


Article

Using Public Participation Geographic Information System to Study Social Cohesion and Its Relationship with Activities and Specific Landscape Characteristics in Shanghai's Modern Historic Parks

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Abstract: Evaluating the perceptions of social cohesion provides an elaborated understanding of the commemorative values of modern heritage. However, little attention has been paid to China's modern historic parks (MHPs) due to the difficulty of capturing spatially explicit information. Utilizing a public participation GIS, we quantified four types of social cohesion in Shanghai's existing MHPs, and analyzed their relationships with different types of activities and specific landscape features. The results show that the MHPs are rich in social cohesion, especially in belonging and place attachment. Social cohesion is spatially associated with leisure and sightseeing activities. The perception of different types of social cohesion varies across spaces with different landscape features. Our findings validate the composition of commemorative values of MHPs, and offer a reference for balancing the preservation and regeneration of modern heritage.

Keywords: urban historic parks; social cohesion; landscape characteristics; regeneration; Shanghai



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1. Introduction

Social cohesion is often described as a state of emotional bonds among members of a society, encompassing aspects such as social connections, trust, and/or overall solidarity among residents [1,2]. It is demonstrated to be a major pathway influencing the relationship between urban green spaces and public health [3–5]. For example, it has been widely accepted that social cohesion helps adjust emotions, promotes health at the individual level, and contributes to improving self-satisfaction, and enhancing social connection while also reinforcing social norms and common beliefs at the collective level [6–8]. The definition, classification, and evaluation indicators of social cohesion may vary concerning different research goals as well as its intangibility and subjectivity. It makes the evaluation of social cohesion challenging [1,9]. The terminologies related to social cohesion include community cohesion, social relations, social interactions, social life, sharing/socializing, etc. [10,11]. However, social relations and communal activities are always identified as the essential aspects of social cohesion.

Research into social cohesion in urban green spaces has increased in recent years. The existing studies have demonstrated that urban green spaces enhance social cohesion by facilitating diverse social and communal activities and creating opportunities for interpersonal bonding [11–14]. However, inconsistencies persist in the findings regarding the effects of landscape characteristics and activities on social cohesion in urban green spaces and across larger scales [15,16]. Most of the existing studies assess the social cohesion of urban green spaces from a macro perspective, emphasizing the positive effects of landscape characteristics or activity types on social cohesion, discussing the correlation between specific activity types and social cohesion [10,17,18], or investigating how urban green spaces

contribute to human well-being (or health) via the medium of social cohesion [15,19,20]. However, there is limited research on the relationship between different types of green spaces and social cohesion [15].

Many studies have argued that at the community or city level, the built environment, facilities, or amenities, space quality, mode of use, and overall social environment significantly influence social relationships and cohesion [10,15,21]; meanwhile, the physical characteristics of urban green spaces contribute to the transmission of social relations and the generation of social cohesion through promoting social interactions by providing diversified activities [22,23]. However, the latest research shows that social activities (which reflect vitality), built environmental characteristics, and spatial qualities are not always positively correlated with social cohesion, but exhibit a more nuanced relationship [24]. Talen's research indicated that physical spaces provide a place for social interaction, but the physical environment often influences social cohesion through intermediate variables [25], and not all public spaces can effectively promote interaction and enhance identity. For example, some research indicates that the presence of urban green spaces contributes to promoting place attachment [15]. The sense of connection and comfort that people feel when visiting urban green spaces helps promote social cohesion [13]. As an indicator of social cohesion, "place attachment" is strongly associated with the meaning of the place [26–28]. But Haggerty (1982) argues that although a favorable physical environment may enhance "place attachment" and alleviate feelings of alienation, it has no effect on social interaction or the cultivation of some limited community responsibility among the neighborhoods [29].

In conclusion, the mechanism of how social cohesion arises in urban green spaces remains unclear [15]. The evaluation, spatial distribution features of social cohesion, as well as its relationship with spatial characteristics, need additional research, especially in urban green spaces.

As a kind of urban cultural heritage and a special form of urban green spaces, modern historic parks (MHPs) accrue a range of values, which form the core of why MHPs continue to matter to people [30]: on the one hand, MHPs have been carrying urban culture and collective memory, as well as recording the process of urban development, which holds significant historical value [31–33]. On the other hand, nowadays, MHPs still play an important role as open, publicly available spaces in the city by offering urban residents' outdoor recreational opportunities in various scenery spots with different physical characteristics [5,15,34]. In addition, it is demonstrated that the joint construction of social history or the retention of established historical records can help strengthen a sense of shared identity within a group, form collective memory, and promote the overall generation of social cohesion [28,35]. It indicates the potential interrelationship among the historical values of MHPs, the social interactions facilitated by various spaces within them, and the social cohesion that emerges from these interactions. However, while researchers have placed a great deal of emphasis on the evaluation and preservation of MHPs' historical values [36], other social values, such as social cohesion, are often neglected. There is little research specifically on social cohesion in MHPs.

The cultural ecosystem service (CES) theory provides a new perspective to fill in the above research gaps. From a theoretical perspective, many researchers propose that social cohesion (or social relations) is central to understanding the importance of ecosystems in breaking down social barriers, promoting citizen solidarity, and enriching the value categories of ecosystem services [10,37,38]. UNESCO's Historic Urban Landscapes (HUL) encourage communities to actively participate in managing and preserving historic urban landscapes, fostering a shared sense of responsibility, and building community bonds [39,40]. The Council of Europe Landscape Convention (ELC) emphasizes landscapes as collective assets, fostering social cohesion by encouraging communities to identify with and invest in their surroundings, preserving both natural and cultural landscapes as integral parts of collective heritage [41]. Integrating social cohesion research into a CES framework facilitates a common discourse system for communication and collaboration across multiple disciplines, highlighting the social and cultural values that were often ignored in the

existing ecosystem service research in the fields of biophysics and economics [10,13]. The existing research frameworks, such as the cascade model in the Common International Classification of Ecosystem Services (CICES) [42] and the spatial environment–cultural practice–cultural benefit model of the UK National Ecosystem Assessment (UKNEA) [43], provide a theoretical foundation for the research into social cohesion assessment and generation mechanism from the perspective of physical, historical characteristics, as well as activities. Jennings V. (2019) proposed a conceptual framework for social cohesion of urban green spaces based on CES theory [20], which provided a reference for the indicator selection in this study. Cheng (2020) conducted productive research based on CES theory, combining various methods of observation with questionnaires and interviews [10]. The results indicated that from a microscopic perspective, the landscape characteristics of urban green spaces such as amenities, land cover, and animals contribute to social cohesion to varying degrees, and validate the integration of social cohesion into a single, coherent CES system. However, the reasons and mechanisms behind how these factors promote social cohesion remain underexplored, and the influence of historical and cultural characteristics on social cohesion has yet to be thoroughly examined.

Two research questions are thus proposed in this research:

- (1) What are the features of activities and social cohesion of MHPs in Shanghai?
- (2) How are the landscape characteristics associated with the activities and social cohesion of MHPs in Shanghai?

2. Materials and Methods

2.1. Study Areas

Shanghai is the city where modern Chinese parks first emerged and remains the city with the highest number of modern parks in modern China. The establishment of the Bund Park as early as 1868 marked the inception of public parks in both Shanghai and China. Subsequently, parks such as Hongkou Park (Lu Xun Park), French Park (Fuxing Park), and Zhaofeng Park (Zhongshan Park) were subsequently constructed. The modern historical parks (MHPs) of Shanghai, which are the focus of this study, refer to public gardens or parks built in China between 1840 and 1949, including concession parks, urban squares, waterfront or roadside green spaces, and other public gardens or green spaces. As a special kind of modern heritage, according to UNESCO (2003) [44], MHPs have witnessed China's transformation in the evolution of gardening styles, as well as in economics and lifestyles since modern times, and displayed a deep and typical perspective into one of the world's diversified reactions to modernity [10,39]. They are a representative of MHPs in Shanghai, but the research results on them are far from sufficient. Most existing research focuses more on the evaluation of historical values, and there is no research on social cohesion in MHPs yet. The old-park-renewal in Shanghai before the 2010 World Expo has promoted awareness of old park renovation (including MHPs) all over China [45,46]. However, many MHP renewal practices have revealed insufficient attention to community cohesion, collective memory, and local culture conservation [47,48], leading to massive destructive construction. Therefore, Shanghai's MHPs should be taken as an example of MHPs in need of additional research on social cohesion.

Shanghai currently has 13 MHPs, 12 of which were taken as the research sites in this paper (Figure 1). Kunshan Park was excluded due to maintenance during the data collection period. Most of these parks have undergone multiple renovations since their construction, resulting in varying degrees of alteration in their historical appearances. Fuxing Park, Luxun Park, and Zhongshan Park are the ones built earliest among the MHPs in Shanghai with well-preserved historical appearances. Huaren Park, Suzhou-Road Children's Park, and Urumqi-Road Children's Park were transformed into roadside green spaces by the end of the 20th century with different spatial layouts and functions, compared to their original appearances.

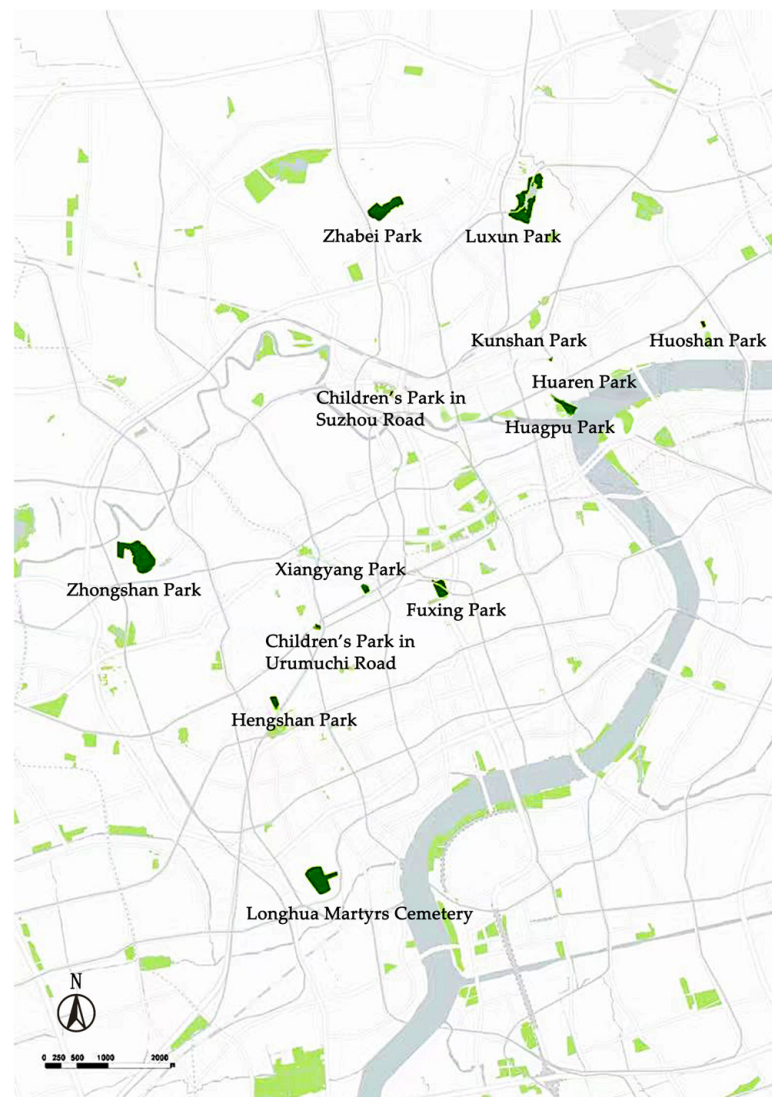


Figure 1. Spatial distribution of 13 MHPs of Shanghai.

2.2. Indicator Selection and Data Collection

The factors involved in this research according to the research questions include landscape characteristics (both physical and historical ones), activities, and social cohesion (Figure 2). Firstly, the landscape characteristics were summarized according to the literature review, and then validated by the satellite map, navigation map, surveying map (1:500), and on-site photos of MHPs in 2018. Secondly, we collected data on activities and social cohesion using the public participation GIS (PPGIS). The survey was designed using the “Landscape Comments” software developed by our team in 2017, which enabled respondents to tag locations on maps using mobile devices. We invited visitors to complete questionnaires on-site and use digital maps to tag specific locations where they engaged in activities or experienced social cohesion. Through this method, we obtained the necessary data for our research. To ensure a broad data source and enhance public participation, the application has not been officially released in the mobile app store. Instead, it was promoted through our laboratory’s WeChat public account. This study adheres to the principle of informed consent, requiring participants to acknowledge a privacy policy outlining clear terms for voluntary participation, with a commitment to anonymizing all aggregated data.

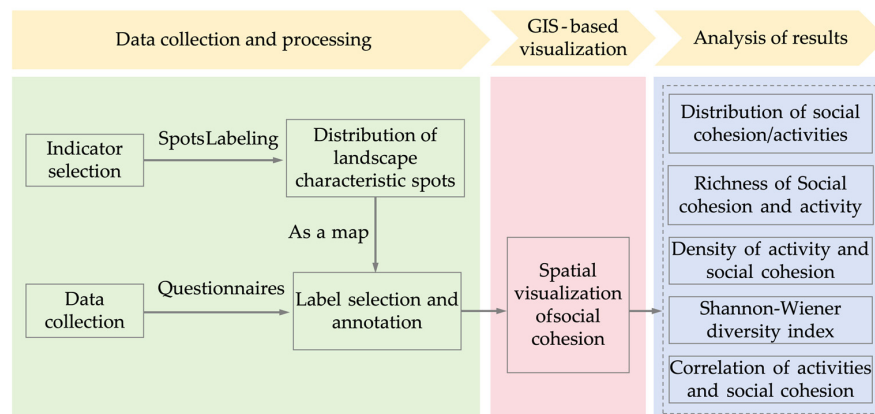


Figure 2. Research framework.

PPGIS is widely used in CES evaluation research for its ability to efficiently collect large volumes of spatial data in a short period. It compensates for the exact spatial information deficiency inherent in traditional methods by providing references for identifying the spatial distribution of social cohesion through a public-participative approach. It also enables the further exploration of the interrelationships among physical/historical landscape characteristics, activities, and social cohesion.

2.2.1. Landscape Characteristic Indicators

Based on the definition of “landscape characteristics” in landscape character assessment theory [49,50], the “Prospect-Refuge” Theory, and related studies on landscape boundaries [51], land cover type is an important index for distinguishing different spaces. Both land cover and scale have been demonstrated as influencing how spaces are appreciated and utilized via activities within the spaces [52,53], and were thus taken as the subcategories of the physical category of MHPs. As shown in Table 1, land cover was categorized into seven indicators based on existing research. And scale was further classified into three levels on the basis of Lin (2012) [53].

Table 1. Location analysis of 12 MHPs of Shanghai.

Name of MHP	Completed Year	Surrounding Environment
Huangpu Park	1868	Several important historical and cultural landmarks, such as the Shanghai People’s Heroes Memorial Tower, etc.
Lu Xun Park	1895	Commercial facilities, Lu Xun’s former residence
Kunshan Park	1898	Residential, commercial spaces
Fuxing Park	1908	Public spaces, commercial spaces
Zhongshan Park	1914	Historical and cultural landmarks and commercial areas
Huoshan Park	1917	Residential areas, schools, commercial districts, etc.
Hengshan Park	1925	Xujiahui commercial district
Children’s Park in Suzhou Road	1931	Commercial areas, residential
Xiangyang Park	1942	Donghu Hotel, Russian Orthodox Church
Zhabei Park	1946	Hotels, accommodations, commercial facilities, educational institutions
Huaren Park	1980	Zhapu Road Bridge and Sichuan Road Bridge
Children’s Park in Urumuchi Road	1981	Educational facilities, residential
Longhua Martyrs’ Cemetery	1995	Red revolutionary memorial site

According to the existing research on MHPs in China, MHPs have witnessed many famous historical events and celebrity activities, chronicled urban development, reflected shifts in gardening styles across historical periods, and embodied the collective memories of several generations. The historical importance was therefore taken as the subcategory of MHPs’ historical and cultural characteristics [54,55]. According to the Code for Scenic Area Planning of China and the existing research on historical buildings and landscapes, the spaces of high historical importance within MHPs were defined as those that were built at least 30 years ago (up to the data collection period of this research in 2018) [56,57], typical in gardening styles, or could be identified with historical/celebrity-related stories or communal events according to archive files (Table 2).

Table 2. Landscape characteristics of Shanghai’s MHPs.

Landscape Characteristics		Definition	Indicator	Explanation
Category	Subcategory			
Physical characteristics	Land cover	The most dominant types of the spot’s land cover	Forest	Refers to areas where the canopy density is equal to or greater than 0.2
			Woodland	Refers to areas where the canopy density is smaller than 0.2 and equal to or greater than 0.1
			Grassland	Refers to areas where the canopy density is smaller than 0.1 and the land is covered by grass
			Water area	Refers to areas that include rivers, lakes, ponds, or other kinds of waterscape, excluding dry fountains
			Recreational area	Refers to areas that contain fitness equipment, small landscape structures, and some other unpowered amenities
			Amusement area	Refers to areas that contain power amusement amenities
			Buildings and office area	Refers to areas that contain buildings and their buffer zone
	Scale	The scale of the spot size	Small	Refers to areas less than 500 m ² in size
			Medium	Refers to areas more than or equal to 500 m ² and less than 10,000 m ² in size
			Wide	Refers to areas more than or equal to 10,000 m ² in size
Historical characteristics	Historical importance		High	Refers to areas that were built at least 30 years ago, or that present typical landscape features, or where there were certain historical stories or celebrity-related events
			Low	

All MHPs were then divided into 215 landscape spots in ArcGis, according to Table 2. The spatial distribution of all the spots is shown in Figure 3.



Figure 3. Spatial distribution of social cohesion and activities.

2.2.2. Activity and Social Cohesion Indicators

On the basis of the research of Jennings V. (2019), on the relationship between cultural services, social cohesion, and public health in urban green spaces [20], social cohesion was categorized into the following four dimensions: place attachment, social support, belonging, and empowerment. The benefits of cultural ecosystem services that corresponded with social cohesion in the UKNEA and its follow-on research (UKNEAFO, 2017) [58], were selected as the indicators of the four subcategories (Table 3). According to the literature of Yu and Wang (2008) on the recreational and leisure activities in urban parks [59], the activities in the MHPs were divided into five categories with various specific activities (Table 3).

Table 3. Categories and indicators of social cohesion and activities of Shanghai’s MHPs.

Category	Subcategory	Indicator
Activities	Sightseeing activities	Enjoying the scenery
		Taking photos
		Participating in events
	Leisure activities	Taking a stroll
		Sitting and resting
	Artistic activities	Reading or painting
		Playing instruments or singing
	Fitness activities	Playing chess or cards
		Working out
	Recreational activities	Doing extreme sports
		Parent–child activity
		Water entertainment
		Amusement facilities
		Picnic and camping
	Social cohesion	Place attachment
Observation of nature		
Social support		Having fond memories (sense of place)
		Feeling joy and happiness
Belonging		Feeling safe.
		Having lots of friends (social belonging)
Empowerment		Feeling at home (rooted identity, rootedness)
		Being used to coming here (space to belong)
	Feeling sublimity (spirituality)	
		Finding creative inspiration
		Self-discovery (spiritual health)

A pilot study was conducted in Zhongshan Park to validate the social cohesion and activity indicators. The questionnaires and interviews were conducted on a selected weekday (30 September 2016) and a weekend day (15 October 2016). The survey started at 9:00 and ended at 15:00. The results showed that visitors of Zhongshan Park intended to take part in various activities and could perceive diversified social cohesion. Most of them selected two–three social cohesion indicators and three–five activities out of the given choices from the questionnaire. All the social cohesion and activity indicators in Table 3

were mentioned in the questionnaires and interviews. This shows that the indicators were feasible for this study.

Field research was subsequently conducted in each park via a PPGIS-based platform “Landscape Comments” from September to November 2018, on both weekdays and weekends. Participants were firstly asked to complete a questionnaire, after which they selected labels of social cohesion and activities from the given options (as shown in the indicator column of Table 3) in “Landscape Comments”, and added them on the digital map of the MHP to show where they experienced or engaged in specific activities within the park. For participants who had difficulty understanding the survey (e.g., older adults), we conducted structured interviews and subsequently extracted the relevant information. The data consisted of the following two parts: (1) the questionnaire including demographical information such as user name, gender, age, and visit information to MHPs including means of transportation to the MHP, transportation time, length of stay, and frequency of visit; (2) the selected social cohesion and activity labels with specific geo-coordination information.

2.2.3. Data Analysis

A descriptive statistical analysis was conducted on the demographic and visit information of the MHPs.

The labels from PPGIS were imported into ArcGIS. The geo-referencing was adjusted and all the labels beyond the boundaries of the study sites were deleted. A descriptive statistical analysis was conducted on social cohesion and activities. A Pearson correlation analysis was conducted on social cohesion and activities to analyze their correlation. Distribution features of various labels in spots with different landscape characteristics, richness, density, and diversity were employed for the spatial distribution feature analysis of social cohesion and activities.

Distribution features of various labels in spots with different landscape characteristics and “richness” (here referred to as the percentage of a category of social cohesion or activity in spots with a certain landscape characteristic), described the degree of dominance of each category of social cohesion or activity in spots with a certain landscape characteristic. “Density” refers to the number of social cohesion or activity labels per square kilometer of land within a given area. The diversity index in ecology indicates the degree of diversity of species within a community; in this paper, the Shannon–Wiener diversity index was used to describe the diversity of social cohesion and activities in different types of areas [ref] (Table 8). The calculation formula was as follows:

$$D_p = -\sum_x^n P_{i_x} \times \ln(P_{i_x}) \quad (1)$$

where D_p referred to the diversity of social cohesion or activities in spot p with certain landscape characteristics; x was the x th social cohesion or activity; and P_{i_x} was the proportion of the x th social cohesion or activity in the total labels of cohesion or activities.

The spatial distribution map of each category of social cohesion and activity was then exported from GIS (Figure 3) for further research.

3. Results

3.1. Descriptive Characteristics of Participants

There were 903 valid participants in total. Figure 4 showed that nearly half of the participants were female (45.85%) and about one-third were male (38.53%), with a roughly balanced gender ratio; about 15.61% were unwilling to report their gender and age. Nearly half of the participants were in the age group of 20–39 (31.98%) or 40–59 (20.44%), followed by 60–79 and 0–19. There were only 2.29% of people over 80 years old. The gender and age formation were in line with the 7th census in Shanghai.

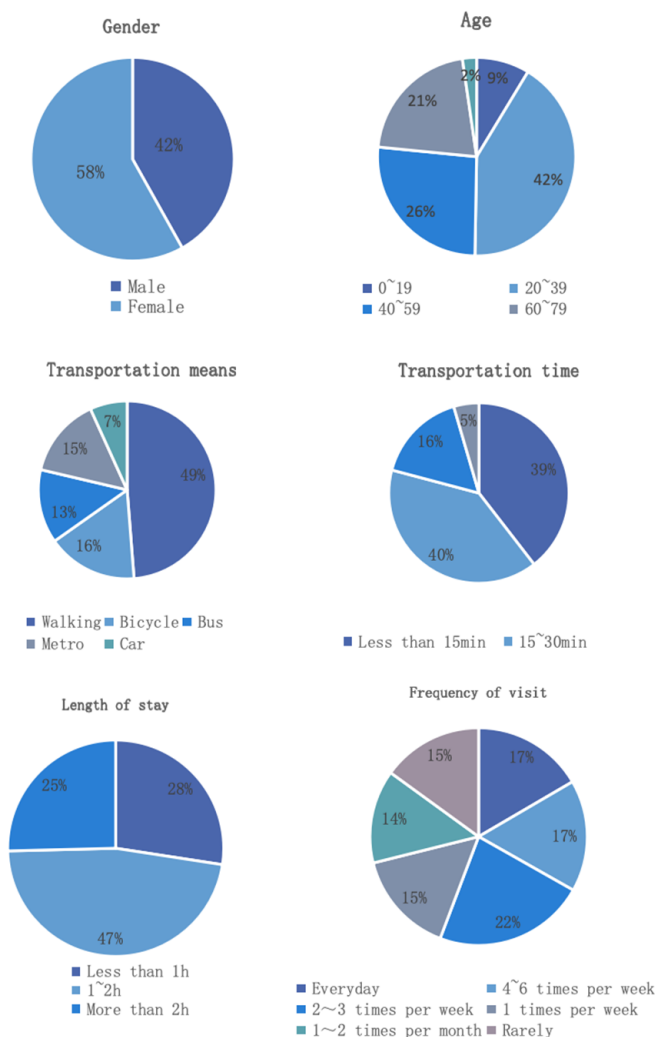


Figure 4. Demographical and visit information of the MHPs.

Half of the participants chose to go to the park on foot; of the remainder, roughly equal numbers chose cycling, taking the subway, or taking a bus; only a few chose to drive. Nearly 80% of the transportation time to the parks was less than 30 min (77.94%), 11.98% was between 30 min and 1 h, and only a few participants traveled more than 1 h to the parks. Nearly half of the participants spent 1 to 2 h in the park during every visit, 22.92% spent less than 1 h, and about 1/3 of the participants did not pay attention to the length of their stay. About two-thirds of the participants visited the parks at least once a week.

3.2. Spatial Distribution of Activities and Social Cohesion

There were 6802 valid labels (4663 activity labels and 2139 social cohesion labels) in total (Figure 5). Leisure, sightseeing, and recreational activities were the most popular categories, accounting for about 80% of the total activities. There were only a few artistic and fitness activities reported in MHPs. “Belonging” and “place attachment” were the most popular categories of social cohesion, accounting for 1/3 of the total social cohesion, followed by “social support”; “empowerment” was the least reported among all social cohesion categories. Both social cohesion and activity labels were distributed mainly in the center or at the entrance of the MHPs; only a few distributed in the margins. Social cohesion and activity labels were always spatially clustered in some spots (e.g., the Great Lawn on the west side of the lakeshore in Luxun Park), indicating that there was a correlation between social cohesion and activities.

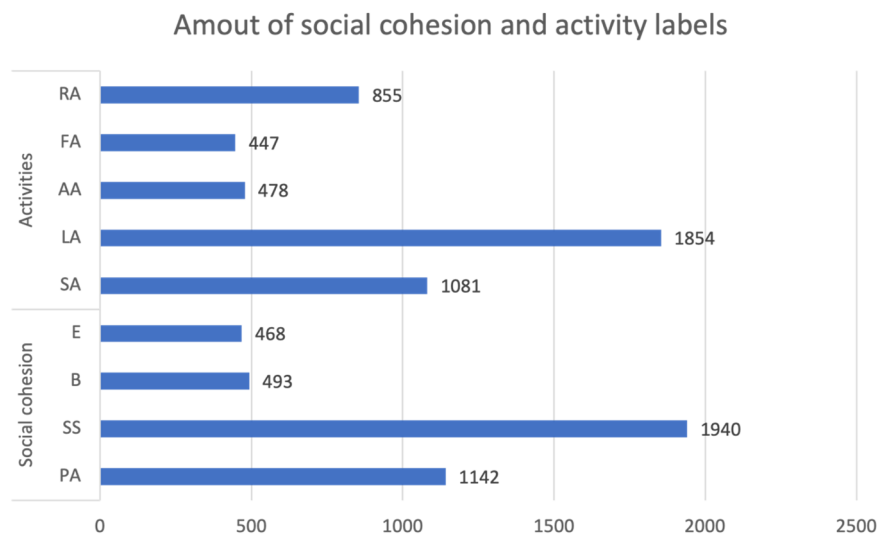


Figure 5. Descriptive statistical analysis of social cohesion and activities.

The richness of all categories of social cohesion and activities was relatively balanced, with no single category dominating others (Table 4). This finding suggests that the activities and social cohesion in the MHPs exhibit high systemic stability and balance, implying that they are unlikely to diminish in the absence of external influences.

Table 4. Richness of social cohesion and activity labels in spots with different landscape characteristics.

Landscape Characteristics		Category	Social Cohesion					Activities					
Category	Sub-Category		PA	SS	B	E	Total	SA	LA	AA	FA	RA	PA
Physical characteristics	Land cover	Forest	29.20%	25.18%	35.77%	9.85%	100.00%	23.88%	40.22%	9.29%	7.53%	19.07%	100.00%
		Woodland	28.16%	23.67%	39.59%	8.57%	100.00%	17.44%	43.36%	11.13%	12.96%	15.12%	100.00%
		Grassland	38.89%	20.11%	31.48%	9.52%	100.00%	21.87%	38.75%	6.27%	9.59%	23.53%	100.00%
		Water area	39.34%	21.69%	30.15%	8.82%	100.00%	30.06%	34.58%	7.79%	6.23%	21.34%	100.00%
		Recreational area	27.59%	30.96%	33.51%	7.94%	100.00%	22.61%	39.67%	13.59%	10.46%	13.66%	100.00%
		Amusement area	48.09%	15.27%	33.59%	3.05%	100.00%	18.80%	36.47%	6.39%	9.40%	28.95%	100.00%
		Buildings and office area	26.04%	23.96%	40.63%	9.38%	100.00%	25.81%	41.47%	11.06%	7.37%	14.29%	100.00%
	Scale	Small	25.00%	43.33%	28.33%	3.33%	100.00%	16.54%	48.12%	10.53%	15.79%	9.02%	100.00%
		Medium	30.80%	25.53%	34.93%	8.73%	100.00%	22.76%	40.83%	11.16%	9.86%	15.39%	100.00%
		Wide	37.82%	21.76%	32.30%	8.12%	100.00%	24.01%	34.77%	7.76%	7.91%	25.55%	100.00%
Historical characteristics	Historical importance	High	36.35%	23.07%	31.12%	9.46%	100.00%	25.31%	37.46%	7.66%	8.90%	20.67%	100.00%

3.3. Associations Between Landscape Characteristics and Social Cohesion

3.3.1. Land Cover Types and Social Cohesion

The comparison of Tables 5 and 6 and Figure 3 reveals that although the total number of labels for woodland did not stand out among the various land covers, the mean density values of social cohesion and activity labels for all woodland areas, as well the maximum density value for individual woodland areas, are roughly equal to those of recreational areas. Furthermore, the mean and maximum density values of social cohesion and activity labels for both land cover types were significantly higher than those of the other land cover types. However the mean and maximum density values for buildings and office areas are relatively low. As Table 4 shows, the dominant type of social cohesion in forests, woodlands, buildings, and office areas is belonging; in grasslands and water areas, it is place attachment; in recreational areas, social support and belonging are dominant; and in amusement areas, place attachment and belonging are dominant.

Table 5. Distribution features of various labels in spots with different landscape characteristics.

Landscape Characteristics		Category	Social Cohesion					Activities				
Category	Subcategory		PA	SS	B	E	SA	LA	AA	FA	RA	
Physical characteristics	Land cover	Forest	11.49%	12.90%	13.46%	15.00%	13.93%	13.71%	12.26%	10.66%	14.03%	
		Woodland	9.91%	10.84%	13.32%	11.67%	9.81%	14.25%	14.16%	17.69%	10.73%	
		Grassland	21.12%	14.21%	16.35%	20.00%	15.98%	16.55%	10.36%	17.01%	21.70%	
		Water area	15.37%	11.03%	11.26%	13.33%	18.04%	12.12%	10.57%	9.07%	16.16%	
		Recreational area	29.45%	42.99%	34.20%	32.78%	32.34%	33.15%	43.97%	36.28%	24.65%	
		Amusement area	9.05%	3.74%	6.04%	2.22%	4.67%	5.30%	3.59%	5.67%	9.08%	
		Buildings and office area	3.59%	4.30%	5.36%	5.00%	5.23%	4.92%	5.07%	3.63%	3.66%	
	Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	Scale	Small	2.16%	4.86%	2.34%	1.11%	2.06%	3.50%	2.96%	4.76%	1.42%	
		Medium	66.38%	71.59%	71.98%	72.78%	67.29%	70.56%	74.63%	70.75%	57.43%	
Wide		31.47%	23.55%	25.69%	26.11%	30.65%	25.94%	22.41%	24.49%	41.16%		
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
Historical characteristics	Historical importance	High	62.93%	51.96%	51.51%	63.33%	63.27%	54.72%	43.34%	53.97%	65.21%	
		Low	37.07%	48.04%	48.49%	36.67%	36.73%	45.28%	56.66%	46.03%	34.79%	
	Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

Table 6. Density of activity and social cohesion labels in different kinds of spots.

Landscape Characteristics		Categories	Density of Social Cohesion Labels (pcs/km ²)			Density of Activity Labels (pcs/km ²)		
Category	Sub-Category		Max	Min	Mean	Max	Min	Mean
Physical characteristics	Land cover	Forest	0.00	50.20	9.85	0.00	116.25	22.42
		Woodland	0.00	572.23	22.40	0.00	1512.32	55.04
		Grassland	0.00	191.41	19.10	0.00	454.60	39.52
		Water area	0.00	51.35	14.71	0.00	114.55	34.71
		Recreational area	0.00	507.54	31.07	0.00	957.08	63.98
		Amusement area	0.00	130.31	18.54	0.00	220.28	37.65
		Buildings and office area	0.00	80.79	4.58	0.00	181.77	10.36
	Scale	Small	0.00	572.23	185.84	0.00	1512.32	411.94
		Medium	0.00	507.54	23.51	0.00	957.08	49.59
		Wide	0.00	55.21	8.93	0.00	90.07	21.06
Historical characteristics	Historical importance	High	0.00	262.78	16.07	0.00	394.17	35.68
		Low	0.00	572.23	17.29	0.00	1512.32	36.81

3.3.2. Space Scale and Social Cohesion

Table 6 and Figure 5 indicate that the maximum and mean density values of social cohesion and activities were much higher for small spots than for other scales, while wide spots exhibit the lowest values. Table 5 reveals that for social cohesion in spots of different scales, social support was stronger in small spots, whereas place attachment and belonging were stronger in medium and wide spots.

3.3.3. Historical Importance and Social Cohesion

Table 6 and Figure 5 show that although the maximum density values of social cohesion and activities were much larger for areas of low historical importance than for those of high historical importance, there were no significant differences between their mean values. Table 5 indicates that place attachment and belonging were stronger in spots with high historical importance. Belonging emerged as the most prominent dimension of social cohesion in spots of low historical importance, followed by place attachment and social support.

3.4. Associations Between Activities and Social Cohesion

As shown in Table 4, “leisure” consistently emerged as the most frequently reported activity across all categories of spots. In water areas, “sightseeing” was of a similar percentage to “leisure” activities. However, as shown in Table 7, there was no significant difference between the maximum and mean values of the Shannon–Weiner diversity index

for activities and social cohesion in each category of areas. Most of the minimum values were due to the absence of labels within these areas, and it was rare that there was only one type of label in an area that resulted in a diversity index of 0.

Table 7. Shannon–Wiener diversity index of social cohesion and activities in MHPs.

Landscape Characteristics		Categories	Diversity of Social Cohesion Labels			Diversity of Activity Labels		
Category	Subcategory		Max	Min	Mean	Max	Min	Mean
Physical characteristics	Land cover	Forest	0.00	1.36	1.30	0.00	1.50	1.44
		Woodland	0.00	1.33	1.28	0.00	1.56	1.46
		Grassland	0.00	1.32	1.28	0.00	1.46	1.44
		Water area	0.00	1.39	1.27	0.00	1.53	1.43
		Recreational area	0.00	1.39	1.29	0.00	0.00	1.48
		Amusement area	0.00	1.39	1.11	0.00	1.57	1.44
		Buildings and office area	0.00	1.29	1.28	0.00	1.56	1.43
	Scale	Small	0.00	1.24	1.18	0.00	1.45	1.33
		Medium	0.00	1.39	1.29	0.00	1.57	1.51
		Wide	0.00	1.35	1.27	0.00	1.56	1.41
Historical characteristics	Historical importance	High	0.00	1.24	1.18	0.00	1.45	1.33
		Low	0.00	1.39	1.27	0.00	1.57	

Table 8 indicates that all five activity categories were strongly correlated with at least one category of social cohesion. There were strong correlations between “leisure” and “place attachment”, “social support”, “sense of belonging”, and “empowerment”. Leisure activities such as walking and sitting and resting were the most common ways of interpersonal interaction whereby participants perceived social cohesion. These activities were found to foster place attachment by creating fond memories, as well as making people feel joy, happiness, and security. Literature reviews and field observations reveal that users often engage in leisure activities with friends and family in the park, which further promotes a sense of rootedness and belonging to the area or the park.

Table 8. Pearson correlation analysis of activities and social cohesion.

	Place attachment (PA)	Social support (SS)	Belonging (B)	Empowerment (E)	Sightseeing activities (SA)	Leisure activities (LA)	Artistic activities (AA)	Fitness activities (FA)	Recreational activities (RA)
PA	1								
SS	0.674 **	1							
B	0.760 **	0.877 **	1						
E	0.620 **	0.558 **	0.668 **	1					
SA	0.678 **	0.526 **	0.628 **	0.716 **	1				
LA	0.820 **	0.851 **	0.910 **	0.687 **	0.738 **	1			
AA	0.560 **	0.909 **	0.838 **	0.543 **	0.452 **	0.773 **	1		
FA	0.687 **	0.656 **	0.741 **	0.560 **	0.580 **	0.793 **	0.507 **	1	
RA	0.793 **	0.404 **	0.572 **	0.594 **	0.585 **	0.629 **	0.298 **	0.541 **	1

Note: **: significant at 0.01 level (double tailed). Dark grey indicates a strong correlation between data at 0.01 (double tailed). Light grey indicates a strong correlation at level 0.01 (double tailed).

There were also strong correlations between “artistic” activities and “social support” and a sense of “belonging”. Compared with leisure activities, artistic activities such as reading, painting, playing instruments, singing, and playing chess or mahjong were more likely to help organize regular groups with other people in the community, thus facilitating more habitual visitations in the park and promoting a sense of belonging. In addition, the number of participants in these groups often exceeded those in leisure activities, thereby contributing more significantly to the perception of a broader social network (i.e., social belonging).

The activity which was most related to “empowerment” was “sightseeing”, while “recreational” activities were strongly correlated with “place attachment”. Sightseeing activities such as visiting the scenery and taking photographs could be conducted with others or independently. It indicates that these participants focused more on their internal feelings or interactions with their “objects” than the interpersonal interactions so that participants could more easily discover themselves and obtain empowerment such as creative inspiration or spiritual sublimation. The strong correlation between recreational

activities and place attachment might be attributed to the fact that the participants of these activities are usually children or youth with their families. Such activities required specific amenities or facilities such as powered amusement facilities, making it easier for participants to have positive memories of the spots and feel happiness and joy.

4. Conclusions and Discussion

4.1. Landscape Characteristics Are Closely Related to Social Cohesion and Activities

According to the results above, both the physical and historical characteristics of the MHPs are correlated with social cohesion and activities.

Recreational areas and open forests are the land cover types contributing most to social cohesion, particularly enhancing social support and belonging. The lack of green space is associated with a decline in people's sense of attachment [60,61]. Grasslands contribute significantly to place attachment and empowerment while buildings and office areas contribute the least to overall social cohesion. The indexes for social cohesion and activity in forests are in line with the research of Peng W. (2018) and Sugiyama (2008) for cultural services in urban parks [3,62], but those in forests and water areas differ from the results of Xin C. (2020) for social cohesion in urban parks [10]. The possible reason could be that the forests with high-density canopies formed shelters around the edges of parks within the MHPs, making those spots less accessible and more insecure. This hindered potential activities and the promotion of social cohesion. Meanwhile, according to Xin C.'s results, although she identified "trees" as a key landscape feature that contributed a lot to social cohesion, she did not quantify the contribution of different canopy densities of the trees to social cohesion. As for water areas, Peng W. subdivided water areas into waterfronts and water bodies, while Xin C. further subdivided them into lakes, rivers, and streams. These possible explanations indicate that the classifications of forests and water areas in this study need further refinement, and should be investigated in depth to validate the contribution of spots with different canopy densities and water forms to social cohesion.

It was found that small and medium areas contribute more to social cohesion than wider areas. As shown in Figure 3, although the total amount of social cohesion and activity labels is much lower in small areas than in medium areas, the density is higher. This could be attributed to the greater appeal of small spots for private leisure activities among smaller groups, such as sitting and chatting, which helps to promote place attachment, social support, and a sense of belonging [63,64]. Medium or wide spots might therefore be seen as more suitable for the interpersonal interactions of a larger group, such as festivals and some other large events [14,65,66]. Wider areas may be too spacious for private social activities, and since large events are held less frequently, wider areas therefore have a weaker effect on social cohesion.

Historic importance also has a significant influence on social cohesion. Areas of high historical importance are more likely to trigger place attachment and a sense of belonging [67,68]. In general, these spots exhibit more activities and higher levels of social cohesion than those of low historical importance, especially the sense of attachment and belonging. It is possibly because such spots have existed for a long time, so their "presence" in the neighborhood has become a spiritual symbol of the community, and many adult participants have already visited them with their families when they were children [69]. Such frequent and early visits may have left community members with many fond memories, fostering a habit of visiting regularly and contributing to the generation of a strong sense of place attachment [70,71]. Furthermore, it is also important to note that many of these spots have witnessed significant historical events, and celebrity-related activities, and currently serve as venues for festivals and events. Collectively, these factors attract people, and foster social interactions, thus contributing to place attachment, a sense of rootedness, and belonging.

4.2. Social Cohesion Can Be Employed as a Potential Approach to Coordinate Historical Value Preservation and Recreational Demands Satisfaction in MHPs

In this study, the hypothesis in the introduction was validated in the following two ways:

- (1) As a type of urban green space, MHPs can provide recreational opportunities while facilitating meaningful, neighborly social interactions among local residents, which result in more emotional connections to other people and the site. Such connections can support and potentially influence the social fabric within the community and help foster social cohesion in a variety of ways. Meanwhile, the benefits of social cohesion, such as “social support”, and “belonging”, are crucial factors that attract residents to visit MHPs and conduct activities. Benefits such as “empowerment” also enhance health and well-being, alleviating feelings of social isolation. Such findings are consistent with Jennings’s (2019) theoretical hypothesis regarding the relationship between social cohesion and health and the well-being of urban green spaces [20].
- (2) In this paper, it is shown that the “existence” of the MHPs, the “presence” of the historical remains, the past fond memories, and the witness of the lives and transformations in them are part of the main reasons why local residents visit here and feel place attachment and a sense of belonging to MHPs. It can be inferred that the historical values of MHPs contribute to social cohesion by strengthening the place identity and forming collective memory. These benefits of social cohesion help residents to inherit the memories and historical values of MHPs across generations.

In short, MHPs provide recreational opportunities for social interaction while stimulating social cohesion, which contributes to the interpretation and inheritance of the historical value of MHPs. It is proposed that the renewal strategies under the aim of social cohesion promotion can meet the recreational demands while inheriting the historical values at the same time, which helps to coordinate the conflict between the preservation and renewal of MHPs in a productive way. The conservation of historic sites should go beyond the isolated, static preservation of the original location and instead strive for dynamic, sustainable development by fostering social interaction among residents. Under the common goal of enhancing social cohesion, the design is mutually reinforced to meet the residents’ recreational demands while preserving the historical value of MHPs. This coincides with concepts of living conservation and organic renewal. Therefore, it is important to realize the sustainable development of MHP regeneration practices, in order to transform static heritage values into forms that can be intuitively perceived, experienced, and remembered for social interactions and activities with communities.

At a practical level, researchers and practitioners have advocated strongly that the methods of preservation of historic urban parks must embrace more than simply the historical value and its physical forms within the parks. According to Biedenweg et al. (2019), individuals can directly experience and learn about historical parks through recreational activities, thereby advancing cultural inheritance [72]. Bahriny found that cultural activities and recreational facilities are critical factors influencing user preferences [73]. It is equally important that intangible social values, such as social cohesion and recreational values, are preserved in a dynamic and balanced way [36]. Based on this, we should reconsider the current heritage reconstruction strategies of MHPs, which remain focused on the physical elements that preserve the historic value, while ignoring the spiritual value derived from people’s interaction with the park [68,74]. As proposed by other studies, the historical values of MHPs are accumulated through bearing and forming the collective memories of the park and the urban dwellers [36]. In this study, potential methods were identified for enhancing social cohesion by pinpointing the areas within MHPs that need improvement and regeneration from a more comprehensive perspective, while also proposing more targeted strategies for areas with varying landscape features.

For example, areas of high historical importance, especially those whose land covers are recreation areas, forests, and grasslands, play a significant role in providing activity opportunities and promoting social cohesion [73–76]. Communities are encouraged to

preserve historical remains while using compatible materials and design methods to enhance the sense of historical sites. It is further recommended that communities integrate new design elements with the existing structures to interpret intangible historical values in more contemporary expressions [10,54,63]. These gestures will strengthen the atmosphere of historical sites through the contrast between the old and the new materials while also triggering a spiritual resonance along with a sense of place attachment and belonging, empowering the residents [62–64]. Such initiatives also contribute to directly enhancing the scientific popularization of historical values through exhibition halls, cultural corridors, or display windows, or indirectly through restoring historical events [77–79]. They provide increased opportunities for other kinds of activities and promote social cohesion, effectively balancing recreation and historical value preservation.

4.3. Limitations

It has been found that horizontal interactions in the communities, such as fitness/sports, recreation, personal skill enhancement activities, and public service/voluntary work, have been shown to promote social cohesion, with the level of cohesion positively correlated to residents' participation rates [80]. Given that in this article, the spatial distribution of landscape characteristics, diversity of activity types, and social cohesion are currently emphasized, in this study, we have not delved into the relationships between visitor frequency, activities, and cohesion beyond this study's scope. These aspects will be further explored in future research.

The studies on land-cover identification of forests, woodlands, and grasslands are mainly conducted at national, regional, or urban scales by classifying canopy density in satellite images. However, in this study, a micro-level perspective is adopted, where the method alone proves insufficiently precise. Therefore, taking China's national standards for land classification as a reference, the identification of the three land covers above was conducted manually on the basis of satellite maps, field photos, mapping maps, and scenic maps. A more accurate identification method based on multiple data sources and machine learning will be applied in future studies.

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References

1. Chan, J.; To, H.-P.; Chan, E. Reconsidering Social Cohesion: Developing a Definition and Analytical Framework for Empirical Research. *Soc. Indic. Res.* **2006**, *75*, 273–302. [[CrossRef](#)]
2. Schiefer, D.; van der Noll, J. The Essentials of Social Cohesion: A Literature Review. *Soc. Indic. Res.* **2017**, *132*, 579–603. [[CrossRef](#)]
3. Sugiyama, T.; Leslie, E.; Giles-Corti, B.; Owen, N. Associations of Neighbourhood Greenness with Physical and Mental Health: Do Walking, Social Coherence and Local Social Interaction Explain the Relationships? *J. Epidemiol. Community Health* **2008**, *62*, e9. [[CrossRef](#)] [[PubMed](#)]
4. Wang, P.; Han, L.; Hao, R.; Mei, R. Understanding the relationship between small urban parks and mental health: A case study in Shanghai, China. *Urban For. Urban Green.* **2022**, *78*, 127784. [[CrossRef](#)]
5. Chen, S.; Sun, Y.; Seo, B.K. The Effects of Public Open Space on Older People's Well-Being: From Neighborhood Social Cohesion to Place Dependence. *Int. J. Environ. Res. Public Health* **2022**, *19*, 16170. [[CrossRef](#)]
6. Li, Q. A study on the properties of the public space with the orientation of social cohesion in residential area: Two cases of Chuangzhifang and Caoyangyicun in Shanghai. *Urban Plan. Forum.* **2014**, *4*, 88–97.

7. Cook, I.R.; Swyngedouw, E. Cities, Social Cohesion and the Environment: Towards a Future Research Agenda. *Urban Stud.* **2012**, *49*, 1959–1979. [[CrossRef](#)]
8. Clarke, M.; Cadaval, S.; Wallace, C.; Anderson, E.; Egerer, M.; Dinkins, L.; Platero, R. Factors that enhance or hinder social cohesion in urban greenspaces: A literature review. *Urban For. Urban Green.* **2023**, *84*, 127936. [[CrossRef](#)]
9. Bottoni, G. A Multilevel Measurement Model of Social Cohesion. *Soc. Indic. Res.* **2018**, *136*, 835–857. [[CrossRef](#)]
10. Xin, C.; Sylvie, V.D.; Luyuan, L.; Pieter, U. Taking “Social Relations” as a Cultural Ecosystem Service: A Triangulation Approach. *Urban For. Urban Green.* **2020**, *55*, 126790. [[CrossRef](#)]
11. Jennings, V.; Rigolon, A.; Thompson, J.; Murray, A.; Henderson, A.; Gragg, R.S. The Dynamic Relationship between Social Cohesion and Urban Green Space in Diverse Communities: Opportunities and Challenges to Public Health. *Int. J. Environ. Res. Public Health* **2024**, *21*, 800. [[CrossRef](#)] [[PubMed](#)]
12. de Vries, S.; van Dillen, S.M.E.; Groenewegen, P.P.; Spreeuwenberg, P. Streetscape greenery and health: Stress, social cohesion and physical activity as mediators. *Soc. Sci. Med.* **2013**, *94*, 26–33. [[CrossRef](#)] [[PubMed](#)]
13. Peters, K.; Elands, B.; Buijs, A. Social Interactions in Urban Parks: Stimulating Social Cohesion? *Urban For. Urban Green.* **2010**, *9*, 93–100. [[CrossRef](#)]
14. Lloyd, K.; Fullagar, S.; Reid, S. Where Is the ‘Social’ in Constructions of ‘Liveability’? Exploring Community, Social Interaction and Social Cohesion in Changing Urban Environments. *Urban Policy Res.* **2016**, *34*, 343–355. [[CrossRef](#)]
15. Jennings, V.; Bamkole, O. The Relationship between Social Cohesion and Urban Green Space: An Avenue for Health Promotion. *Int. J. Environ. Res. Public Health* **2019**, *16*, 452. [[CrossRef](#)]
16. Wan, C.; Shen, G.Q.; Choi, S. Underlying relationships between public urban green spaces and social cohesion: A systematic literature review. *City Cult. Soc.* **2021**, *24*, 100383. [[CrossRef](#)]
17. Baran, P.K.; Smith, W.R.; Moore, R.C.; Floyd, M.F.; Bocarro, J.N.; Cosco, N.G.; Danninger, T.M. Park Use Among Youth and Adults. *Environ. Behav.* **2013**, *46*, 768–800. [[CrossRef](#)]
18. Liu, Y.; Wang, R.; Lu, Y.; Li, Z.; Chen, H.; Cao, M.; Zhang, Y.; Song, Y. Natural Outdoor Environment, Neighbourhood Social Cohesion and Mental Health: Using Multilevel Structural Equation Modelling, Streetscape and Remote-Sensing Metrics. *Urban For. Urban Green.* **2020**, *48*, 126576. [[CrossRef](#)]
19. Bergefurt, L.; Kemperman, A.; van den Berg, P.; Borgers, A.; van der Waerden, P.; Oosterhuis, G.; Hommel, M. Loneliness and Life Satisfaction Explained by Public-Space Use and Mobility Patterns. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4282. [[CrossRef](#)]
20. Opdam, P.; Verboom, J.; Pouwels, R. Landscape Cohesion: An Index for the Conservation Potential of Landscapes for Biodiversity. *Landsc. Ecol.* **2003**, *18*, 113–126. [[CrossRef](#)]
21. Dupuis, M.; Baggio, S.; Gmel, G. Validation of a Brief Form of the Perceived Neighborhood Social Cohesion Questionnaire. *J. Health Psychol.* **2017**, *22*, 218–227. [[CrossRef](#)]
22. Gehl, J. *Life Between Buildings: Using Public Space*, 6th ed.; Island Press: Washington, DC, USA, 2011; ISBN 978-1-59726-827-1.
23. Fan, Y.; Das, K.V.; Chen, Q. Neighborhood Green, Social Support, Physical Activity, and Stress: Assessing the Cumulative Impact. *Health Place* **2011**, *17*, 1202–1211. [[CrossRef](#)] [[PubMed](#)]
24. Mouratidis, K.; Poortinga, W. Built Environment, Urban Vitality and Social Cohesion: Do Vibrant Neighborhoods Foster Strong Communities? *Landsc. Urban Plan.* **2020**, *204*, 103951. [[CrossRef](#)]
25. Talen, E. Sense of Community and Neighbourhood Form: An Assessment of the Social Doctrine of New Urbanism. *Urban Stud.* **1999**, *36*, 1361–1379. [[CrossRef](#)]
26. Scannell, L.; Gifford, R. Defining Place Attachment: A Tripartite Organizing Framework. *J. Environ. Psychol.* **2010**, *30*, 1–10. [[CrossRef](#)]
27. Hu, J.; Ying, J.; Zhang, Y.; Shen, Y.; Wu, X. From Landscapes to Bonds: Exploring the Influencing Mechanism of Community Parks on Social Integration. *Sustainability* **2023**, *15*, 8065. [[CrossRef](#)]
28. Bazrafshan, M.; Spielhofer, R.; Wissen Hayek, U.; Kienast, F.; Grêt-Regamey, A. Greater Place Attachment to Urban Parks Enhances Relaxation: Examining Affective and Cognitive Responses of Locals and Bi-Cultural Migrants to Virtual Park Visits. *Landsc. Urban Plan.* **2023**, *232*, 104650. [[CrossRef](#)]
29. Haggerty, L.J. Differential Social Contact in Urban Neighborhoods: Environmental vs. Sociodemographic Explanations. *Sociol. Q.* **1982**, *23*, 359–372. [[CrossRef](#)]
30. ICOMOS. *Document on Historic Urban Parks*; ICOMOS: Delhi, India, 2017.
31. Paraskevopoulou, A.; Klados, A.; Malesios, C. Historical Public Parks: Investigating Contemporary Visitor Needs. *Sustainability* **2020**, *12*, 9976. [[CrossRef](#)]
32. Jiang, B.; Liu, Y. Historical and Cultural Values of the Modern Historic Parks in Tianjin—The British Concession. *J. Asian Archit. Build. Eng.* **2018**, *17*, 221–228. [[CrossRef](#)]
33. Taplin, D.H.; Scheld, S.; Low, S.M. Rapid Ethnographic Assessment in Urban Parks: A Case Study of Independence National Historical Park. *Hum. Organ.* **2005**, *61*, 80–93. [[CrossRef](#)]
34. Harding, S. Towards a Renaissance in Urban Parks. *Cult. Trends* **1999**, *9*, 1–20. [[CrossRef](#)]
35. Bietti, L.M.; Tilston, O.; Bangerter, A. Storytelling as Adaptive Collective Sensemaking. *Top. Cogn. Sci.* **2019**, *11*, 710–732. [[CrossRef](#)] [[PubMed](#)]
36. Gil, J.-H.; Park, H.-S. A Case Study on the Preservation Strategies of “Historic Urban Parks” in the UK, the USA, and Japan. *J. Korean Inst. Landsc. Archit.* **2020**, *48*, 20–33. [[CrossRef](#)]

37. Petit-Boix, A.; Apul, D. From Cascade to Bottom-Up Ecosystem Services Model: How Does Social Cohesion Emerge from Urban Agriculture? *Sustainability* **2018**, *10*, 998. [CrossRef]
38. Kosanic, A.; Petzold, J. A systematic review of cultural ecosystem services and human wellbeing. *Ecosyst. Serv.* **2020**, *45*, 101168. [CrossRef]
39. van der Hoeven, A. Valuing Urban Heritage Through Participatory Heritage Websites: Citizen Perceptions of Historic Urban Landscapes. *Space Cult.* **2020**, *23*, 129–148. [CrossRef]
40. Taylor, K. The Historic Urban Landscape Paradigm and Cities as Cultural Landscapes. Challenging Orthodoxy in Urban Conservation. *Landsc. Res.* **2016**, *41*, 471–480. [CrossRef]
41. Ginzarly, M.; Houbart, C.; Teller, J. The Historic Urban Landscape Approach to Urban Management: A Systematic Review. *Int. J. Herit. Stud.* **2019**, *25*, 999–1019. [CrossRef]
42. Potschin-Young, M.; Haines-Young, R.; Görg, C.; Heink, U.; Jax, K.; Schleyer, C. Understanding the Role of Conceptual Frameworks: Reading the Ecosystem Service Cascade. *Ecosyst. Serv.* **2018**, *29*, 428–440. [CrossRef]
43. Fish, R.; Church, A.; Willis, C.; Winter, M.; Tratalos, J.A.; Haines-Young, R.; Potschin, M. Making Space for Cultural Ecosystem Services: Insights from a Study of the UK Nature Improvement Initiative. *Ecosyst. Serv.* **2016**, *21*, 329–343. [CrossRef]
44. UNESCO World Heritage Centre. UNESCO World Heritage Centre—Document—Identification and Documentation of Modern Heritage. Available online: <https://whc.unesco.org/en/documents/12/> (accessed on 31 August 2021).
45. Mo, F.; Selman, P.; Woudstra, J. The Origins of the Modern Park System of the International Settlement in Shanghai (1899–1929). *Landsc. Res.* **2021**, *46*, 435–449. [CrossRef]
46. Wu, Y.; Jin, Y.; Qian, C. Exploration of the regeneration of urban historical park under the background of organic regeneration: A case study of Shanghai Zuibaichi Park. In *Annual Conference of CELA; Chinese Society of Landscape Architecture: Beijing, China, 2018*; p. 7. Available online: https://kns.cnki.net/kcms2/article/abstract?v=QHiZY5KKB7ZyveH5vApja4KjiXCyY00dF5U6-M5_kNuzFTGpryfZd1HKdQqCwM2IEH3LfvIbuiiPSV4YHep312_e2YCPi1p6FajsMebgqN2e-rvw-8ngDuUUWUcql5QZkgZ0FtvGas-w4TKfvSn02axj5nOKfh1vnCF6TZhE83jKfD6K-a6b2SRnPYmYzETnWOtT8Ym9Y0=&uniplatform=NZKPT&language=CHS (accessed on 15 August 2024).
47. Dai, D.; Chen, Y.; Dai, K. Evaluating Cultural Ecosystem Services in China’s Modern Historic Parks: A Sentiment Computing Approach. *Urban For. Urban Green.* **2024**, *95*, 128314. [CrossRef]
48. Dai, D.; Chen, Y.; Yuan, M. Cognitive map based quantitative method of spatial cognition in Shanghai’s urban historical parks: A case of Luxun Park. *Urban Archit.* **2019**, *307*, 7–13.
49. Tveit, M.; Ode, Å.; Fry, G. Key Concepts in a Framework for Analysing Visual Landscape Character. *Landsc. Res.* **2006**, *31*, 229–255. [CrossRef]
50. Osher, L.J.; Buol, S.W. Relationship of Soil Properties to Parent Material and Landscape Position in Eastern Madre de Dios, Peru. *Geoderma* **1998**, *83*, 143–166. [CrossRef]
51. Li, S. Guidelines for urban design: Based on “public image”—A case study of the vicinity of Lu Xun Park in Shanghai. Harmonious Urban Planning. In *Proceedings of the 2007 Annual Conference of Urban Planning in China, Harbin, China, 1–3 September 2007*; p. 7.
52. Swanwick, C.; Fairclough, G. Landscape Character: Experience from Britain. In *Routledge Handbook of Landscape Character Assessment*; Routledge: London, UK, 2018; ISBN 978-1-315-75342-3.
53. Lin, Y. Comparative study on the assessment system of landscape characteristics in England and the assessment system of scenic and historic interest areas in China. *Landsc. Archit.* **2012**, *1*, 104–108. [CrossRef]
54. Kümmerling, M.; Müller, N. The relationship between landscape design style and the conservation value of parks: A case study of a historical park in Weimar, Germany. *Landsc. Urban Plan.* **2012**, *107*, 111–117. [CrossRef]
55. Loughran, K. Urban Parks and Urban Problems: An Historical Perspective on Green Space Development as a Cultural Fix. *Urban Stud.* **2020**, *57*, 2321–2338. [CrossRef]
56. Zhan, Q.; Furuya, K.; Tang, X.; Li, Z. Policy Development in China’s Protected Scenic and Historic Areas. *Land* **2024**, *13*, 220. [CrossRef]
57. Chen, H. Land Use Trade-Offs Associated with Protected Areas in China: Current State, Existing Evaluation Methods, and Future Application of Ecosystem Service Valuation. *Sci. Total Environ.* **2020**, *711*, 134688. [CrossRef] [PubMed]
58. Church, A.; Fish, R.; Haines-Young, R. UK National Ecosystem Assessment Follow-On Work Package Report 5: Cultural Ecosystem Services and Indicators. Available online: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx> (accessed on 31 August 2021).
59. Yu, X.; Wang, F. Study on the spectrum of recreational activities in urban gardens: A case study of Wuxi. *Chin. Gard.* **2008**, *4*, 84–88.
60. Human Geographies. Available online: <https://www.humangeographies.org.ro/> (accessed on 5 November 2024).
61. Comstock, N.; Dickinson, L.M.; Marshall, J.A.; Soobader, M.-J.; Turbin, M.S.; Buchenau, M.; Litt, J.S. Neighborhood attachment and its correlates: Exploring neighborhood conditions, collective efficacy, and gardening. *J. Environ. Psychol.* **2010**, *30*, 435–442. [CrossRef]
62. Peng, W.T.; Liu, W.Q.; Cai, W.B.; Wang, X.; Huang, Z.; Wu, C.Z. Evaluation of ecosystem cultural services of urban protected areas based on public participation GIS (PPGIS): A case study of Gongqing Forest Park in Shanghai, China. *Ying Yong Sheng Tai Xue Bao* **2019**, *30*, 439–448. [CrossRef]

63. Tenzer, M. Social Landscape Characterisation: A People-Centred, Place-Based Approach to Inclusive and Transparent Heritage and Landscape Management. *Int. J. Herit. Stud.* **2024**, *30*, 269–284. [CrossRef]
64. Seaman, P.J.; Jones, R.; Ellaway, A. It's Not Just about the Park, It's about Integration Too: Why People Choose to Use or Not Use Urban Greenspaces. *Int. J. Behav. Nutr. Phys. Act.* **2010**, *7*, 78. [CrossRef]
65. Gale, T. Harmony in Urban Growth: Combining Densification, Green Spaces, and Social Cohesion. Bachelor's Thesis, University of Groningen, Groningen, The Netherlands, 2024. Available online: <https://frw.studenttheses.ub.rug.nl/4637/> (accessed on 15 August 2024).
66. Sonta, A.; Jiang, X. Rethinking walkability: Exploring the relationship between urban form and neighborhood social cohesion. *Sustain. Cities Soc.* **2023**, *99*, 104903. [CrossRef]
67. Silva, T.M.; Silva, S.; Carvalho, A. Economic valuation of urban parks with historical importance: The case of Quinta do Castelo, Portugal. *Land Use Policy* **2022**, *115*, 106042. [CrossRef]
68. Hosseini, F.; Sajadzadeh, H.; Aram, F.; Mosavi, A. The Impact of Local Green Spaces of Historically and Culturally Valuable Residential Areas on Place Attachment. *Land* **2021**, *10*, 351. [CrossRef]
69. Hoteit, A. Role of the Landscape in the Preservation of Collective Memory and the Enhancement of National Belonging. *Can. Soc. Sci.* **2015**, *11*, 42–49. [CrossRef]
70. Liu, Q.; Wu, Y.; Xiao, Y.; Fu, W.; Zhuo, Z.; van den Bosch, C.C.K.; Huang, Q.; Lan, S. More meaningful, more restorative? Linking local landscape characteristics and place attachment to restorative perceptions of urban park visitors. *Landsc. Urban Plan.* **2020**, *197*, 103763. [CrossRef]
71. Goussous, J.S.; Al-Hammadi, N.A. Place attachment assessment of a heritage place: A case study of the roman amphitheater in downtown amman, jordan. *Front. Archit. Res.* **2018**, *7*, 1–10. [CrossRef]
72. Biedenweg, K.; Williams, K.; Cerveny, L.; Styers, D. Is recreation a landscape value?: Exploring underlying values in landscape values mapping. *Landsc. Urban Plan.* **2019**, *185*, 24–27. [CrossRef]
73. Bahriny, F.; Bell, S. Traditional versus Modern? Perceptions and Preferences of Urban Park Users in Iran. *Sustainability* **2021**, *13*, 2036. [CrossRef]
74. Schöbel, S. Restructuring the Urban Landscape: A “Critical Reconstruction” of Permanent Structures in Historic Cultural and Urban Landscapes. In *Urbanization and Locality: Strengthening Identity and Sustainability by Site-Specific Planning and Design*; Wang, F., Prominski, M., Eds.; Springer: Berlin/Heidelberg, Germany, 2016; pp. 215–225. ISBN 978-3-662-48494-4.
75. Yuan, L.; Marzuki, A. What Keeps Historical Theme Park Visitors Coming? Research Based on Expectation Confirmation Theory. *Front. Psychol.* **2024**, *15*, 1293638. [CrossRef]
76. Cooper, N.; Brady, E.; Steen, H.; Bryce, R. Aesthetic and Spiritual Values of Ecosystems: Recognising the Ontological and Axiological Plurality of Cultural Ecosystem ‘Services’. *Ecosyst. Serv.* **2016**, *21*, 218–229. [CrossRef]
77. Xu, Y.; Matarrita-Cascante, D.; Lee, J.H.; Luloff, A.E. Incorporating Physical Environment-Related Factors in an Assessment of Community Attachment: Understanding Urban Park Contributions. *Sustainability* **2019**, *11*, 5603. [CrossRef]
78. Loughran, K. Imbricated Spaces: The High Line, Urban Parks, and the Cultural Meaning of City and Nature. *Sociol. Theor.* **2016**, *34*, 311–334. [CrossRef]
79. Peters, K. Being Together in Urban Parks: Connecting Public Space, Leisure, and Diversity. *Leis. Sci.* **2010**, *32*, 418–433. [CrossRef]
80. Putnam, R.D.; Leonardi, R.; Nonetti, R.Y. *Making Democracy Work: Civic Traditions in Modern Italy*; Princeton University Press: Princeton, NJ, USA, 1993; ISBN 978-0-691-03738-7.

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