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Learning from Older Adults' Use of Urban Parks in Hong Kong's Low-income Areas

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Abstract

Spatial justice, specifically accessibility, Universal Design and the fulfilment of human rights for vulnerable groups are increasingly deemed relevant issues in urban research and citylevel agendas concerning public spaces. Although the development of older adult-friendly urban environments is part of the agenda to promote healthy ageing societies, public spaces (e.g., urban parks) often exclude those in the advanced age group in the community. This article offers a preliminary assessment of the older adult-friendly urban environments, hostile urban design elements and the everyday activities of older adults in urban parks by focusing on the extreme case of Sham Shui Po. This is a low-income, high-density and public space-scarce neighbourhood in Hong Kong, a city characterised by a rapidly ageing population and high socio-spatial inequality. Qualitative methods as environment audit, direct observations and video-recordings were used to investigate the physical environment and the older adults' social and physical activities. Two representative urban parks are selected, the Nam Cheong Street Sitting-out Area (NCSA) and Tai Hang Tung Park (THTP). NCSA, located in a congested vehicular street median, allows independent mobility and is predominantly for intergenerational social activities. It is part of the daily route of residents and inhabitants from different ethnicities. Hostile design prevents the full use of seating facilities. THTP is a site for older adults to engage in physical activities and also accommodates large groups and caregivers. Defensive architecture and design layout may affect the group size in the parks, while sittable edges may directly contribute to the park use by older adults with physical disabilities, particularly near street crossings. The findings from this deprived neighbourhood highlight the critical role of landscape infrastructure for healthy ageing societies.

Keywords: urban parks, spatial justice, healthy ageing, park use, everyday life

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Introduction

'Every morning, what we take up again, on awakening, is the weight of life, the difficulty of living, or of living in certain conditions.' (de Certeau et al., 1998).

Globally, life expectancy is increasing at unprecedented and steady levels. The number of older persons is projected to double in the next three decades (vs 2019), reaching 16% of the global population by 2050 (UNDESA, 2019). East Asia and Southeast Asia are likely to see the most rapid increase in the number of older citizens between the current decade and 2050, and Hong Kong is expected to feature among the largest increases (UNDESA, 2019). The living environments of older persons, including the size and composition of their households and their living arrangements, are constantly changing. Poverty is a major threat to the wellbeing of older persons, and for a great portion of the population, ageing is associated with a higher poverty risk (UNDESA, 2015).

One of the most pressing ageing-related issues is health decline, which encompasses physical, psychological, social and cultural dimensions. Physical activity, even at a low intensity, supports the physical health of older adults. Similarly, social interactions improve their physical and psychological health (Wen et al., 2018). Open public spaces offer essential settings for the enjoyment of different physical and social activities, thereby decreasing morbidity and enhancing social interactions and ties. Thus, older adults engaging in different activities in public spaces can help generate in them a sense of community and place attachment, preventing social isolation and promoting social life and ageing in place (Levy-Storms et al., 2018). However, the size, layout, design and program of public spaces differ highly across neighbourhoods, which affects the type and variety of available activities.

Spatial justice (particularly regarding accessibility), Universal Design, and the fulfilment of human rights for vulnerable groups are increasingly deemed critical in urban research and city-level agendas concerning public spaces (Jian et al., 2020, 2021; Low and Iveson, 2016; Soja, 2010). However, they are often overlooked in the planning and redevelopment of these spaces, particularly in underserved local neighbourhoods (Ma et al., 2020; Xiao et al., 2021). In extremely dense and deprived environments, public parks are crucial for providing citizens with ecological, social and physical health functions (Low, 2016; Park et al., 2018). Urban parks are essential for the wellbeing of some vulnerable social groups, such as older adults (Wen et al., 2018). Given the limited mobility, local parks, i.e., parks located in the neighbourhood or within a short walking distance from home, are essential to enable older persons to engage in different activities and enhance social interactions, thus improving physical and mental health among the older population. Although the development of older adult-friendly parks is part of the initiative of age-friendly cities to promote healthy ageing societies and in line with the Convention on the Rights of Persons with Disabilities (Article 9, 19, 30), public spaces, including urban parks, often exclude those in the advanced age group (Loukaitou-Sideris et al., 2014). Without an in-depth understanding of the activities of older adults in low-income and high-density settings, policies aimed at improving public spaces will likely overlook the needs and habits of this group. Moreover, the agential

dimension of public space, reflecting how park design can contribute to or hinder the activities of older adults, is still unclear.

United Nations (UN) agencies have established a values agenda including principles that set a moral compass for planning for older citizens and their environment. The UN Decade of Healthy Ageing (2021-2030) brings together these agendas towards a better future for older people. It demonstrates that all societal forces should share accountability for "concerted, catalytic and collaborative action to improve the lives of older people, their families and the communities" (WHO, 2020). This article focuses on urban parks closely related to the lives of older adults. By observing the environment, the daily life and activities of older persons, we explore settings in urban parks that may not completely meet the needs of the older people in their everyday life to support further research on inclusive and accessible public spaces in a healthy ageing society. This article aims to provide a preliminary assessment of the older adult–friendly urban environments and the hostile urban design elements, and to reveal the variety of activities (social and physical) and everyday interactions of older adults in parks. This paper investigates Hong Kong, an increasingly socio-spatially unequal city in East Asia (Chen et al., 2018; Tang, 2017) that is also home to one of the most rapidly ageing populations in the world (UNDESA, 2019). By 2038, older adults are projected to comprise one-third of the East Asian population (HKSAR, 2019). We examine the revelatory case of Sham Shui Po. This neighbourhood represents an extreme case, characterised by a low-income and ageing local population, extremely precarious living environments and limited public spaces, which are major factors influencing the wellbeing of older adults.

Public space and age-friendly cities

Inclusive and accessible public spaces are crucial for ensuring the enjoyment of human rights, enhancing the quality of life and access to services and enabling independent living and mobility, particularly for older adults. The crucial role of public space is particularly evident during emergencies such as public health crises, natural disasters and conflicts. With the COVID-19 pandemic more acutely affecting vulnerable groups (Villani et al., 2020), it has become more vital to address the needs of older adults in public space planning. As stipulated by UN Sustainable Development Goal 11.7, the target is to ensure "[U]niversal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities". The principle of accessibility (CRPD) is particularly relevant in this matter as it aims to ensure that persons with disabilities and others enjoy the right to "equal access" to physical environment, transportation, information, public facilities and services. It reflects Universal Design principles promoting equitable use, usage flexibility, intuitive design, perceptible information communication, tolerance for error, design for low physical effort and ergonomic design (Clarkson et al., 2015). These are essential principles required for the safe and comfortable recreational use of facilities by older adults.

In addition, the development of specific age-friendly approaches in cities is vital to accommodate the global ageing urban populations. The WHO Age-friendly City Initiative recognises that inclusive and accessible public spaces are crucial for the wellbeing of older adults and suggests recommendations for promoting public space as a

pivotal part of the active ageing concept (WHO, 2007). Considering ageing from an intersectional perspective and understanding the contribution of Universal Design to all populations is the first step in planning public spaces that can empower older people. First, older adults should not be considered a homogeneous group. Intersection identity characteristics including disability, gender, age groups, economic and educational status must be considered in urban space planning, especially as individual diversity in cognitive and physical status increases with ageing. The WHO initiative recommends that open public spaces, in particular, parks, should be barrier-free, attractive, well equipped and accessible to older adults. For example, defensive architecture (also known as hostile design), including filtering mechanisms to make public space inhospitable for those groups whose presence is not welcomed (e.g. spikes preventing seating near commercial buildings) may affect park use by older adults and other users (Smith and Walters, 2018) and thus should be avoided. Environments built according to the abovementioned recommendations can enhance the mobility and independence of a large group of people with disabilities, including those in the younger generations. The Age-friendly City Initiative recommends the following environmental factors to ensure that older adults can venture into public spaces independently:

- Even pavement conditions
- Visibility of walking paths
- Presence of shading and moderate temperature conditions
- Seating spaces placed to ensure that older people can walk independently
- Toilet facilities
- Quieter and contained spaces
- Crossings with auditory clues

Space-time activities of older adults in public spaces

'In terms of public space, distributive justice based on equity would ensure that public space was available to all people and that everyone would have some degree of access. [...] The concept of interactional justice is about the quality of interpersonal interaction in a specific situation or place. [...] Accommodating the differences in the ways social class and ethnic groups use and value public sites is essential to making decisions that sustain cultural and social diversity.'

(Low, 2016, p. 298).

The exclusion of a specific group of people, such as older adults, in public green spaces is also affected by factors other than the presence of physical barriers. The failure of these spaces to accommodate the habits and activities of older adults can prevent them from fully utilising spaces and facilities. For example, older adults mostly engage in low-intensity physical activities such as brisk walking; dancing; practising tai chi and yoga (Loukaitou-Sideris et al., 2014); and sedentary social-oriented activities such as chatting with peers, sitting, resting and watching passers-by (idem). Older adults can also participate in small-group recreational activities, such as playing (and watching) chess, or large-group activities, such as playing a bocce game. However, age-friendly planning initiatives aiming to increase park use by older adults often overlook the diversity of the

physical and social activities of older adults. Consequently, small playgrounds consisting of only few standard physical activities equipment are built for older adults. In highly dense East Asian cities, public spaces are also characterised by temporary patterns of use. Older persons most often visit the parks and engage in recreational activities in the morning (Pleson et al., 2014; Tu et al., 2015) given the local culture, the moderate temperatures and relatively low park population during these hours. In these locations, popular activities include group dancing (Chen, 2019), Tai Chi, bird-keeping (Leung, 2020) and playing chess (Siu, 2008), cards and mah-jong.

The context of Hong Kong

Ageing is a pressing issue in Hong Kong. Among developed economies, the city has one of the highest inequality rates. According to the latest poverty report, 391,200 older adults live in poverty, which corresponds to 32% of citizens aged 65 and above (HKSAR Census and Statistics Department, 2020b); that is, 3 in every 10 older adults live in poverty. This older group is likely to rely heavily on public spaces for their daily activities compared with other groups who have more income and experience less difficulties moving around. The available public spaces in Hong Kong are inadequate in size and quality and characterised by highly competing uses and users (Villani and Talamini, 2019, 2020, 2021). Nevertheless, over the past 30 years, some policies promoting accessibility and barrier-free access have been implemented to improve the access of people with physical disabilities to buildings and public spaces. The 'Universal Accessibility – Best Practices and Guidelines' manual, published by the Architectural Services Department in 2004, is based on the concept of Universal Design and meets the requirements of barrier-free legislation to achieve universal accessibility in built environments. It provides design suggestions for aspects such as the layouts of facilities, paths, entrances, exits and elevators; passage connections; material selection; lighting; and signage. Similarly, the 'Universal Accessibility for External Areas, Open Spaces and Green Spaces' manual, published by the Architectural Services Department in 2007, indicates that the following architectural factors should be considered to ensure Universal Design: 'anthropometrics', 'continuity', 'connectivity', 'equality', 'safety' and 'sustainability'. The Hong Kong Planning Standard and Guidelines emphasises the importance of green space accessibility in Hong Kong, especially for older adults. In 2016, the Hong Kong Chief Executive's Policy Address featured developing an agefriendly community as a specific policy focus. The recommendations included enhancing pedestrian facilities through the introduction of covered walkways and other infrastructure, enhancing transport and public facilities and increasing the number of seats in some public facilities (e.g., indoor markets). However, the main policy direction for improving existing public spaces was limited to installing "additional elderly fitness equipment" in the outdoor leisure venues of the 18 districts. The provision of design elements compatible with a more diverse range of activities, as sedentary recreational activities or large groups physical activities, was not considered.

Materials and method

'Meeting other people, watching what is going on, seeing young and old [...] ordinary daily street life, or the ever-changing human scene: these are the subtle, traditional joys related to life in public spaces.'

(Gehl, 1989, p. 8)

This research employs qualitative methods as on-site audit of the environment, unobtrusive direct observations; video-recording and note-taking in public spaces to assess the environment of two selected small urban parks' and to examine older adults' activities in them. Gehl and Svarre (2013) proposed that the core principle of public life studies is "to test the actual conditions in the city by observing and experiencing" (p. 99) and advocate that researchers should "walk around while taking a good look" (p. XII), observe the city at eye level "from the perspective of pedestrians" (p.78) to "better understand the needs of users and how urban spaces are used" (p.3). Previous studies adopted semi-structured direct observations to conduct empirical studies on social activities and behavioural responses on several forms of public spaces, as the high street (Mehta, 2009), streets median (Sankalia, 2014) or urban sidewalks (Loukaitou-Sideris and Ehrenfeucht, 2009). A vast urban design scholarship highlights that research on public space and public life should be based on the observation of how people use and walk around in public space. Thus, on-site audits of the environment and direct observations are considered important research method and decision-making tools in studying urban public space and public life. The reminder of this section introduces Sham Shui Po context and the two public spaces selected as case studies. Then, the data collection and analysis are presented.

Case studies selection

Sham Shui Po, the case study examined in this article, is a low-income, high-density old neighbourhood in Hong Kong with insufficient public spaces (Siu, 2013) (Fig. 1). According to the latest population census, this district features a high percentage of adults over 65 (15.9%; HKSAR Census and Statistics Department, 2016) and the second-lowest household monthly income across Hong Kong (HK\$23,000; HKSAR Census and Statistics Department, 2020a).

Sham Shui Po is often referred to as 'hou2 dzaap9' ([好雜] 'undesirably mixed'), which describes an area with/for poor people and misfits (Cheng, 2013). It is characterised by a high percentage of older adults, low-income inhabitants, poorly educated people, recent migrants, and inadequate living spaces in the form of subdivided units (idem). These precarious and bed-size living spaces are a result of the subdivision of larger apartments to fit in more tenants and increase rent revenue. These residential spaces do not have any common room or other private facilities that can cater to social of physical activities of residents. Moreover, this grassroots neighbourhood is also home to second-hand markets and fabrics and electronics stores and includes a rapidly redeveloping and gentrifying area with cafés and workshop spaces (He et al., 2021). In the past, the government implemented some pedestrianisation projects to enhance the amount of pedestrian space in these highly congested environments (Murakami et al., 2021). While few indoor public spaces are available in Sham Shui Po, as libraries and indoor food markets, regulations controlling access and acceptable behaviours prevent

any informal use of these spaces (e.g. prohibiting sleeping, playing games, loitering, among others).

The neighbourhood is characterised by a limited amount of public open spaces per older person (1.9 m2; Gong et al., 2016), below the city-level standard of 2 m2 per capita (Lai, 2017). The few available public spaces are limited in size and design quality and mainly include micro- or pocket parks, or parks whose sizes are akin to street spaces. Linear public spaces are a typical form of public space in this Hong Kong neighbourhood and more in general in East Asian cities (Pu, 2001). Thus, we selected two small parks characterised by a linear layout in the same neighbourhood (Fig. I): the Nam Cheong Street Sitting-out Area (NCSA) and Tai Hang Tung Park (THTP). The distance between the two parks is approximately 950 m. NCSA was chosen as representative of a street-level mixed-use public space developed along the road-space in high density environments. THTP represents a linear park with sport facilities, surrounded by community and institution services. Both NCSA and THTP have older adult-friendly fitness facilities. Located near a highly populous areas, both parks are frequently used by older adults and other residents.



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Figure 1. Map of Sham Shui Po and location of Nam Cheong Street Sitting Area and Tai Hang Tung Park.
Source: authors.

Alt Text: The geographical location and surrounding environment of the two parks (NCPA and THTP) selected in this paper.

Data collection and analysis

In this paper, we highlight how the city operates at temporal (Nadimpalli, 2020) and spatial micro-levels by focusing on NCSA and THTP. Firstly, we based the on-site audit of the environment on The Age-friendly City Initiative recommendations. In both parks,

two authors independently gathered extensive notes and photographic material on the pavement type and condition, visibility of paths, availability of shading, availability and layout of seating spaces, location of quieter spaces, crossings auditory signals and location of toilet facilities. In case of discrepancies between the two observers on the gathered data, the material was discussed until the two observers reached an agreement.

Secondly, given that older adults prefer to use parks in the morning (Duan et al., 2018), we selected the morning hours (from 8 am to 11.30 am) as observational period for this study. We observed morning activities in the public spaces and adopted unobtrusive observations, repeated walkthroughs, video recordings and notetaking over prolonged field visits, between October 2020 and October 2021. The fieldwork took advantage and matched the first author's daily commute routes. Although COVID-19 restrictions have been strictly implemented in Hong Kong since the onset of the pandemic, public spaces in the city remained open (Chen et al., 2020; Villani et al., 2020, 2021) during the data collection period.

Findings present the main observations emerging after debriefing and discussion of the environmental audit data collected and the direct observations of parks' use.

Findings

Park characteristics and accessibility

NCSA is a linear public space approximately 600 m long and 12 m wide, and it connects Tai Po Road and Tung Chau Street (Fig. 2). It is located a few blocks away from the Sham Shui Po mass transit railway, thus the area has high pedestrian flow. The blocks that border the street have basic facilities such as public toilets. NCSA is in a congested vehicular street median and stops vehicular traffic from perpendicular roads from passing through Nam Cheong Street, thus allowing uninterrupted pedestrian connection between several blocks. This layout allows pedestrians, in particular the ones with lower mobility, to have a dedicated and continuous walking path across the neighbourhood. The path is mostly paved with non-slip bricks and the numerous street crossings connected to NCSA have dropped kerbs and auditory clues. While during the day the visibility of walking paths is high, it significantly drops after dark with areas almost completely in dark. Thus, fewer users, especially partially sighted users and seniors, can use the park after sunset.

NCSA includes six sitting-out areas: the landscape design from area I to 4 consists of a central curved walking path of varying width (2.8 to 7.8 m), while areas 5 and 6 feature a central flowerbed (3.3 m wide) and two straight walking side-paths approximately 1.8 m wide. The central curved path allows to have larger flowerbed and clearly separates the park from the surrounding car-traffic and its noise. The walking pavements are mainly made of non-slip bricks in area I to 4 (Fig. 3), while they are made of concrete in area 5 and 6. While the concrete pavement is non-slip, its surface is rough, bumpy, and in some places, uneven, making it unfriendly to users with reduced mobility (among others). The flowerbeds bordering the central walking path are raised 45 cm from the road level, creating a sittable edge of stone material, while making the flowerbeds inaccessible. Scattered along this small park are 49 standard benches with armrests, which provide users with additional spacious seating spaces. The number and location of benches, scattered along the main path, allows users to stop and take rest anytime.

Some of the benches are under canopies, providing shaded seating spaces, as well as quieter and contained spaces. However, benches are surrounded by raised flowerbeds, often leaving little or almost no space around the bench. This seating arrangement is particularly unfriendly to wheelchair-users and those relying on walking aids. While most of the vegetation in NCSA consists of small bushes and palm trees, larger trees provide shade along the walking path. In areas 2 and 3, a micro play space is surrounded by two pebble walking trails, built primarily for use by older adults. Having a children' play zone, a low-impact fitness path for older users and a rest area in the same place, makes these zones usable by residents and visitors of different age-groups. Fences border most areas of NCSA (1-4) and entry points (open from 7 am to 11 pm). These entry points are connected to street crossings, and the sidewalk curbs are lower than those of the road and feature tactile hazard warning tiles with raised dots. Main street crossings also provide audible traffic signals, while smaller street crossings only provide dropped kerbs. A map is present at the entry point of each area, but these maps do not follow guidelines that ensure accessibility for people with visual impairment. THTP is a linear public space approximately 340 m long with varying width (max: 35 m; min: 5.9 m). It is bordered by fenced sports fields (football, rugby and gate ball fields) and connects Tong Yam Street and Boundary Street (Fig. 2). The area surrounding the park contains schools, public housing estates and private housing estates, and a public facility building in the middle of the park has one food stall and public toilets. The environment is not noisy or congested. THTP comprises three main areas: the northern part (near the Tong Yam Street entrance), the central part and the southern part (near the Boundary Street entrance). The basic design includes a central concrete walking path connecting the two entry points (Fig. 3). THTP has high fences bordering the park and two fenced entrances, open from 7 am to 10 pm. The North entrance is connected to the sidewalk through a dropped kerb. The South gate is approximately I m above the street level, with a ramp and a guide path. While this South entrance is wheelchair accessible, it is connected to an inclined sidewalk (for emergency vehicle entrance) which is considerably steep. Thus, it could be dangerous, especially for users with reduced mobility. This entrance is connected to the zebra crossing providing auditory clues. The space is adequately illuminated even after sunset.

The main walking path has a rough concrete surface, which is uneven in some places (e.g. seams). Accessible flowerbeds border the main walking path. Near the northern entrance, a large flowerbed follows the right edge of the walking path, but trees do not shade the space during warmer hours of the day. In the central area of the park, trees and other shading devices are completely lacking. The southern part, with large canopy trees is the only area which is adequately shaded during the warmer hours of the day. In the southern part, an additional walking space runs parallel to the main path and provides a large empty shaded space for unplanned activities or uses. The large unshaded areas along the THTP walking path could make the space unfriendly to senior users, among others.

Long benches (three-seater) were installed in this park, but the singular seating space is smaller if compared to a standard two-seater bench. Approximately 40 benches with armrests provide seating spaces in the southern area of THTP. While in the northern area there is only one seating space and in the central part, the only resting option is a sittable edge. This seating arrangement, clustered in the southern area of the park, is not conducive to independent mobility of seniors and other users with reduced

mobility, who cannot stop and take rest while walking across this park. Moreover tree-canopied benches providing shaded seating spaces are only available in the southern part of the park. In the centre of the park, one older adult playground (274 m²) is equipped with several exercise machines (one arm press, one air walker, three bonny riders, four shoulder wheels and two double arm stretches). Some benches border this playground and the surrounding empty space can accommodate users with reduced mobility.



Figure 2. Map of Nam Cheong Street Sitting Area No.2 to No.5 (left) and Tai Hang Tung Park (right) Alt text: Map of the NCSA (left) and THTP (right), including their geographical location, characteristics, infrastructure, etc.

Older adults' everyday activities in Sham Shui Po parks

The NCSA provides a linear pedestrian connection along the heart of Sham Shui Po and is regularly used by older adults to navigate and walk to nearby destinations. Older adults walking alone or as couples use this park for their daily activities such as shopping at the grocery store, street markets or hawker markets. Older women regularly walk in the park in the early hours of the day, carrying bags of groceries or items to sell in the second-hand market. Wheelchair users visit the park independently, but usually they do not sit on the benches, which are embedded in the raised flowerbeds. Older adults and other users with canes or walkers who are walking in the park or waiting for the crossing signal stop can rest at the sittable raised flowerbeds within NCSA. This activity was frequently observed near the street crossings where seniors were waiting for the green light while resting on the flowerbeds' edges.

As the vast majority of the nearby residential spaces lack living rooms or other such private communal spaces, the park is a destination in itself. NCSA is used as a resting

area to read newspapers, scroll through apps on smartphones or snooze (Fig. 4 and 6). Users often perform their activities in the shade, resting on covered benches under gazebos (Fig. 5). While individual physical activities are typically performed near the pebble walking trail, placing their belonging or walking devices on or near the children's games (Fig. 7). Often seniors stop their exercise and take rest while on this trail. After using the trail, older adults sit on the flowerbed edges or stretch leaning on the trail's railings.

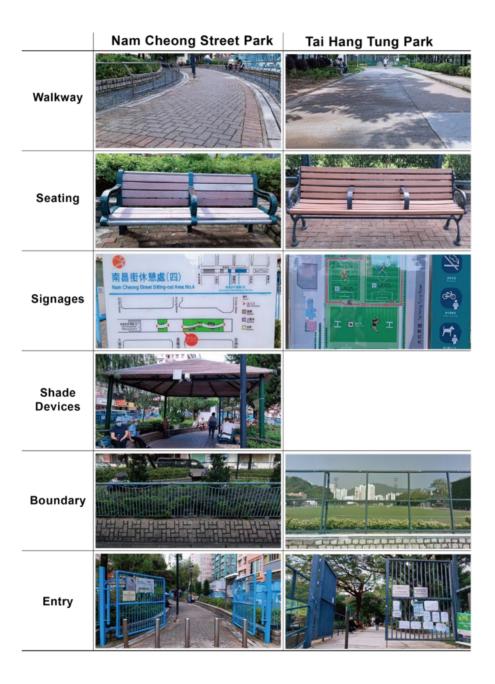
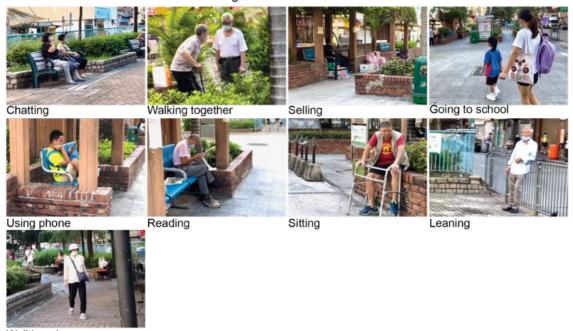


Figure 3. Accessibility and spatial features of Sham Shui Po parks. Source: authors. Alt text: Comparison of NCSA and THTP base on seven aspects: sidewalk, seating, signals, shade devices, boundary, and entry.

Social activities observed in Nam Cheong Street Park



Walking alone

Physical activities observed in Tai Hang Tung Park



Figure 4. Activities observed in Nam Cheong Street Sitting Area and Tai Hang Tung Park. Source: authors.

Alt text: The activities of older people in the two parks are different. NCPA has more social activities, and THTP is mainly for physical activities.

In the early hours of the day, THTP serves as an outdoor gym for older adults (Fig. 4). The southern part of the park contains two parallel walking paths, one of which allows various groups to engage in recreational physical activities. Here older women gather in groups of 10–15 to dance and engage in aerobics. These groups usually carry a speaker and rehearse their dancing choreographies. Other smaller groups or individuals engage in stretching routines. Some beat their arms behind their back, while others stretch their legs against a bench or a fence. In the central area of the park, some older adults use workout equipment to perform circuits or pull-down bars. Much older adults perform walking laps and are often accompanied by a domestic worker or family member. Seniors are rarely seen without a migrant domestic worker or a family member in this park, suggesting that older adults do not reach the park and use it independently.

The shaded southern area of the park appears to be more used than the central and northern parts, which have little shade and few benches. In these areas older adults pass by, but they are not observed using the space for recreational activities. In the central and northern parts, younger people usually jog, and accompanied older adults use the walking path to cross the park to their destinations. Fewer users sleep or engage in resting activities in the central and northern parts than in the southern area. Here, few seniors usually rest and read the newspaper after their physical exercises.



Figure 5. Older man resting in Nam Cheong Street Sitting Area Source: Kasyap Sarvadevabhatla and Caterina Villani.

Alt text: An older man fell asleep leaning on his luggage on the NCPA's bench.

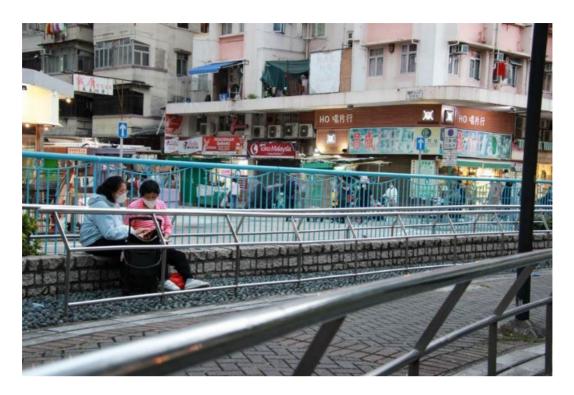


Figure 6. Women sitting on the curved sittable edge in the pebble walking trail (NCSA).

Source: Kasyap Sarvadevabhatla and Caterina Villani

Alt text: Two older women are sitting on the curved sittable edge and are chatting in the NCPA.



Figure 7. Older man exercising in Nam Cheong Street Sitting Area.

Source: Kasyap Sarvadevabhatla and Caterina Villani.

Alt text: An older man is doing exercise near the pebble walking trail while the other one is passing by.

Overlapping uses of space

Several uses and users are observed in both parks. Users of different ages, gender, class, nationality, disabilities and educational statuses are observed to gather, stay or pass by in the NCSA and THTP for various reasons or purposes. In particular, the proximity between play area and senior fitness corner seems to cater to children, older-adults and their caregivers sharing the same space in NCSA. Here, grandparents play with their grandchildren. In the same park, groups of young adults from the Indian subcontinent are observed socialising before lunchtime. During Sundays, older adults are sitting side-by-side migrant domestic workers, who gather *en masse* during their weekly day off. In THTP older and younger adults are observed training with different intensities. Younger adults train completing running lapses, while older adults use the low-impact equipment or dancing space. The seniors' caregivers, typically migrant domestic workers, usually sit on benches that encircle the older adults' playground, while socialising.

Beyond the 'Senior Playground'

Overall, both NCSA and THTP are vital spaces for older adults. NCSA is essential for their daily social activities, serving as a communal living room for low-income residents. NCSA is predominantly a site for social activities. It forms part of the daily route of residents, and people from different ethnicities mingle in the intergenerational space with old-time residents and children. Unaccompanied older adults with limited mobilities rely on NCSA to navigate the neighbourhood. While the NCSA design allows users to stop, seat and take rest, its hostile design of benches makes it difficult for older adults and other low-mobility users to fully utilize them. THTP primarily functions as an outdoor gym for older adults. THTP is a hub for older persons to engage in physical activities. Larger groups in the park are often accompanied by caregivers. While seating spaces are pervasive in NCSA, in THTP, benches are mainly located in one area of the park and near the older adults' playground. This area of the park mainly caters to seniors. The shading area with seating opportunities is located in the southern area of THTP. As a result, older adults gather mainly in one area of this park. The foregoing observations from the Sham Shui Po parks agree with the findings of previous observational studies, particularly that morning is an active time for older adults in parks (Pleson et al., 2014). According to the WHO age-friendly recommendations, parks should contain some quiet and contained spaces to ensure that older adults can rest comfortably. Such spaces, with benches and shading are used for resting in NCSA (Fig. 5) and appear vital in a deprived neighbourhood, with underperforming living spaces. In THTP, the empty spaces of a walking path are highly used for group recreational activities, demonstrating the importance of flexible programming of public spaces. Defensive architecture (Smith and Walters, 2018) and inherent design layout may affect the older adults' use of the parks and the group size. In NCSA, while sittable edges may directly contribute to the independent movement of older adults with physical impairment, particularly near street crossings, they may prevent wheelchair users from gathering near the benches.

Limitations

This study is not without limitations. As a preliminary assessment, there are limitations in terms of quantity and extent of on-site data collected and in the analysis. The time-slot selected for the direct observations in this study is limited to the morning time. Wider observation period would allow more comprehensive findings.

Conclusion

The findings from the investigated extreme neighbourhood illustrate that parks fill in the fundamental function of providing space for the daily activities of older adults and other users (including providing physical exercise facilities and dedicated infrastructure for independent mobility and social interactions). Nevertheless, it is recommended that shaded, sittable and intergenerational space is considered in landscape planning, especially in similar urban environments. While the local policy-level agenda promotes older-adults friendly fitness areas, this preliminary assessment highlights other uses of the space, essential to Sham Shui Po older residents. Spaces for larger groups activities and zones for sedentary social activities seem to cater to this age group. Several studies have clarified the uses, needs and preferences of older adults in urban parks, highlighting the importance of physical and social activities; however, parks often fail to include spaces that cater to the wide needs of older adults. In several cities worldwide, policymakers and planners consider the inclusion of older adults in public spaces as an afterthought. Older adult playgrounds appear as the main design solution for the inclusion of older adults in urban parks. In Hong Kong and many other cities, these spaces are designed as very utilitarian (Loukaitou-Sideris et al., 2014), perhaps because the focus is on exercise, fitness and budget costs. While the design aims at active recreation, these places focus only on a limited set of physical exercises. The designs mostly fail to incorporate facilities for other social activities such as chess and card games and a layout of benches for interactive engagement. More spacious areas (or empty shaded spaces) with grass and trees would be ideal park locations for group activities. Additional research is needed to further examine the relationship between design, spatial features and usage by older adults. In this direction, a wider selection of case studies and data collected would enrich the research. The findings from the investigated extreme neighbourhood are relevant to highlight the critical role of landscape infrastructure and the need to provide inclusive and accessible public spaces for healthy ageing societies.

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A group of older persons playing draughts in Kwai Shing, a public housing neighbourhood in Hong Kong. Picture by Fabio Mantovani.