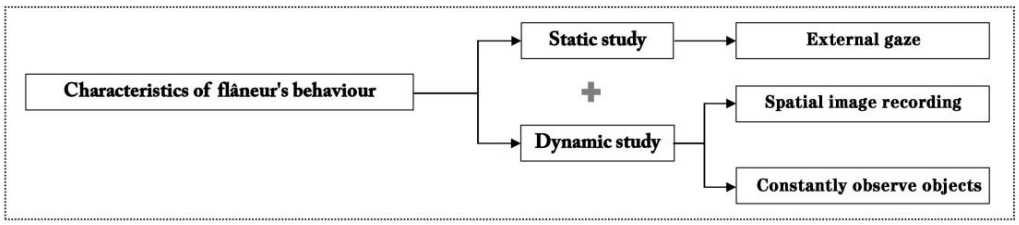


Figure 7. Research methods based on the behavioural characteristics of the *flâneur*.

In the static study, the observation site was selected first, and the *flâneur* stood in the centre of the observation site to observe the behaviour of the moving crowd, simultaneously taking photos and recording. The number of observation sites was determined based on the size of the region and its suitability for observation. Based on the normal visual range of the human eye, which can see faces and actions approximately 50 m away, the radius of the observation site was set to 50 m, and the specific radius during implementation was changed to ensure optimal observation conditions. The area of Case A is approximately 280,000 square meters (700 m × 400 m), whereas that of Case B is approximately 434,000 square meters (700 m × 620 m). Based on observation suitability, 58 observation points were determined for the static study of the former and 62 observation points for the latter (Figures 8 and 9).

In the dynamic study, first-hand information was formed through interviews, questionnaires, and hand-drawn records of the *flâneur*. Second, the data were obtained by continuously observing the objects. The *flâneur* stood 2–5 m behind the object being followed. It recorded the status of the public space while walking and drew relevant behavioural graphs.

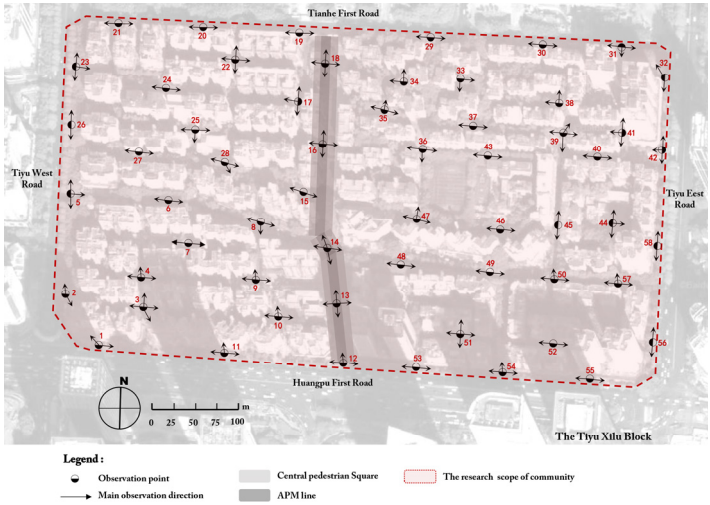


Figure 8. Distribution of observation points in Case A.

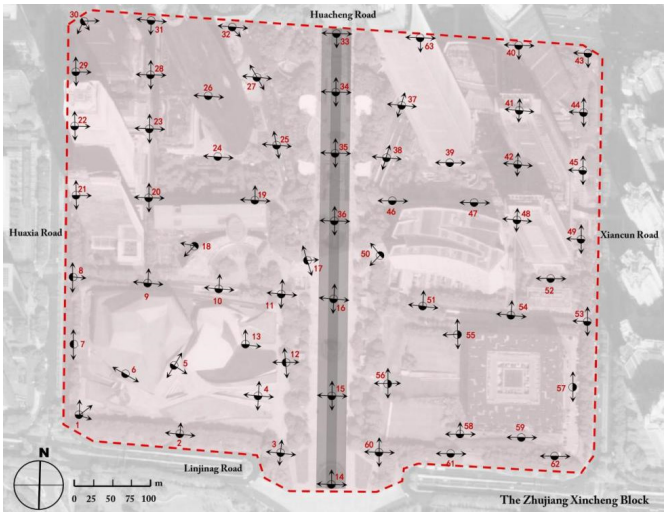


Figure 9. Distribution of observation points in Case B.

The survey was conducted in September and October. The climate was comfortable during this period and most people went out for activities. The types of activities in the two urban public spaces are diverse, making this a suitable period for conducting the research. From September to October 2022, as *flâneurs*, the research team members continuously observed, painted, and recorded the public space and the people in the two cases, and they conducted more than 30 semi-structured interviews with people (Figure 10). Static and dynamic study are objective investigations, while NPS surveys are subjective. The relationship between the two and the research objectives is shown in Figure 11.

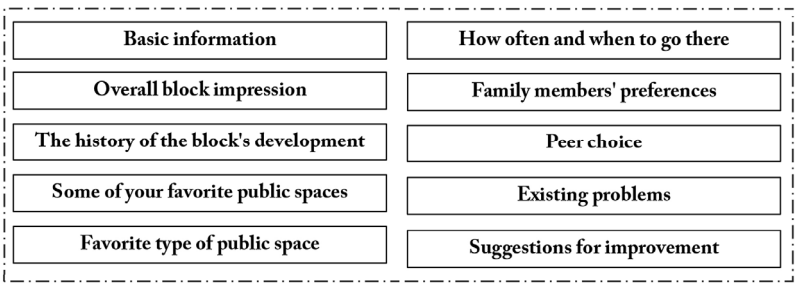


Figure 10. The framework of semi-structured interviews.

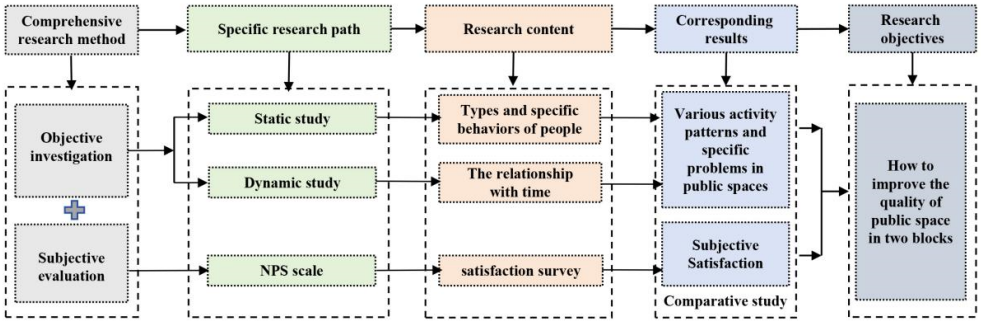


Figure 11. Relationship with research objectives.

3.3. The Application of Polynomial Functions

In exploring the relationship between group behaviour and time in urban public spaces, we mainly used polynomial functions for analysis. A prototype of the polynomial function is presented in (1). In this study, the formula evolves into Equation (2). The symmetry axis of the polynomial can be obtained using Equation (3), which is the corresponding time point. The number of behaviours can be calculated using Equation (4), which is the peak number. The values of a represent the direction of the polynomial opening. When a is positive, the opening faces upwards, and the minimum peak value can be calculated. When a is negative and the opening is downward, the maximum value can be obtained. The size of the polynomial opening reflects the relationship between behaviour and time. The smaller the opening, the greater the absolute value of a, indicating that the number of behaviours increases at a faster rate over time. Contrariwise, the smaller the absolute value of a, the slower the growth of the number over time.

$$Pn(x) = a(n)x\hat{}n + a(n-1)x\hat{}(n-1) + \cdots + a(1)x + a(0) \quad (1)$$

$$y = ax^2 + bx + c \ (n = 2) \quad (2)$$

$$x = \frac{-b}{2a} \quad (3)$$

$$x = \frac{4ac - bx^2}{4a} \quad (4)$$

3.4. Satisfaction Survey: Subjective Evaluation

The Net Promoter Score (NPS) scale was used to explore users' feelings regarding public spaces. It can be used to visually observe trends and provide quantitative data. This scale mainly focuses on three aspects: green and healthy environments, flexible spaces, and users' behavioural experiences, which are important bases for selecting adjectives to describe public spaces. To ensure accuracy, big data were used to check omissions, fill gaps, reduce errors, and obtain more comprehensive evaluation words (Figure 12).

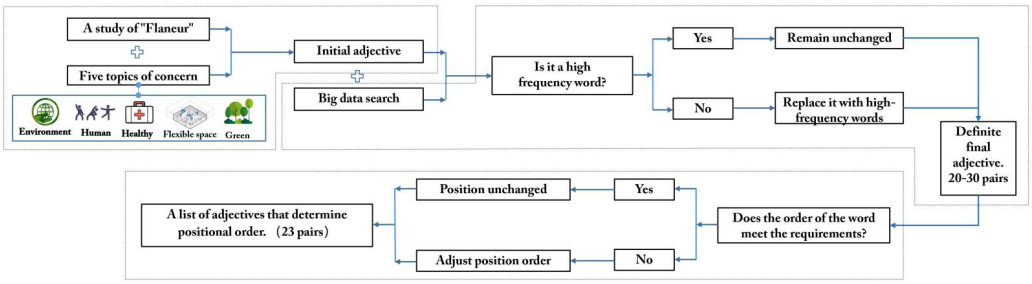
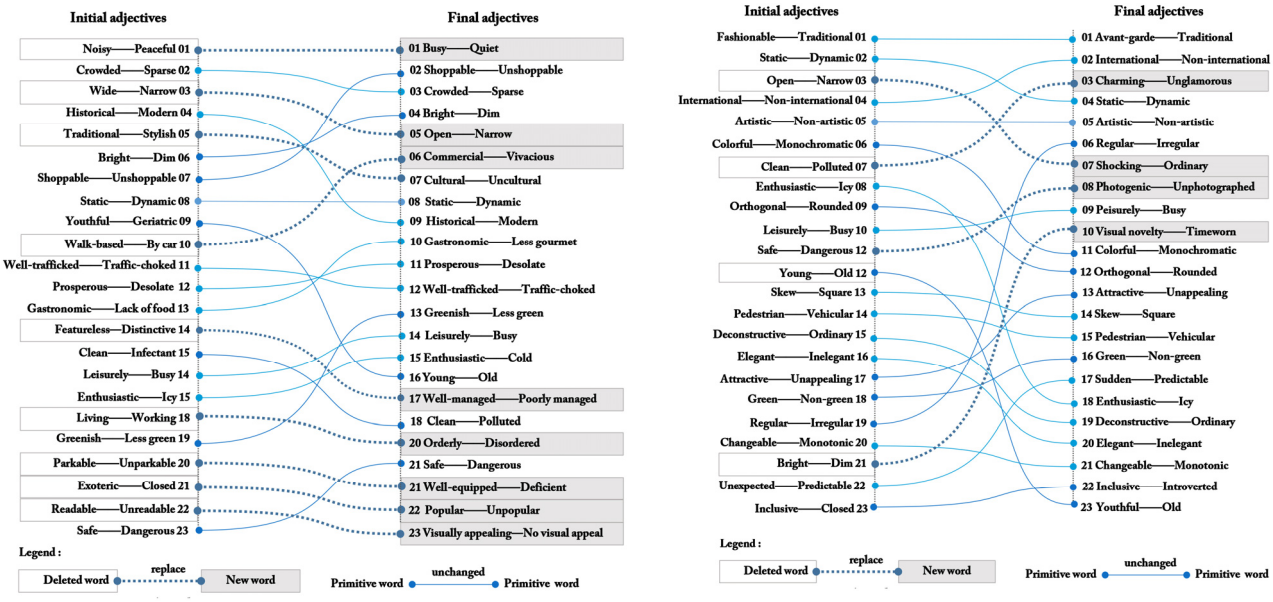


Figure 12. Determination of adjectives. The final vocabulary is ordered in descending frequency.

After the initial adjectives were determined, high-frequency words related to concerns were selected in the Micro Blog and the original low-frequency words were replaced

to obtain the final scale (Figure 13). During the survey implementation, a combination of online and offline methods was used, with a total of 100 NPS scales distributed and 99 recovered. The NPS divides the questions into nine levels. In addition to the average scores and recommended values, the proportion of each level could also be obtained. The overall methodology for this part of the study is shown in Figure 14.



(**a**) Case A (**b**) Case B

Figure 13. The formation process of the NPS scale.

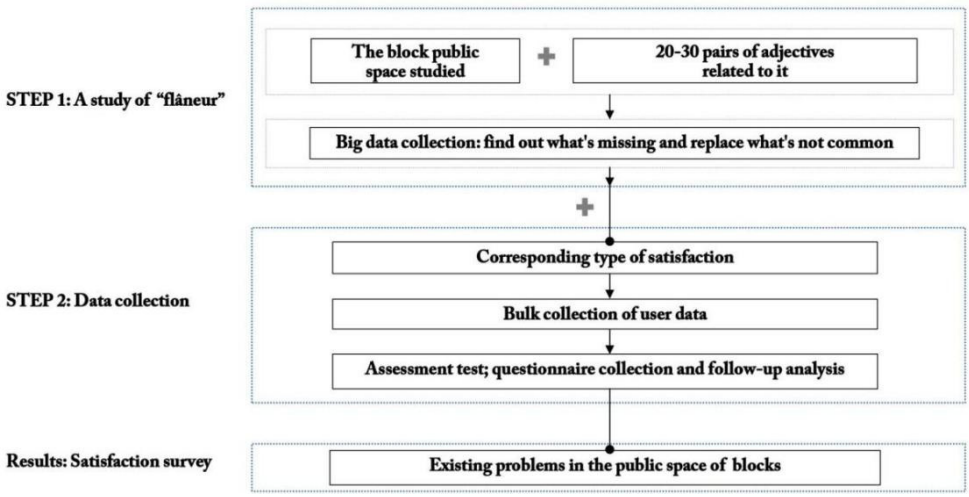


Figure 14. Implementation steps of the satisfaction survey.

3.5. Technical Route

The *flâneur* is not only a member of the public space, but also an observing subject, and can thus better understand the choices and behaviours of users in the urban public space and make reasonable inferences. Based on the characteristics of the *flâneur* and its combination with research on urban public spaces, the overall technical route is shown in Figure 15.

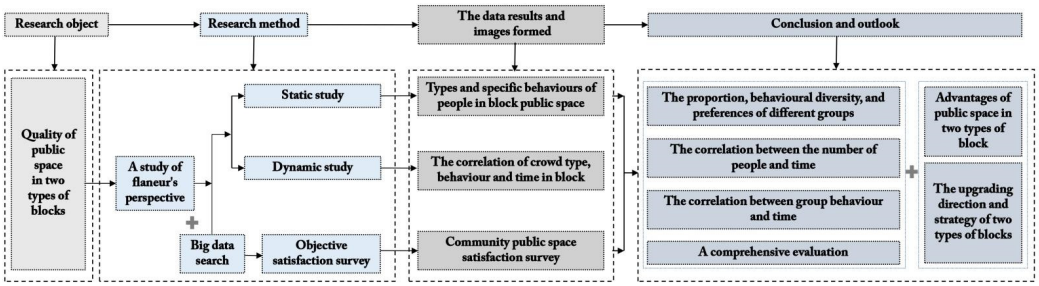


Figure 15. The overall research roadmap.

4. Results

4.1. Group Categories and Behaviours in Urban Public Spaces

Respondents were divided into three categories according to their identity attributes: resident, entertainer, and worker. In terms of group behaviour, 14 behaviours were selected for research (Figure 16), whereas other behaviours were omitted owing to their small proportion. The defined static behaviour represents a relatively static state and not a completely still state. The relationship between group categories and behaviours in the two urban public spaces was obtained (Figure 17).

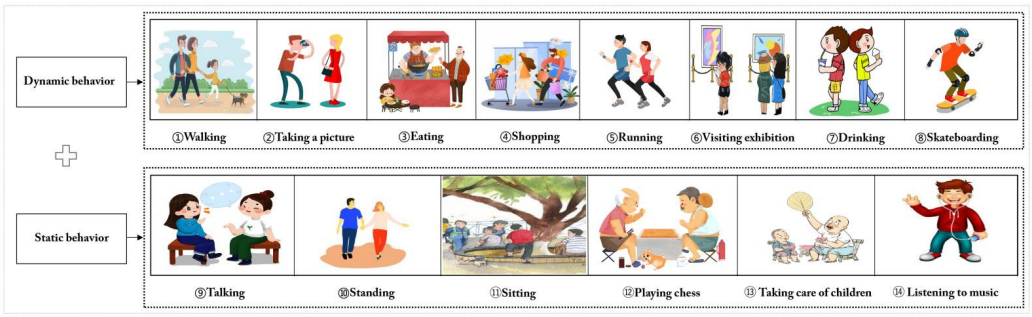
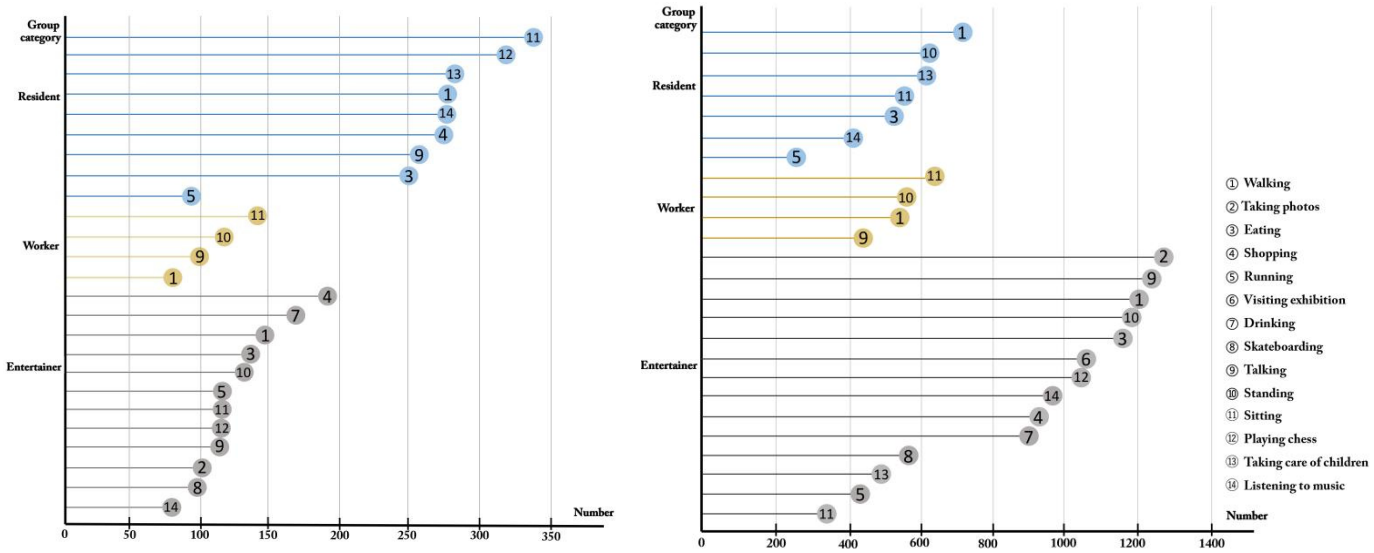


Figure 16. The 14 kinds of behaviours: 1–8 are dynamic behaviours; 9–14 are static behaviours. The order was determined by ranking the number of behaviours from highest to lowest.



(**a**) Case A (**b**) Case B

Figure 17. The relationship between group categories and behaviours. The number of behaviours represents the average number of behaviours during the study period, that is, the average number from 9 a.m. to 9 p.m.

According to the analysis in Figure 17, the order of group categories in Case A, sorted by number and proportion, is as follows: resident > entertainer > worker (Figure 18). We used the covering rate of activity behaviours to represent the diversity of activity among different groups, which were ranked as entertainer > resident > worker (Figure 19). Figure 20 shows the behavioural preferences of the different groups. Most residents tended to engage in static behaviours, accounting for 63.30%, whereas 36.70% tended to exhibit dynamic behaviours. People liked sitting the most (14.80%), followed by playing chess, caring for children, listening to music, and other activities (Figure 17). For workers, the most common behaviour was sitting (28.90%) and leisure behaviour was almost absent. For entertainers, dynamic behaviours accounted for 63.10%, whereas static behaviours accounted for 36.90%. People liked shopping the most (12.40%), followed by dynamic behaviours such as drinking cold drinks, walking, and eating.

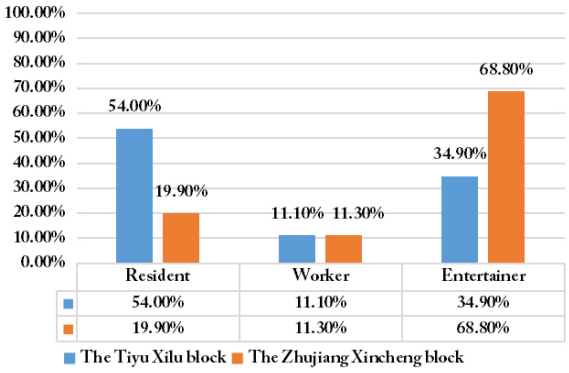


Figure 18. Three groups of people and their proportions. The coverage rate of activity behaviours refers to the proportion among the 14 types of behaviour.

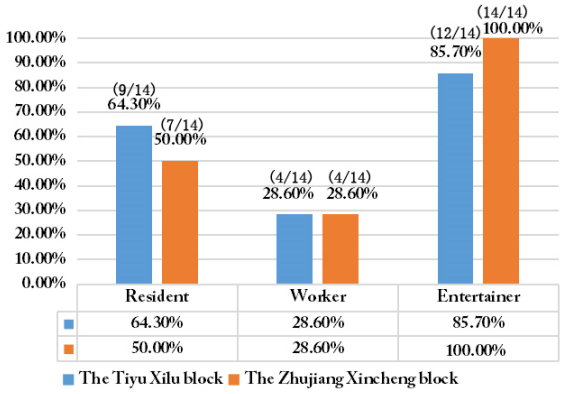


Figure 19. The diversity of group behaviours.

In Case B, when sorted according to the number and proportion of categories, the result was as follows: entertainer > resident > worker (Figure 18). According to the diversity of group behaviours, the coverage rate of activity behaviours was ranked as follows: entertainer > resident > worker (Figure 19). Most residents tended to exhibit dynamic behaviours (53.30%), while 46.70% tended to exhibit static behaviours. Residents liked walking the most (19.70%; Figure 20), followed by standing, talking, taking care of children, and other activities (Figure 17). Compared with Case A, these residents exhibited fewer static behaviours. For workers, the behavioural patterns were almost the same as those of Case A, the most common of which was sitting (30.50%). For entertainment, dynamic behaviours accounted for 72.70%, while static behaviours accounted for 27.30%. People liked taking photographs the most (9.84%; Figure 20), followed by walking and talking (Figure 17). There were fewer static behaviours than in Case A.

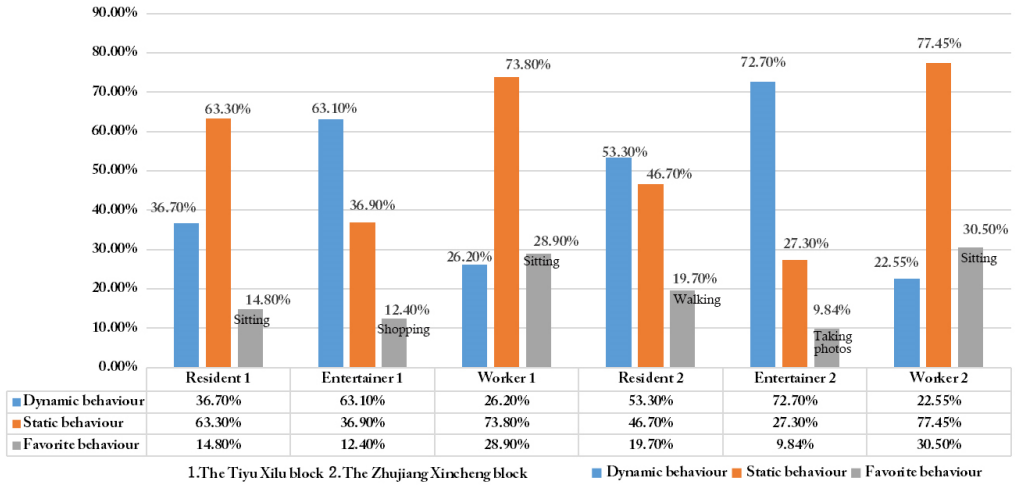


Figure 20. Comparative analysis of behavioural preferences.

4.2. Correlation between Group Categories and Time

There was a linear relationship between group categories and time (Figure 21). In the urban public space of Case A, the number of workers exhibits little variation with the change in time, with an hourly growth rate of 3.33, while the number of residents and enterprises increases over time, with hourly growth rates of 40.10 and 46.45, respectively. In Case B, the hourly growth rates of the numbers of workers and residents are 2.89 and 44.56. Entertainers increased rapidly, with an hourly growth rate of 124.87, which was much faster than that of Case A.

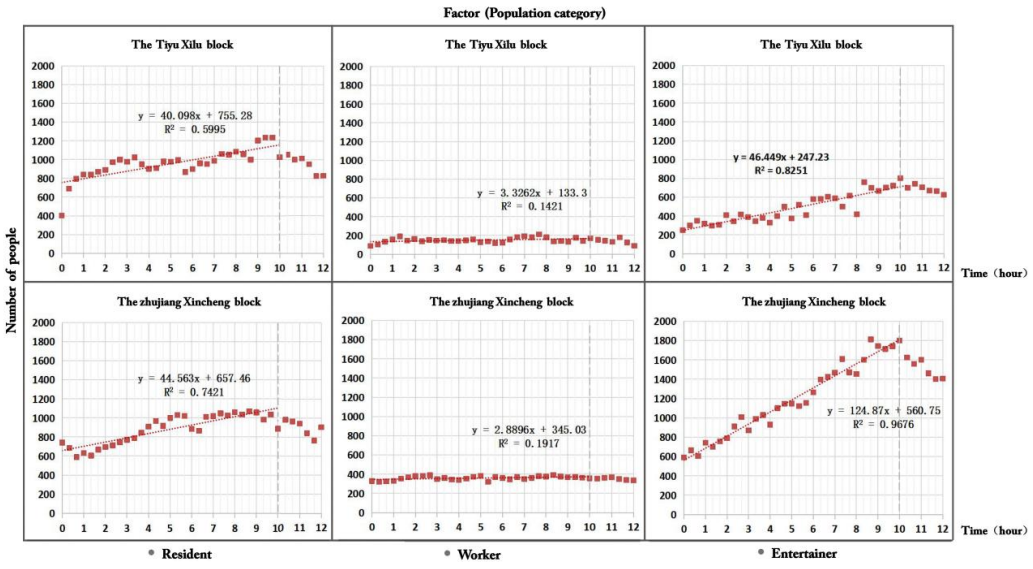


Figure 21. Relationship between group categories and time: 0–12 represent the respective hours of the survey (i.e., 9 a.m.–9 p.m.). Because the crowd generally declined after 7 p.m., only the 0–10 range was considered when calculating the growth rate; thus, the linear relationship was more accurate.

In terms of the degree of fit of the linear relationship, the entertainer group had the highest fitting degree, with an R^2 [80] value greater than 0.75, indicating a strong positive correlation with time. The resident group had an R^2 value between 0.30 and 0.75, showing a weak positive correlation between group number and time. The worker group had the lowest degree of fit, with an R^2 value of less than 0.25, indicating no significant linear correlation between the number of groups and time [81].

4.3. Correlation between Group Behaviour and Time

Figures 22 and 23 demonstrate that the relationship between behaviour and time is essentially an incomplete polynomial for the two cases. Except for the absence of a significant correlation between listening to music and time, the polynomial R^2 values of the other behaviours were greater than 0.50, demonstrating good reliability.

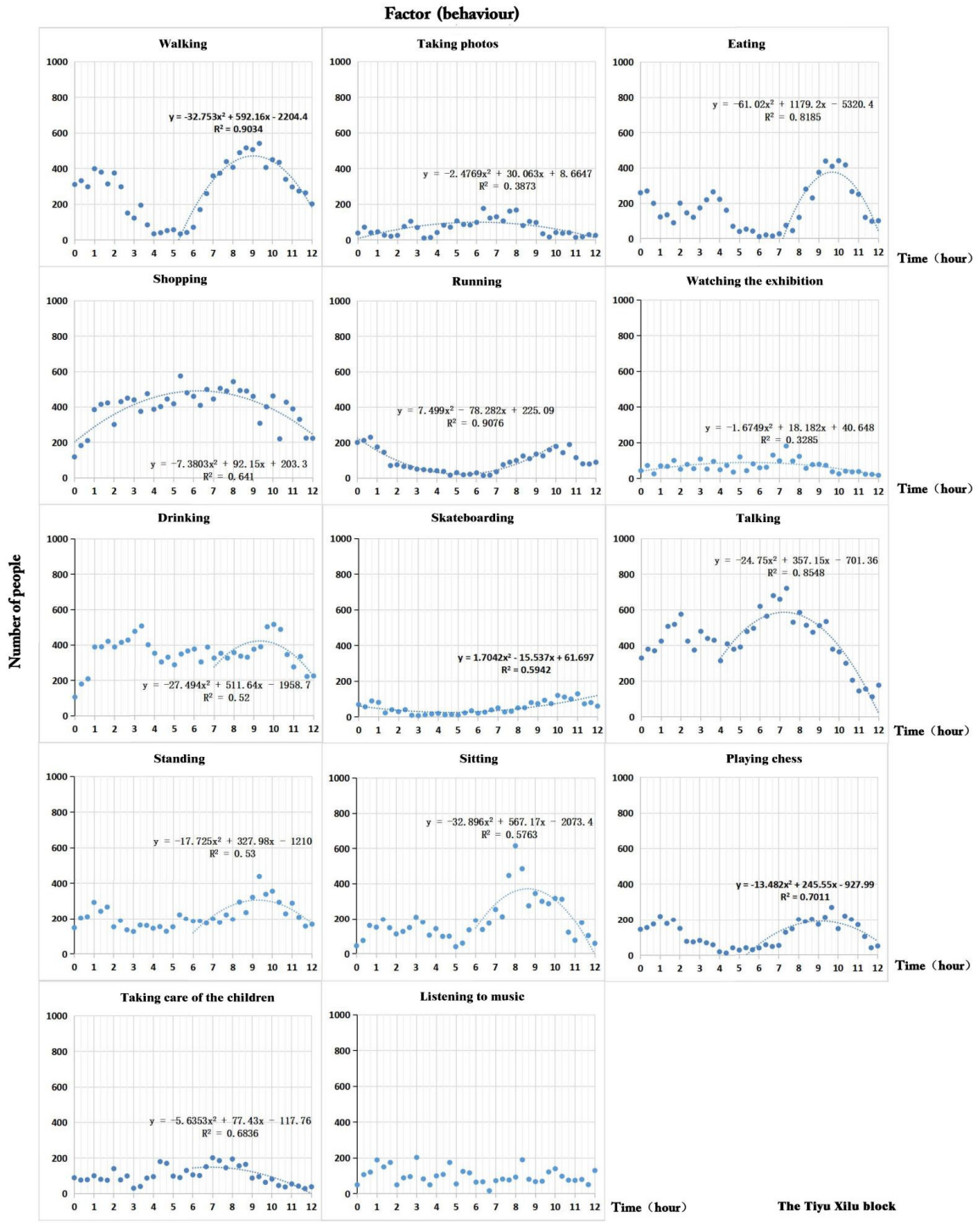


Figure 22. Relationship between group behaviour and time in Case A.

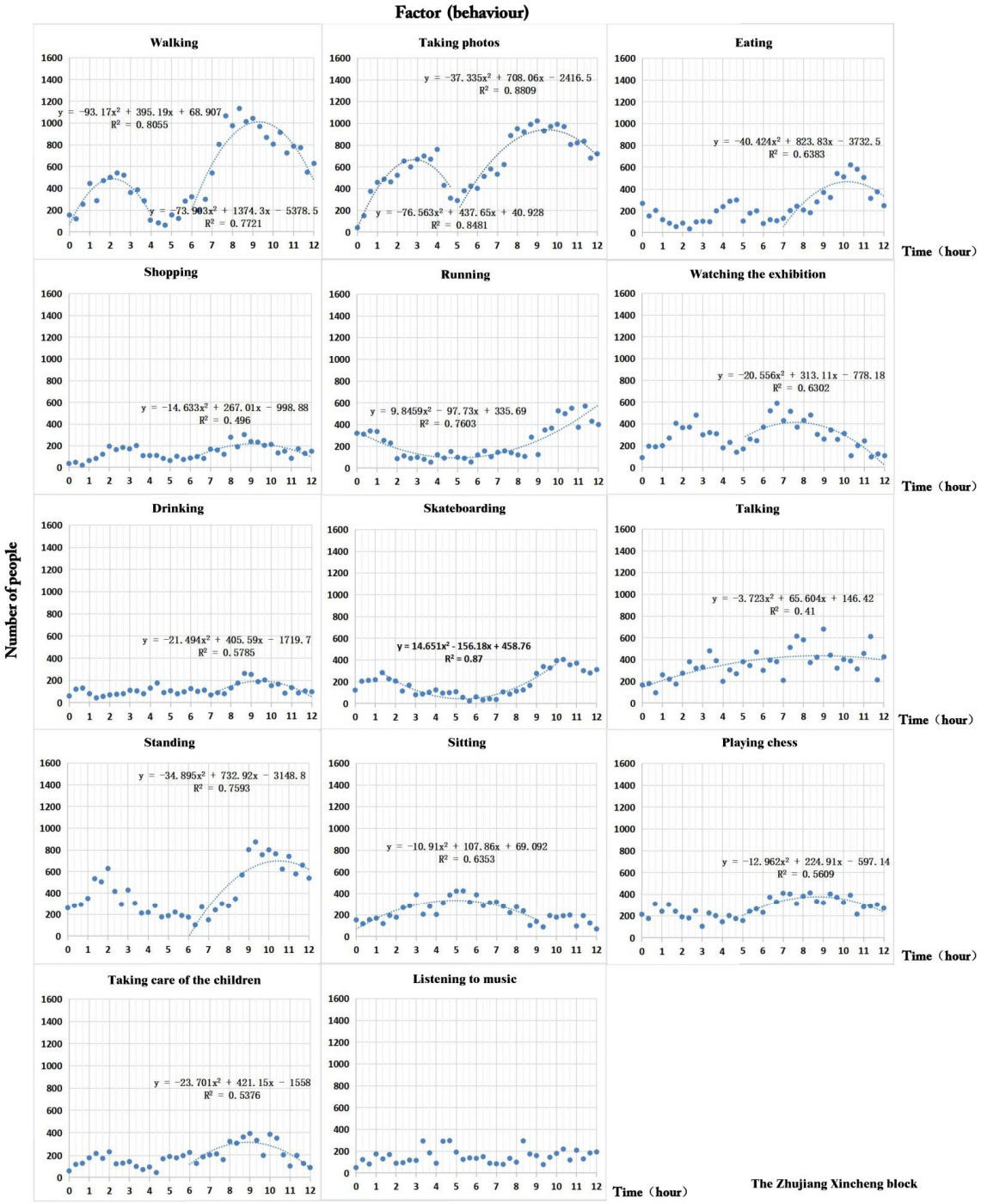


Figure 23. Relationship between group behaviour and time in Case B: 0–12 in Figure 24 and Figure 25 represent the respective hours of the survey (i.e., 9:00 a.m.–9:00 p.m.).

Under the incomplete polynomial relationship mentioned above (Section 3.3), the following results can be obtained:

(1) Related results of Case A: First, the top three with the peak number of behaviours are as follows: (a) 721 people were talking at 4:20 p.m.; (b) 615 people were sitting at 5:00 p.m.; and (c) 575 people were shopping at 2:20 p.m. Second, the top three behaviours that increase rapidly over time are eating, sitting, and walking. The commonality between the three behaviours is that the number of behaviours is relatively low from 1:00 to 3:00 in the afternoon, whereas the number is highest from 6:00 to 7:00 in the evening. Third, the characteristics of other behaviours are not very obvious from 9:00 a.m. to 12:00 p.m.,

except for running and skateboarding, which have high numbers in the early morning and evening and low numbers in the afternoon (1:00 to 3:00).

(2) Related results of Case B: First, the top three with the peak number of behaviours are as follows: (a) 1133 people were walking at 5:20 p.m.; (b) 1022 people were taking photos at 6:00 p.m.; and (c) 874 people were standing at 6:20 p.m. Second, the top three behaviours that increase rapidly over time are walking, eating, and taking photos. The commonality of the three behaviours is that the number of behaviours is relatively low from 1:00 p.m. to 3:00 p.m., whereas the number is highest from 6:00 to 7:00 in the evening. Among them, the two behaviours of standing and taking photos showed a small peak in the morning and a large peak in the evening. Third, running and skateboarding are characterised by a high number in the early morning and evening and a low number in the afternoon, which is similar to Case A. Fourth, unlike Case A, the highest number of sittings occurs from 1:00 to 3:00 p.m., and the number is relatively low in the morning and evening.

4.4. Cognitive Survey and Satisfaction Analysis of Urban Public Spaces

The results obtained using the NPS are listed in Tables 1 and 2.

Table 1. Analysis and comparison of NPS data for public spaces in Case A.

Problem Description	Score	NPS	User Type
Busy—Quiet	2.26	92.87%	Extreme promoter
Shoppable—Unshoppable	2.74	90.48%	Extreme promoter
Sparse—Crowded	4.43	66.67%	Detractors
Bright—Dim	3.71	92.86%	Extreme promoter
Open—Narrow	2.81	92.86%	Extreme promoter
Commercial—Vivacious	3.19	80.95%	Promoter
Cultural—Uncultural	4.07	85.71%	Promoter
Static—Dynamic	2.86	85.72%	Promoter
Historical—Modern	4.43	83.34%	Promoter
Gastronomic—Less gourmet	3.07	83.33%	Promoter
Prosperous—Lonely	2.57	92.87%	Extreme promoter
Well-trafficked—Traffic-choked	5.24	52.39%	Detractors
Greenish—Less green	5.26	52.38%	Detractors
Leisurely—Abustle	4.36	73.81%	Passives
Enthusiastic—Cold	2.98	92.86%	Extreme promoter
Young—Old	2.76	92.86%	Extreme promoter
Well-managed—Poorly managed	3.69	90.48%	Extreme promoter
Clean—Polluted	4.14	80.95%	Promoter
Orderly—Disordered	4.14	78.57%	Passives
Safe—Dangerous	2.95	92.86%	Extreme promoter
Well-equipped—Deficient	3.79	85.72%	Promoter
Popular—Unpopular	2.38	85.72%	Promoter
Visually appealing—No visual appeal	5.64	45.24%	Detractors
Total score	83.47	78.20%	-

The comparison (Tables 1 and 2) shows that the total recommended value of the public space of Case B is 91.30%, which is higher than that of Case A (78.20%), indicating that the urban public space of the former is in a better overall condition and more popular. The User Type shows that among the twenty-three evaluations, six of the public spaces of Case A were substandard (less than 80%), whereas two evaluations of Case B were substandard. This is consistent with the description of the overall recommended value, indicating that the public space of Case A needs to be improved further.

For Case B, the top three characteristics of public spaces with high scores were (1) suitable for photography, (2) attractive, and (3) open and inclusive. However, this case also exhibits undesirable characteristics. Users perceive public spaces as somewhat monotonous in colour, and their overall ambience has not yet reached the desired level of elegance.

Table 2. Analysis and comparison of NPS data for public spaces in Case B.

Problem Description	Score	NPS	User Type
Avant-garde—Traditional	2.98	84.21%	Promoter
International—Non-international	3.21	87.72%	Promoter
Charming—Unglamorous	2.96	87.72%	Promoter
Dynamic—Static	3.30	85.97%	Promoter
Artistic—Non-artistic	3.07	85.97%	Promoter
Irregular—Regular	3.14	89.48%	Promoter
Shocking—Ordinary	3.51	85.96%	Promoter
Photogenic—Unphotographed	2.49	97.74%	Extreme promoter
Leisurely—Busy	3.35	89.47%	Promoter
Visual novelty—Timeworn	3.23	87.72%	Promoter
Colourful—Monochromatic	4.25	77.20%	Passives
Rounded—Orthogonal	3.54	82.46%	Promoter
Attractive—Unappealing	2.72	96.49%	Extreme promoter
Skew—Square	3.47	89.48%	Promoter
Pedestrian—Vehicular	2.51	91.23%	Extreme promoter
Green—Non-green	3.25	91.23%	Extreme promoter
Sudden—Predictable	3.47	87.72%	Promoter
Enthusiastic—Icy	3.79	80.70%	Promoter
Deconstructive—Ordinary	3.32	87.72%	Promoter
Elegant—Civilian	3.58	78.95%	Passives
Changeable—Monotonic	2.96	92.98%	Extreme promoter
Inclusive—Introverted	2.75	94.74%	Extreme promoter
Youthful—Old	3.07	91.23%	Extreme promoter
Total score	73.92	91.30%	-

User type in this table: Extreme Promoter (90% and above); Promoter (80–90%); Passives (70–80%); Detractors (0–70%). Because negative characteristics were assigned large values and positive characteristics small values on the scale, the higher the average score, the lower the popularity of the feature.

For Case A, the three characteristics with the lowest scores were (1) no visual attraction, (2) lack of greenery, and (3) traffic congestion. Second, the public space is narrow, and there is a certain degree of disorder, which is also criticised in these aspects. The top three most popular characteristics were (1) prosperous and busy, (2) enthusiastic and open, and (3) available for shopping.

5. Discussion

5.1. Relationship between Group Categories, Behaviours, and Urban Public Spaces

Firstly, we obtained the proportions of the group categories (Figure 24). In the original public space, the sorting result was resident > entertainer > worker, whereas in the new public space, it was entertainer > resident > worker. The proportion of entertainers in the new public space increased significantly, possibly because of the shortcomings in the original case, such as narrow streets and lack of greenery, which made it difficult to attract entertainers. In contrast, wide squares and flexible public spaces in the new public space provided more opportunities for entertainers. The above results are similar to the conclusion of Zhang and Zhuang, who also noted that "the large non-linear space brings people a sense of assimilation of natural environmental recreation" [77,78]. Iribarne mentioned that there are many positive measures to improve urban public spaces in China, such as promoting the mixed use of space, which would make public spaces more attractive [6]. All these studies have confirmed the superiority of new urban public spaces, which can attract people.

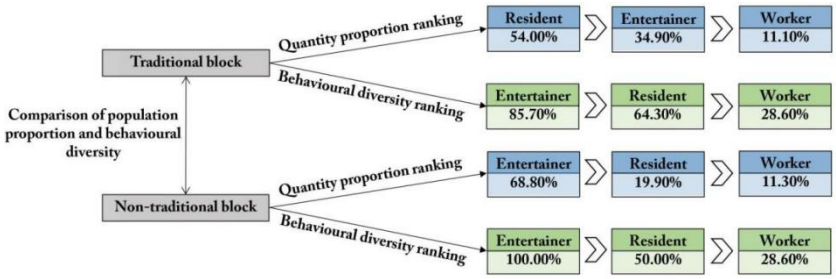


Figure 24. Comparative analysis of quantitative proportion and behavioural diversity.

Secondly, the behavioural diversity of the different groups was obtained. In both cases, the coverage rate of activity behaviours was ranked as follows: entertainer > resident > worker. However, if we analyse the behaviour of a particular group of people, their specific numbers will appear differently (Figure 24). Two trends can be observed in these results. First, the behavioural diversity of entertainers is higher than that of residents. This is because, although the proportion of residents in the original public space is relatively high, 72.60% are older adults and children, and their behaviours mainly consist of sitting, resting, or chatting. However, entertainers have more diverse behavioural patterns. The other trend is that the behavioural diversity of entertainers in the new urban public space is higher than that in the original case. This result is consistent with those of Stanley et al., who reported that open spaces in many cities have proven to be particularly flexible in serving the general population and can accommodate the diverse activities of people [32]. Cherfaoui and Djelal also stated that urban public spaces must be multifunctional and able to adapt to rapid and unpredictable changes to meet the needs of users over time [82]. It can also be concluded that the new public space offers better spatial flexibility.

Thirdly, the results show the behavioural preferences of the different groups (Figure 25). Residents in the original public space preferred static behaviour. However, residents in the new public space preferred dynamic behaviours. The majority of entertainers in the original case tended to be dynamic and preferred shopping. However, 72.70% of the entertainers in the new public space tended to be dynamic and preferred taking photos. The reason for this result may be that the latter provides a public space on a larger scale, providing residents with the opportunity to exercise, whereas the former is a smaller public space and is suitable for small-scale static behaviours. Commercial spaces in the original case bring many consumption opportunities to entertainers, while new public spaces have relatively less commercial space, but more art or blue-green spaces, which attract entertainers to take photos. However, in Iribarne's study of new public spaces, he observed the phenomenon of many idle open spaces [6], which may be because the scale and needs of users were not considered before the design. This finding confirmed the significance of our study from a different perspective. Our study also found that residents in the original case were generally concerned about the number or comfort of leisure facilities compared with green or other spatial features. Stasiak also confirmed the importance of facility comfort, mentioning that their location should encourage conversation and allow users to observe their surroundings to improve the quality of life of older adults [58]. Entertainers in the new public space cared more about attractiveness, reflecting the advantages of open squares and fresh vision. Hamzah and Ebraheem also noted that the redevelopment of urban forms and structures should identify individuals' preferred movement patterns [59].

These three rules have a certain extensibility and universality in urban design, which also put forward requirements for the design of two types of urban public spaces. The former should not only make full use of its existing commercial space advantages but also strive to create a humanised space and be equipped with comfortable facilities. The latter must fully utilise its open outdoor space to attract groups, create a more interactive public space, and meet different behavioural needs.

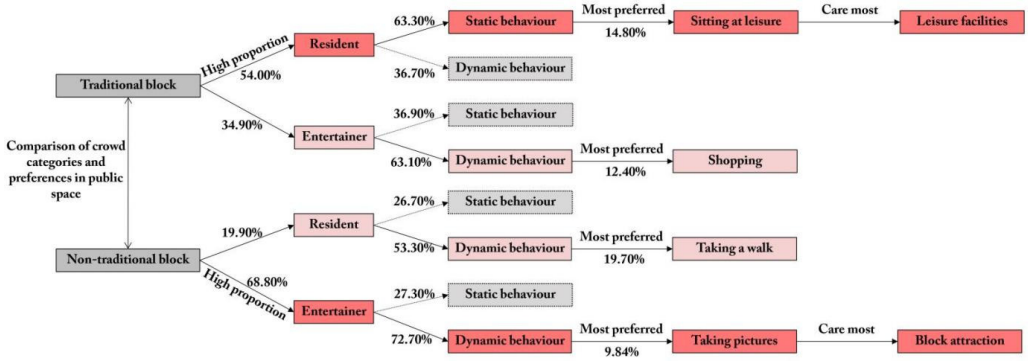


Figure 25. Comparative analysis of selection preferences.

5.2. Relationship between the Growth Rule of Different Groups and the Urban Public Space

This study established a correlation between the number of groups and the time (Figure 26). The growth rate ranking of original case was as follows: entertainer > resident > worker. The growth rate ranking of the new case was consistent with this pattern; however, the specific figures were different. The growth rates of entertainers and residents in the new public space were significantly greater than those in the latter. This result is attributed to the presence of wide squares and diverse public spaces that attract residents and facilitate various forms of dynamic activities. Abundant public spaces are highly attractive to other groups, resulting in the continuous growth of entertainers. Figure 21 also shows that the number of residents was initially larger than that of entertainers, proving that the new public space in the early morning was still dominated by residents. At about 9:20 p.m., entertainers gradually became the "mainstream". Yu, Sun, and Wu also studied the recreational behaviours and spatiotemporal features of residents, but found no regularity in the relative activity levels of green areas, squares, and streets [67]. This may be because the three communities studied were quite different, and there was no spatiotemporal research on different behaviours; therefore, no regularities were obtained.

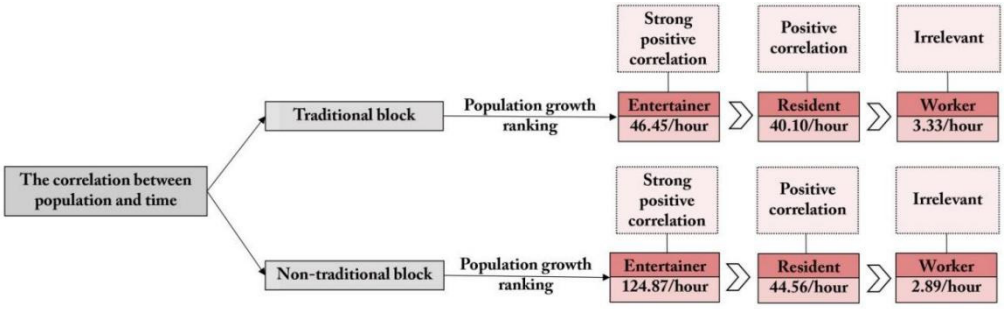


Figure 26. Comparative analysis of the growth rate of different groups.

For both types of public space, entertainers ranked first. This suggests that we need to consider the status and preferences of entertainers. A study of urban public space in Hong Kong argued that urban open spaces should be transformed into recreational land, which is crucial for urban life [68]. This confirms that entertainers will be the most important group in urban public spaces. With regard to the correlation between the number of groups and time, entertainers showed a strong positive correlation, residents showed a weak positive correlation, and workers showed no correlation. In terms of the degree of fit of the linear relationship, entertainers were the highest, residents were the second highest, and workers were the lowest. This shows that the growth of entertainers and residents is more in line with a linear relationship. This finding is consistent with the results discussed above.

5.3. Relationship between the Rule of Different Behavioural Activities and Urban Public Spaces

The relationship between behaviour and time was an incomplete polynomial for the two cases. The polynomial R^2 values of most behaviours were greater than 0.50, demonstrating good reliability (Figures 22 and 23).

First, we analyse the peak behaviour quantity (Figure 27). In the original case, the top three activities were talking, sitting, and shopping. This is because the proportion of residents was the highest. In the evenings, they go outdoors for leisure, mainly engaging in static behaviours. Commercial pedestrian streets are the largest attractions for entertainers. Consumer behaviour greatly promotes the vitality of the public space, which usually occurs in the afternoon. In the new public space, the top three activities were walking, taking photos, and standing. The new spaces attracted many visitors, who usually came towards the evening time to watch the fountains and light shows.

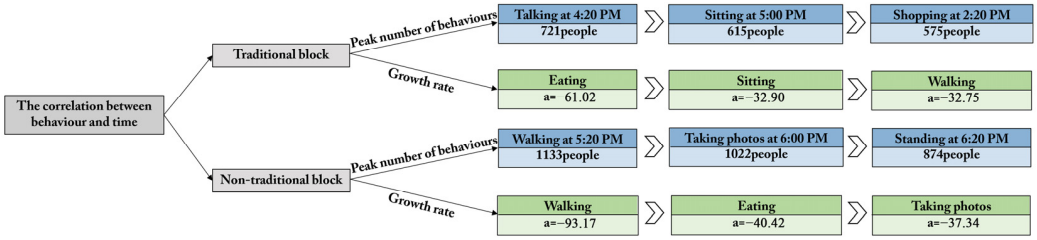


Figure 27. Comparative analysis of the rule of behavioural activities.

Second, we analysed the relationship between the number of behaviours over time (Figure 27). In the original case, the top three that increased rapidly were eating, sitting, and walking. The commonality of these behaviours is that they were low from 1:00 p.m. to 3:00 p.m., whereas they were highest from 6:00 p.m. to 7:00 p.m., which further explains the clustering phenomenon in the evening. In the new public space, the top three were walking, eating, and taking photos. Among these, taking photos showed a small peak in the morning and a large peak in the evening. It can be seen that at night, there were some dynamic behaviours in the original case. Conversely, there are always dynamic behaviours in new public spaces.

Third, we analysed the relationships between sports behaviour, rest behaviour, and time. The frequency of skateboarding and running was both high in the morning and after dinner, whereas it was low from 1:00 to 3:00 p.m. Residents often exercise in the morning and evening, while the daytime is too hot, resulting in fewer sports activities. In summary, hot weather was the main reason for the decrease in the number of exercise activities. Unlike the original case, the number of people sitting in the new public space was the highest from 1:00 to 3:00 p.m. and lower in the morning and evening. In contrast to residents in the original case who can go home to rest, these entertainers have no fixed resting place, and after 3:00 p.m., they usually start other activities. It was observed that the square was large in scale and had limited nodes for resting, which reduced the rest behaviour, and many people had to continue walking in an exhausted state.

In summary, for the original case, static behaviours decreased in the afternoon and increased in the evening, whereas dynamic behaviours were low in the day and increased in the evening. For the new public space, dynamic behaviours had small and large peaks in the morning and evening, and the intensity was highest in the evening, whereas static behaviour showed a higher intensity in the afternoon and the lowest intensity in the evening.

By comparing the relationship between behaviour and time, three important public spaces were identified. The first is commercial spaces. Commercial streets significantly increase the vitality of the public space. Prior research has confirmed that consumers play a major role in the growth of public spaces [68]. Nguyen, Han, and Sahito illustrated that commercial spaces play a leading role in urban development [83]. This demonstrates the advantages of commercial spaces, especially in the original case. Another is art spaces. The flexible space and fresh visual appeal of the new public space propelled them. Stasiak

took the Art Walk as an example to illustrate the importance of art spaces in attracting people [58], which is consistent with the results of our study. The third is blue-green spaces. However, the quantity and scale of the blue-green spaces were insufficient, consistent with the findings of Silva et al. [84], who argued that the availability of green spaces was limited or unevenly distributed. Some scholars have also studied the relationship between user behaviour and specific spatial configurations using Space Syntax and made relevant predictions on the experience of spatial nodes [14].

The above discussion provides valuable guidance for the development of public spaces. It is reasonable to conclude that all cases need to improve their blue-green spaces and that original public spaces must include art spaces. Original public spaces can be created through participatory experiences and interactions. New public spaces require the addition of stasis nodes and small-scale public spaces, which can help break the straight and monotonous rhythms of existing streets or squares. These adjustments address psychological and visual fatigue.

5.4. Relationship between the Evaluation Results and Urban Public Spaces

The results showed that (Figure 28) the overall score of the new public space was better than the others. The positive recommendation rate for the former was 91.30%, whereas that for the latter was 78.20%. In the original case, the three prominent disadvantages are (1) no visual attraction, (2) lack of greenery, and (3) traffic congestion. The three most popular traits are (1) alive and bustling, (2) enthusiastic and open, and (3) available for shopping. In the new public space, the three prominent merits are (1) suitable for photography, (2) attractive, and (3) open and inclusive.

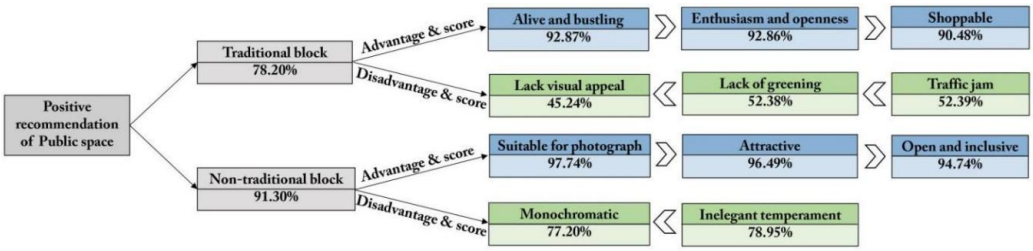


Figure 28. Comparative analysis of evaluation results.

The above evaluation reveals a difference between the two cases. The public spaces in the original case are generally arranged linearly and have strong mobility. Commercial spaces are often set up on the ground floor, which enable users to complete tasks while walking. Therefore, the edible and shoppable factors are the merits. However, the distribution of commercial spaces is too concentrated, resulting in traffic congestion. This is similar to the findings of Zhang et al., who proposed that the distribution of the commercial spaces had different effects on pedestrian activities and that the local expansion of street space could enhance tourists' interest and alleviate traffic congestion [69]. In the new public space, various spaces between the buildings and streets are mainly used to arrange coffee shops, florists, etc. These stores have more diverse ways of enclosing space. Zhang et al. emphasised the study of spatial vitality by delving into the interaction between space and users to analyse the underlying mechanisms, which is consistent with the view of this study [70].

5.5. Limitations of Research

We finally came up with the direction for improving the urban public space. However, some limitations were found in the research process that should be further addressed.

First, the sample size is small. Two cases were represented by typical cases, whereas others of the same type were not studied. Considering that the environmental characteristics of different urban public spaces in the same type are also different and that user

behaviour also differs, it is necessary to explore more cases in the future to obtain more universal conclusions.

Second, the scope of this study was limited. Because of limited time and resources, the research scope of Case A in this study was approximately 700 m × 400 m, whereas that of Case B was approximately 700 m × 620 m. Considering the diversity of urban public space, the scope of future research should be expanded to obtain more accurate analysis data.

In addition, the time of this study has some limitations. This study did not consider the influence of other seasons and future climatic uncertainty [85], particularly cold climates during winter. In the future, it will be necessary to explore the behavioural patterns of groups in different seasons to reduce errors.

6. Conclusions and Outlook

6.1. Conclusions

From the perspective of the *flâneur*, this paper chose two typical urban public spaces for examination, aiming to explore how to improve the quality of the two types of urban public space. This study proposes a comprehensive research method for urban public spaces. The conclusions of this study are as follows:

First, this study identified the proportions, behavioural diversity, and preferences of different groups in public spaces. Regarding the number proportion, the order of the original case was residents > entertainers > workers, whereas that of the new case was entertainers > residents > workers. From the perspective of behavioural diversity, the order in both cases was entertainers > residents > workers. For the original case, residents prefer static behaviour and sitting, whereas entertainers prefer dynamic behaviour and shopping. For new public spaces, residents prefer dynamic behaviour and walking, while entertainers prefer dynamic behaviour and taking photos.

Second, in the linear correlation between the number of people and time, entertainers exhibited a strong positive correlation, residents displayed a weak positive correlation, and workers showed no correlation. In terms of the degree of fit of the linear relationships, entertainers exhibited the highest, residents the second highest, and workers the lowest. In terms of the growth rate of different groups, both cases were in the order of entertainer > resident > worker, whereas the growth rate of entertainers in the new public space was significantly higher than that in the original one. This highlights the importance of focusing on the behaviours and preferences of entertainers to improve the quality of public spaces.

Third, the correlation between group behaviour and time was determined. In terms of the peak number of behaviours, entertainment and consumption activities usually occurred in the afternoon, while residents usually sat and chatted in the evening in the original case. For new public spaces, nightfall was the most attractive time for entertainers. In terms of quantitative changes in behaviour, static behaviours decreased in the afternoon and increased in the evening, whereas the intensity of dynamic behaviours was low in the day and increased in the evening in the original case. For new public spaces, dynamic behaviours had small and large peaks in the morning and evening, whereas static behaviours showed a higher intensity in the afternoon and the lowest intensity in the evening. This research has shown that commercial, blue-green, and art spaces are the three important types of public spaces in urban areas.

Finally, a comprehensive evaluation was obtained based on the NPS scale. The quality of the new public space was better than that of original one. The reasons are as follows: new public spaces are dominated by diverse spaces, which have many advantages, while the original one is mainly a linear space; although it has certain advantages in terms of a bustling atmosphere and shopping, the public space needs to be improved in terms of visual appeal, greenery, and traffic congestion.

6.2. Inspiration for Design

From the perspective of the *flâneur*, this paper investigated two typical cases in Guangzhou and attempted to answer the questions mentioned in the introduction.

(1) As the proportion of new nonlinear or super-scale buildings increases, new public spaces bring about an influx of people. Free space can accommodate a variety of behaviours from different groups, which promotes the development of the city. New public spaces have many advantages, such as open squares, blue-green spaces, good visual effects, and the design of grey spaces. However, they require an increase in the number of stagnant nodes and small-scale public spaces, creating more opportunities for rest.

(2) Original public spaces still have sufficient advantages in some respects, which are mainly reflected in (a) having plenty of commercial space, (b) having a rich flavour of life and bustling atmosphere, and (c) having a sense of history and culture. The trend of "urban renewal" is continual, and original public spaces should make full use of the current advantages and focus on upgrading the following points: a. create a humanised space environment, equipped with comfortable facilities; b. focus on the creation of art spaces to enhance the visual appeal; c. increase the proportion of blue-green spaces in different forms and scales; and d. improve the current situation of congestion in public spaces, appropriately expand the size of original streets, add small squares, and relieve the current land use pressure.

Public spaces are an important component of urban development. High-quality urban public spaces are conducive to the healthy development of people. Starting from the practical problem of city stock renewal, this study conducted research from the unique perspective of the *flâneur* and verified the significance of the integration development between different disciplines. Finally, future development directions of the two types of public spaces are proposed with the aim of bringing new ideas to future urban planning, design, and research.

Author Contributions: L.W.: Conceptualization, Methodology, Software, Investigation, Resources, Writing—original draft, Writing—review and editing. X.L.: Conceptualization, Investigation, Methodology, Project administration, Resources, Validation, Writing—original draft, Writing—review and editing, Funding acquisition. H.Z.: Data curation, Software, Writing—review and editing. L.C.: Writing—review and editing, Funding acquisition. All authors have read and agreed to the published version of the manuscript.

Funding: This research is supported by the 2022 Guangdong Philosophy and Social Science Foundation (Grant No. GD22XGL02); the National Natural Science Foundation of China (Grant No. 52108011); the Guangdong Basic and Applied Basic Research Foundation (Grant No. 2024A1515012129 and Grant No. 2023A1515011137); the Guangzhou Basic and Applied Basic Research Foundation (Grant No. 2024A04J9930); the Department of Housing and Urban-Rural Development of Guangdong Province (Grant No. 2021-K2-305243); and the Department of Education of Guangdong Province (Grant No. 2021KTSCX004).

Data Availability Statement: Data will be made available on request. The data are not publicly available due to privacy issues related to daily travel of community residents.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Safaee, M.M.; Nematipour, N. Development of Urban Public Spaces Using Urban Underground Spaces: A New Method To Improve Quality Of Life (QOL) in Tehran Metropolis. *IOP Conf. Ser. Earth Environ. Sci.* **2021**, *703*, 012025. [CrossRef]
2. Shu, P.; Cai, X.; Zhang, P. Improvement of Urban Residential External Environment Space Quality under Urban Sustainable Development: On Residential Area in Tianjin. *Build. Energy Effic.* **2018**, *46*, 29–36. [CrossRef]
3. Zhou, Q.; Zheng, Y. Research on the Spatial Layout Optimization Strategy of Huaihe Road Commercial Block in Hefei City Based on Space Syntax Theory. *Front. Comput. Neurosci.* **2023**, *16*, 1084279. [CrossRef] [PubMed]
4. Goledzinowska, A. Development Policy or Palliative Therapy? Investing in the Quality of Public Spaces in the Distance from Large Urban Centers. In Proceedings of the 49th Congress of the International Society-of-City-and-Regional-Planners (ISOCARP), Brisbane, Australia, 1–4 October 2013; pp. 421–433. Available online: https://www.webofscience.com/wos/alldb/full-record/WOS:000347398400033 (accessed on 23 January 2024).
5. Erkang, F.; Ping, Z. Research on Optimization of Public Space Addressing in Urban Open Case Based on Topological Complexity. In *Communications, Signal Processing, and Systems. CSPS 2018*; Lecture Notes in Electrical Engineering; Liang, Q., Liu, X., Na, Z., Wang, W., Mu, J., Zhang, B., Eds.; Springer: Singapore, 2019; Volume 515. [CrossRef]

6. Iribarne, J. Urban Form and the Social Use of Space. In Proceedings of the 24th International Seminar on Urban Form, Valencia, Spain, 27–29 September 2017; pp. 489–499. [CrossRef]
7. Julià, P.B.; Ferreira, T.M. From Single- to Multi-Hazard Vulnerability and Risk in Historic Urban Areas: A Literature Review. *Nat. Hazards* **2021**, *108*, 93–128. [CrossRef]
8. Wikantiyoso, R.; Suhartono, T.; Triyosoputri, E.; Sulaksono, A.G. Sustainable Urban Spatial Resilience in Improving the Quality of Livable Green Open Space (GOS). Case Study: An Implementation of Green City Development Program (GCDP) in Malang City Center Development Area, Indonesia. *IOP Conf. Ser. Earth Environ. Sci.* **2021**, *780*, 012025. [CrossRef]
9. Hidayat, J.T.; Ridwan, M. Assessment of the Quality of Public Green Open Space (GOS) in the Urban Fringes in Response to Urban Sprawl Phenomenon (Case Study District of Tanah Sareal, Bogor City). *IOP Conf. Ser. Earth Environ. Sci.* **2018**, *179*, 012027. [CrossRef]
10. Hoffimann, E.; Campelo, D.; Hooper, P.; Barros, H.; Ribeiro, A.I. Development of a Smartphone App to Evaluate the Quality of Public Open Space for Physical Activity. An Instrument for Health Researchers and Urban Planners. *Landsc. Urban Plan.* **2018**, *177*, 191–195. [CrossRef]
11. Chen, X.; de Vries, S.; Assmuth, T.; Dick, J.; Hermans, T.; Hertel, O.; Jensen, A.; Jones, L.; Kabisch, S.; Lanki, T.; et al. Research Challenges for Cultural Ecosystem Services and Public Health in (Peri-)Urban Environments. *Sci. Total Environ.* **2019**, *651*, 2118–2129. [CrossRef] [PubMed]
12. Wang, L.; Zhao, X.; Xu, W.; Tang, J.; Jiang, X. Correlation Analysis of Lung Cancer and Urban Spatial Factor: Based on Survey in Shanghai. *J. Thorac. Dis.* **2016**, *8*, 2626–2637. [CrossRef]
13. Carr, S.; Francis, M.; Rivlin, L.G.; Stone, A.M. *Public Space*; Cambridge University Press: Cambridge, UK, 1992.
14. Mahmoud, A.M.; Khalil, H.B.; Sobhy, T.; Farouk, H. Space Syntax as a Vital Tool to Enhance Urban Spaces. *ERU Res. J.* **2023**, *2*, 399–414. [CrossRef]
15. Li, S.-Y.; Chen, Z.; Guo, L.-H.; Hu, F.; Huang, Y.-J.; Wu, D.-C.; Wu, Z.; Hong, X.-C. How Do Spatial Forms Influence Psychophysical Drivers in a Campus City Community Life Circle? *Sustainability* **2023**, *15*, 10014. [CrossRef]
16. Hong, X.-C.; Cheng, S.; Liu, J.; Guo, L.-H.; Dang, E.; Wang, J.-B.; Cheng, Y. How Should Soundscape Optimization from Perceived Soundscape Elements in Urban Forests by the Riverside Be Performed? *Land* **2023**, *12*, 1929. [CrossRef]
17. Li, K.; Liu, X.; Zhang, H.; Ma, J.; He, B.-J. Evaluating and improving the adaptability of commonly used indices for predicting outdoor thermal sensation in hot and humid residential areas of China. *Dev. Built Environ.* **2023**, *16*, 100278. [CrossRef]
18. Liu, X.; He, J.; Xiong, K.; Liu, S.; He, B.-J. Identification of factors affecting public willingness to pay for heat mitigation and adaptation: Evidence from Guangzhou, China. *Urban Clim.* **2023**, *48*, 101405. [CrossRef]
19. Benjamin, W. *The Archades Project*; Eiland, H.; Mclaugulin, K., Translators; Harvard University Press: Cambridge, MA, USA, 2002.
20. Sigüenza, J. Riddle of Walter Benjamin (El Enigma de Walter Benjamin). *Acta Poética* **2013**, *34*, 77–100. Available online: https://www.webofscience.com/wos/alldb/full-record/SCIELO:S0185-30822013000200005 (accessed on 24 January 2024). [CrossRef]
21. Castigliano, F. *Flâneur: The Art of Wandering the Streets of Paris*; CreateSpace: Scotts Valley, CA, USA, 2017.
22. Robert, P.; Rey, A. *Le Grand Robert de la Langue Française*; Dictionnaires Le Robert; Educa Books: Paris, France, 2001.
23. Larousse, P. *Grand Dictionnaire Universel du XIXe Siècle*; Larousse et Boyer; Slatkine: Paris, France, 1867.
24. Benjamin, W. *Paris—The Capital of the 19th Century*; The Commercial Press: Beijing, China, 2013.
25. Weber, M. *The Protestant Ethic and the Spirit of Capitalism*; Charles Scribner's Sons: New York, NY, USA, 1958.
26. Fontana, M.P.; Cabarrocas, M. Learning to See through the Cities. In Proceedings of the 6th Workshop on Educational Innovation in Architecture (JIDA), Barcelona, Spain, 22–23 November 2018; pp. 124–137. [CrossRef]
27. Paek, S.H. Korean Commercialism and Sense of Place: A Case Study of Shin-chon Commercial District through Two Concepts of Walter Benjamin's *Flâneur* and Mimesis. *J. Asian Arch. Build. Eng.* **2008**, *7*, 193–200. [CrossRef]
28. Bairner, A. Urban Walking and the Pedagogies of the Street. *Sport Educ. Soc.* **2011**, *16*, 371–384. [CrossRef]
29. Minnaard, L. The Postcolonial Flaneur: Ramsey Nasr's 'Antwerpse Stadsgedichten'. *Dutch Crossing* **2013**, *37*, 79–92. [CrossRef]
30. Trivundza, I.T. Photographic Flaneur, Street Photography, and Imagi(ni)ng the City. *Int. J. Commun.* **2019**, *13*, 5292–5309.
31. Arnold, D. Panoptic Visions of London: Possessing the Metropolis. *Art History Art Hist.* **2009**, *32*, 332–350. [CrossRef]
32. Stanley, B.W.; Stark, B.L.; Johnston, K.L.; Smith, M.E. Urban Open Spaces in Historical Perspective: A Transdisciplinary Typology and Analysis. *Urban Geogr.* **2012**, *33*, 1089–1117. [CrossRef]
33. Afacan, Y. Achieving Inclusion in Public Spaces: A Shopping Mall Case Study. In *Designing Inclusive Systems*; Springer: Berlin/Heidelberg, Germany, 2012; pp. 85–92.
34. Guo, W.; Wen, H.; Liu, X. Research on the psychologically restorative effects of campus common spaces from the perspective of health. *Front. Public Health* **2023**, *11*, 1131180. [CrossRef] [PubMed]
35. Ercan, A.; Müge, Z. Public Spaces of Post-industrial Cities and Their Changing Roles. *METU J. Fac. Archit.* **2007**, *24*, 115–137.
36. Bacová, A.; Puškár, B.; Vráblová, E. Residentialization of Public Spaces: Bratislava Example. *IOP Conf. Ser. Mater. Sci. Eng.* **2017**, *245*, 042012. [CrossRef]
37. Reith, A.; Orova, M. Do Green Neighbourhood Ratings Cover Sustainability? *Ecol. Indic.* **2015**, *48*, 660–672. [CrossRef]
38. Teixeira, M.C.; Maciel, M.; Pereira Costa, S. The Role of the Plot in Engendering Environmental Quality: From Unplanned Favelas to the Planned Subdivisions of New Blocks. In Proceedings of the 24th International Seminar on Urban Form, Valencia, Spain, 27–29 September 2017; pp. 343–351. [CrossRef]

39. Xuan, W.; Zhao, L. Research on Correlation between Spatial Quality of Urban Streets and Pedestrian Walking Characteristics in China Based on Street View Big Data. *J. Urban Plan. Dev.* **2022**, *148*, 05022035. [CrossRef]
40. Zeng, X. Traffic Sustainable Development Research on Historical Commercial Blocks. In Proceedings of the 2nd International Conference on Education, Sports, Arts and Management Engineering (ICESAME), Zhengzhou, China, 29–30 April 2017; Volume 123, pp. 899–903.
41. Sun, Y.; Lu, W.; Sun, P. Optimization of Walk Score Based on Street Greening—A Case Study of Zhongshan Road in Qingdao. *Int. J. Environ. Res. Public Health* **2021**, *18*, 1277. [CrossRef] [PubMed]
42. Cao, J.; Duncan, M. Associations among Distance, Quality, and Safety When Walking from a Park-and-Ride Facility to the Transit Station in the Twin Cities. *J. Plan. Educ. Res.* **2019**, *39*, 496–507. [CrossRef]
43. Mishra, H.S.; Bell, S.; Vassiljev, P.; Kuhlmann, F.; Niin, G.; Grellier, J. The Development of a Tool for Assessing the Environmental Qualities of Urban Blue Spaces. *Urban For. Urban Green.* **2020**, *49*, 126575. [CrossRef]
44. Branea, A.-M.; Găman, M.S.; Bădescu, Ş. Network of Green Areas within Collective Housing Communities—Case Study from Timişoara, Romania. *IOP Conf. Ser. Mater. Sci. Eng.* **2017**, *245*, 082018. [CrossRef]
45. Sanders, T.; Feng, X.; Fahey, P.P.; Lonsdale, C.; Astell-Burt, T. Greener Neighbourhoods, Slimmer Children? Evidence from 4423 Participants Aged 6 to 13 Years in the Longitudinal Study of Australian Children. *Int. J. Obes.* **2015**, *39*, 1224–1229. [CrossRef] [PubMed]
46. Simić, I.; Stupar, A.; Djokić, V. Building the Green Infrastructure of Belgrade: The Importance of Community Greening. *Sustainability* **2017**, *9*, 1183. [CrossRef]
47. Barron, S.; Nitoslawski, S.; Wolf, K.L.; Woo, A.; Desautels, E.; Sheppard, S.R.J. Greening Blocks: A Conceptual Typology of Practical Design Interventions to Integrate Health and Climate Resilience Co-Benefits. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4241. [CrossRef] [PubMed]
48. Feng, W.; Ding, W.; Fei, M.; Yang, Y.; Zou, W.; Wang, L.; Zhen, M. Effects of Traditional Block Morphology on Wind Environment at the Pedestrian Level in Cold Regions of Xi'an, China. *Environ. Dev. Sustain.* **2021**, *23*, 3218–3235. [CrossRef]
49. Wang, P.; Goggins, W.B.; Shi, Y.; Zhang, X.; Ren, C.; Lau, K.K.-L. Long-Term Association between Urban Air Ventilation and Mortality in Hong Kong. *Environ. Res.* **2021**, *197*, 111000. [CrossRef] [PubMed]
50. Yang, Y.; Li, J. Study on Urban Thermal Environmental Factors in a Water Network Area Based on CFD Simulation: A case study of Chengnan new district, Xiantao city, Hubei Province. *Environ. Technol. Innov.* **2020**, *20*, 101086. [CrossRef]
51. Watanabe, N.; Setoguchi, T.; Sato, K.; Tsutsumi, T. New City Block Design Approaches Incorporating Environmental Assessment for Downtown Districts in Cities with Severe Winter Climates. *J. Asian Arch. Build. Eng.* **2016**, *15*, 455–462. [CrossRef]
52. Wei, C.; Barona, P.C.; Blaschke, T. A New Look at Public Services Inequality: The Consistency of Neighborhood Context and Citizens' Perception across Multiple Scales. *ISPRS Int. J. Geo-Inf.* **2017**, *6*, 200. [CrossRef]
53. Lu, Y.; Zhu, X. Strategies for optimizing meso-scale spatial layout based on travel demand. WIT Transactions on Ecology and the Environment. In Proceedings of the 11th International Conference on Urban Regeneration and Sustainability (SC), Seville, Spain, 23–25 September 2024; pp. 117–128. [CrossRef]
54. Kumar, S.; Rajak, F. Assessment of Urban Green Open Spaces of Micro- and Meso-Level Zones, Based on the Growth Pattern: Case of Patna City. *Sustainability* **2023**, *15*, 1609. [CrossRef]
55. Ding, W.; Wei, Q.; Jin, J.; Nie, J.; Zhang, F.; Zhou, X.; Ma, Y. Research on Public Space Micro-Renewal Strategy of Historical and Cultural Blocks in Sanhe Ancient Town under Perception Quantification. *Sustainability* **2023**, *15*, 2790. [CrossRef]
56. Pawłowicz, J.A.; Szafranko, E. The impact of preferences of inhabitants of settlements for developers activities. *IOP Conf. Ser. Mater. Sci. Eng.* **2017**, *227*, 012092. [CrossRef]
57. Giddens, A. *The Consequences of Modernity*; Stanford University Press: Redwood City, CA, USA, 1990.
58. Stasiak, A.; Wojtowicz-Jankowska, D. Public Spaces—Coexistence and Participation. *IOP Conf. Ser. Mater. Sci. Eng.* **2017**, *245*, 042026. [CrossRef]
59. Hamzah, M.J.; Ebraheem, M.A. Analyzing Urban Attraction Nodes by Using GIS and Space Syntax (Case Study-Al-Adhamiya). *IOP Conf. Ser. Mater. Sci. Eng.* **2020**, *737*, 012181. [CrossRef]
60. Bauman, Z. From Pilgrim to Tourist: Or a Short History of Identity. In *Question of Cultural Identity*; Hall, S., du Gay, P., Eds.; Sage: London, UK, 1996; pp. 18–36.
61. Blake, L. Edgar Allan Poe in Paris: The Flaneur, the Detournement and the Gothic Spaces of the Nineteenth-Century City. In Proceedings of the Conference on Gothic Voyages—Influences and Appropriations in Europe and America, Paris, France, 2008; pp. 38–49. Available online: https://www.webofscience.com/wos/alldb/full-record/WOS:000283662200003 (accessed on 24 January 2024).
62. Garnica, N. Critical Irony or the Lovers of Ruins: The Aesthete, the Dandy and the Flâneur. *Top. De Filos.* **2016**, *52*, 151–172. [CrossRef]
63. George, D.R. Between Wandering and Decadence: The Figure of the Flaneur En sin Rumbo by Eugenio Cambaceres. In Proceedings of the Purdue University Conference on Romance Languages, Literatures and Film, West Lafayette, IN, USA, 1 January 1998; pp. 496–500. Available online: https://www.webofscience.com/wos/alldb/full-record/WOS:000074689700083 (accessed on 24 January 2024).
64. Coates, J. Key Figure of Mobility: The flâneur. *Soc. Anthr.* **2017**, *25*, 28–41. [CrossRef]
65. Poe, E.A. *The Man of the Crowd*; BookSurge Classics: Charleston, SC, USA, 2009.

66. Maric, J.; Aleksandra, D.; Antonic, B.; Furundzic, D.; Parezanin, V. The Effects of Open Space on Reducing Workplace Stress: Case Study of Business Park in the Post-Socialist Urban Setting. *Sustainability* **2021**, *13*, 336. [CrossRef]
67. Yu, B.; Sun, W.; Wu, J. Analysis of Spatiotemporal Characteristics and Recreational Attraction for POS in Urban Communities: A Case Study of Shanghai. *Sustainability* **2022**, *14*, 1460. [CrossRef]
68. Cheung, D.M.-W.; Tang, B.-S. Recreation Space or Urban Land Reserve? Land-Use Zoning Patterns and the Transformation of Open Space in Hong Kong. *J. Urban Plan. Dev.* **2016**, *142*, 3. [CrossRef]
69. Zhang, L.; Zhang, R.; Yin, B. The Impact of the Built-Up Environment of Streets on Pedestrian Activities in the Historical Area. *Alex. Eng. J.* **2020**, *60*, 285–300. [CrossRef]
70. Zhang, F.; Liu, Q.; Zhou, X. Vitality Evaluation of Public Spaces in Historical and Cultural Blocks Based on Multi-source Data, a Case Study of Suzhou Changmen. *Sustainability* **2022**, *14*, 14040. [CrossRef]
71. Ioannidi, A.; Gavalas, D.; Kasapakis, V. Flaneur: Augmented Exploration of the Architectural Urbanscape. In Proceedings of the 2017 IEEE Symposium on Computers and Communications (ISCC), Heraklion, Greece, 3–6 July 2017; pp. 529–533. Available online: https://www.webofscience.com/wos/alldb/full-record/WOS:000426895800088 (accessed on 26 January 2024).
72. Rook, T.; Wu, H.Y.-J. Defending Lives among Concrete Walls: An Interview with Flaneur Artist, Tom Rook. *East Asian Sci. Technol. Soc. Int. J.* **2022**, *16*, 550–553. [CrossRef]
73. Martins, I.B. Soul of the Streets: The Virtual and the Real Flaneur in a Webdocumentary. In Proceedings of the 10th International Conference on Digital and Interactive Arts (ARTECH 2021), Aveiro, Portugal, 13–15 October 2021; Association for Computing Machinery: New York, NY, USA, 2022. [CrossRef]
74. Thibault, M.; Tarasti, E. *Du Flaneur au Traceur*: Playful bodies in urban spaces. *Semiotica* **2022**, *2022*, 79–94. [CrossRef]
75. Argin, G.; Pak, B.; Turkoglu, H. Through the Eyes of (Post-)Flaneurs Altering rhythm and visual attention in public space in the era of smartphones. In Proceedings of the 38th Conference on Education and Research in Computer Aided Architectural Design in Europe (eCAADe), Berlin, Germany, 16–18 September 2020; pp. 239–248. Available online: https://www.webofscience.com/wos/alldb/full-record/WOS:000651200600025 (accessed on 26 January 2024).
76. Argin, G.; Pak, B.; Turkoglu, H. Post-flneur in Public Space Altering Walking Behaviour in the Era of Smartphones. In Proceedings of the 37th Conference on Education and Research in Computer Aided Architectural Design in Europe and XXIII Iberoamerican Society of Digital Graphics, Joint Conference, Porto, Portugal, 11–13 September 2019; pp. 649–658. Available online: https://www.webofscience.com/wos/alldb/full-record/WOS:000562928600072 (accessed on 26 January 2024).
77. Zhang, R.; Zhuang, W. The Indissoluble Bond between the "Flâneur" and Environment—Behavior Study. *New Archit.* **2018**, *4*, 50–53.
78. Zhang, R.; Zhuang, W. 'Flâneur' A Research Carrier of the Built Environment from a Civilian Perspective. *Archit. J.* **2016**, *12*, 98–102.
79. Benjamin, W. *Einbahnstraße*; CreateSpace Independent Publishing Platform: Scotts Valley, CA, USA, 2015.
80. Bruce, P.; Bruce, A.; Gedeck, P. *Practical Statistics for Data Scientists*; Posts and Telecommunications Press: Beijing, China, 2021.
81. Iversen, G.R.; Gergen, M. *Statistics: The Conceptual Approach*, 1st ed.; Springer: New York, NY, USA, 1997. [CrossRef]
82. Cherfaoui, D.; Djelal, N. Assessing the Flexibility of Public Squares the Case of Grande Poste Square in Algiers. *Cities* **2019**, *93*, 164–176. [CrossRef]
83. Nguyen, T.V.T.; Han, H.; Sahito, N. Role of Urban Public Space and the Surrounding Environment in Promoting Sustainable Development from the Lens of Social Media. *Sustainability* **2019**, *11*, 5967. [CrossRef]
84. de Sousa Silva, C.; Viegas, I.; Panagopoulos, T.; Bell, S. Environmental Justice in Accessibility to Green Infrastructure in Two European Cities. *Land* **2018**, *7*, 134. [CrossRef]
85. Liu, S.; Wang, Y.; Liu, X.; Yang, L.; Zhang, Y.; He, J. How does future climatic uncertainty affect multi-objective building energy retrofit decisions? Evidence from residential buildings in subtropical Hong Kong. *Sustain. Cities Soc.* **2023**, *92*, 104482. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.