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Sense of place or sense of belonging? Developing guidelines for human-centered outdoor spaces in China that citizens can be proud of

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Abstract

Creating livable cities through cultural development is important not only because of the inherent value of culture itself, but also because of the social, economic, and environmental benefits afforded by communities with increased pride and attachment to places and people they share the city with. This is increasingly more critical for children and young people, as educating them to become better citizens, it also do strongly relate with development habits and their awareness of interacting with outdoor environments surrounding them. For inhabitants of cities to live an enriched life in every means, they require more than just the infrastructure and the trappings of material wealth: They require an attachment to a place, a sense of belonging and a sense of purpose, of which, a sound cultural development can help generate.

Given the central government's recent emphasis in the 13th 5-year plan on encouraging creative and innovative industries, it is relevant to generate programs on cultural development focusing on younger generations. Through this, municipal governments can improve the quality of life and empower the young generation to shape the long-term prosperity of their cities.

What are various ways to develop solutions based on strengthening community relations? What are the dynamics of relationship of people with each other from different social milieu? Potential discussion areas include deployment of policies such as providing grants for artists and innovators, creating tax incentives that encourage corporate social responsibility programs, and restructuring public processes to ease among different social milieu of same generation as well among different generations.

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1. Introduction

All around the globe, municipal development efforts that target the regeneration of green, urban spaces are often sites of social segregation for certain age groups, most vulnerable to the effects of top-down, fast-paced change at home [1]. Evidence indicates that urban and social considerations intersect, given the relationship between green, built space and standard of life – or "livability" – within the context of functional amenities, cultural heritage preservation and mobility accessibility for users. Among these groups, children and young people are particularly important. However in China, when these groups are taken into consideration, there is a third group that is also need to be taken into account: The elderly. Currently in China despite the growing elderly population and their care needs, many people belonging to this age group live with their children after they get married. Many young couples, through sense of more traditional Chinese cultural and familial norms, hold intergenerational relations in high regard. This dynamic, shapes shape the upbringing and societal setting of the next generation, thus conflating the built space needs and wants of the elderly and the children. As children spend a lot of time with their grandparents and taken care by them, this condition interestingly co-locates these two age groups within urban spaces together. Therefore in this paper we have chosen to focus on the elderly, alongside with children and young people.

Outdoor green spaces play an array of critical roles, ranging from recreational outlets to exercise facilities, to tourist attractions. At their core, they are intended to serve to citizens of the community in which they are located. Green spaces within urban settings have been found to improve cognitive development in primary schoolchildren [2], and are conducive to positive general health – disproportionately benefiting the elderly and the young [3]. The elderly and the young also constitute a large demographic of green space and public park users, partly owing to the rapid shift from more traditional Chinese typologies of *Hutong* or *Lilong* style housing equipped with courtyards, to isolated apartment blocks bereft of any communal space. This indeed reinforces the need for shared spaces outdoors for the young and old in mind within the context of China. Yet, these groups' specific needs are often neglected if parks are created in the top-down, opaque design and maintenance process as they have been in recent Chinese history.

As such, the design process of public outdoor spaces should be inclusive that factors in the needs of the community and the age groups within. To involve the general public, and their various nuanced opinions, as active contributors rather than passive users is essential in order to curate spaces suitable for diverse social groups - not least to build a sense pride and strengthen emotional ties to the hometown. We propose two major themes: 'Interactivity' between stakeholders and 'dynamic feedback loops' as ways to incorporate the needs and desires of population more comprehensively. Within the extent of this paper, we will attempt to pull together examples reflecting the current related situation in China and later, we will investigate a number of related case studies from around the world as examples of the success of community involvement in park development and maintenance suggesting potentials to adapt these processes to improve policies in China.

2. Interactivity between stakeholders in designing public spaces

2.1. Community Involvement

Chinese urban, public space planning procedure - that is, planning, managing and designing - is currently conducted predominantly by city planners and government officials, and without the input of community members [4]. The late 1970's witnessed to an overwhelming shift towards municipalities adopting Western-style open space models, under the "City Cosmetic Movement" inspired policies implemented throughout China [5]. This top-down decision making approach often fails to adequately gauge community interests - it is based on professional estimations rather than public wishes - thus resulting in spaces that are largely unusable by the majority [6]. It is a common sight on many outdoor spaces in Shanghai. *The Music Square* at Yanan East Road in Shanghai seen in Fig. 1 (a) and *Yanzhong Greenland Park* at People's Square seen in Fig. 1 (b) for instance, have lawns on which people are prohibited to step foot on to play sports or have picnics [6]. To ameliorate these issues, Chinese cities should

turn towards processes, which take public opinion into consideration, as the involvement of community members and organizations is essential to determining the community's needs [7] (Community Involvement in Program Planning, 25). Members of the community, from children to the elderly, are the most important stakeholders in an outdoor public space, as they are the group, which public spaces are meant to serve. The rise of the new urban class in China, along with the advances in information sharing, has paved way for increased civic consciousness and a greater public desire for enhanced civil engagement [8]. Empirical evidence conducted in Guangzhou - a location selected for both its size and prominence in China's opening up reforms - via survey-based primary evidence collation supported the civil engagement hypothesis, but to varying degrees amongst the social strata. Those belong to the 30-39 age group exhibited the greatest desire to participate, whereas older demographics (59 and over) appeared to be the most neutral [9]. Yet, this evidence does not necessarily suggest a strong subservience to participation, or even, lack of active willingness; the findings for the older age group may be influenced by a lack of participatory experiences, mistrust in bureaucracy or an evolved, conservative approach to local government policy matters. As the older demographic represents a large proportion of park usage owing to their copious leisure time, it is likely that the elderly have a distinct set of park criteria that is still worthy to consider [10]. Given the means, it is likely that this neutrality can advance into participation and engagement.



Fig. 1. (a) Music Square; (b) Yanzhong Greenland

These community involvement processes must therefore be engaging to all demographic groups, including the elderly and the young, in order to have effective participation. Town hall meetings, for instance, may not draw a representative group of participants because they often attract many older people and very few young ones [11]. Moreover, an entirely electronic survey may find difficulties in drawing the elderly, who are not as connected to the Internet. Perhaps a combination of community involvement measures is necessary to gauge what the community really wants.

2.1.1. Case Example: Tempelhof Airport Park

A good example of a multi-faceted approach to outdoor space planning is how community involvement determined the fate of *Tempelhofer Feld* in Berlin, Germany. After *Tempelhof* Airport closed in 2008, leaving behind its legacy as a base of operations for the Berlin Airlift and as Berlin's inner-city airport, the Berlin Senate sought to add an affordable-housing community and a new main library [12]. However, citizen-led efforts resulted in a 2014 referendum on the future of the field, which decided to keep the *Tempelhofer Feld* as a green open space instead of developing it into a residential or community facility.

Throughout the entire case, the Berlin Senate involved the community in the former airfield's design process. Even before the 2008 closing of the airport, the city held a web dialogue, which drew 68,000 users and distributed a survey to 7,000 households, which received 25% response rate. This combined approach gathered responses from varied demographic groups, as they targeted people with different levels of access to technology as well as geographic location. Still, the City believed its responses may not have been a complete cross-section of the community's ideas, so 17 different moderated focus groups were held to engage migrant demographics which historically did not respond to surveys [13].

Since the closing of the airport, the city of Berlin has held numerous events, which have drawn members of the community. After the 2014 Referendum, planning shifted from designing a residential facility to maintaining and improving the green space as a park. The park has since become one of the best in Germany, employing community-oriented approaches such as guided tours, apps and information boards to educate the populace as well as transparency in the maintenance process to involve the community [12]. Perhaps a unique example, *Tempelhofer Feld* currently being used as a popular destination by the inhabitants of the city from various age groups, among children, young and the elderly as seen in Fig. 2 (a) and Fig. 2 (b). This example shows how involving the public through means which attract a complete cross-section of demographic groups in the design of a park can lead to favorable outcomes.



Fig. 2. (a) Picnic at Templehof Airport Park; (b) Former runways are used by children and young people for various activities

2.2. Nonprofit Partnerships

In many examples, the model of public sector planning and maintenance is enough to create fulfilling green area. In those cases, the involvement of local, community-oriented non-profit organizations can fill the staffing, maintenance, management, and programming gaps that the public sector leaves behind. In some cases, non-profit companies must take a more active role, revitalizing a park suffering from mismanagement and/or underfunding [14]. Moreover, these non-profit and parks department partnerships serve as bridges to their communities.

Nonprofit organizations can have a wide variety of relationships with the parks they aid. Regardless, they are often essential players in the development of a good park. The "Project for Public Spaces" – a nonprofit organization from New York City– successfully categorizes other nonprofits into four roles depending on the municipality's and nonprofit's resources and abilities: assistance providers, catalysts, co-managers & sole managers [15].

2.2.1. Assistance Providers

Assistance providers are smaller nonprofits that support parks with labor, community outreach and park programming. They act as public interest groups for the community, often fundraising and advocating for park improvements. They give residents a sense of ownership over the park, providing volunteer openings for them to give back and forums to hear their suggestions and complaints. Usually, however, assistance providers are not heavily involved in the design of the park due to their nature as a lesser partner in the nonprofit-municipality relationship [15].

2.2.2. Catalysts

Catalysts, co-managers and sole managers, on the other hand, are key contributors to the final version of an outdoor space. Catalysts are organizations that create a vision for a public space and generate a process, which allows the vision to be implemented. Catalysts are critical in all roles of a park's development, from conducting initial research to building community and political support to locating funding. They recruit talent in engineering the park, often holding design competitions to find a suitable park layout. They serve as mediums for community engagement in the design process, providing focus groups and public meetings to gather information on citizen needs and desires [15].

2.2.3. Co-managers and sole managers

Co-managers and sole managers are larger organizations that hold even more weight in working with a city's parks department. While co-managers serve as equals when collaborating with city partners, often sharing staff and salaries, sole managers are delegated complete control of a park, wielding near-total authority over design, maintenance and operations with limited involvement of parks departments [15].

3. Dynamic Feedback Loops

Incorporating a human-centric "feedback loop" in both the development and maintenance of an urban green space can further assist with the goal of providing public facilities that adequately fulfill the unique criteria of the age groups that we will be focusing in this paper. The dynamic nature will be applied by constant monitoring of the park's reception amongst the community, and through regular, intervallic discussions held in the form of workshops. In order to host these events, a community-led, volunteer based local council group should be encouraged amongst residents, most notably amongst the elderly, who can use this as an accessible, peer-to-peer platform to voice their views.

This public park management style has been trialed successfully across the United Kingdom. One of the examples for this is the "Friends of Stamford Park" initiative. Launched in 2005, this initiative acts as an independent nonprofit that maintains and improves the park space. Efforts have included but have not been limited to restoring heritage features, encouraging community involvement, and enhancing facilities combined with an emphasis on safety and accessibility. The organization's aim to involve as many people as possible, to act as the local community's "voice" through Annual General Meetings and events such as 'The Big Lunch 2016' integrating members in a more recreational setting, whilst manages to also act as a space for mobilizing paying members to voice their concerns and suggestions. This forum has voted for projects such as the "Rose Garden" horticulture installation. The dynamic nature of park development and regeneration is reflected by the multiple other on-going projects that capture the interests of the young and the elderly alike.

The park's interactive noticeboard, whereby the park's latest planned proposals and public news is displayed for the users to view, is designed with the purpose of establishing a mutual mode of communication between the visitor and the 'friends' (of the park). We believe that this technique, if adopted in Chinese urban parks, would foster an open dialogue between both the young park users and the council; the elderly, or over 60, some of whom the park's friend group is mainly comprised of, are given an outlet to express their views in a medium conducive to creating change that reflects their self-identified needs. Other methods that could be adopted to facilitate this open dialogue include feedback boxes, guest books and comment cards – all of which are affordable, low maintenance methods to gauge the thoughts and suggestions of visitors, whilst presenting park goers of all ages with the opportunity of providing input.

Such feedback methods such as comment cards, combined with raw data from well-attended public meetings and surveys are also methods used by Ottawa County Parks Commission in Canada, where the commission formed a draft plan for the park's future that is based on these feedback. Proposals listed included further efforts to meet and exceed ADA accessibility guidelines, and an increased emphasis on improving communication with residents [17].

This is supported by findings using the Feldman & Oberlink framework that lists "social and civic engagement" – through community involvement and engagement with meaningful work – as a requisite for ensuring "elder-friendly" green space usage [18]. As such, a dynamic yet non-technology based option is easily accessible for those, who may not be accustomed to the workings of modern day electronic methods.

Another derived advantage of the park focused community group could be from gaining the involvement of expert consultants from across various fields, who would mediate the meetings, host workshops and propose tangible suggestions based off the recommendations from the general public feedback. This varied approach can also be adopted during the development process of the park, in order to gain more technical insight, as well as to increase the myriad of prospective ideas for the park's progression in a multitude of interdisciplinary ways. This could involve academic contributors (of Sociology, Economics, Architecture, Geography), physiotherapists, as well as Chinese landscape practices, artists and academicians of whom could provide a distinctly culturally relevant view that creates a hybridized park, that hence relates modern, urban planning, whilst embodying the necessary themes of

traditional heritage, resonating with local users. These collaborations, coupled with a park development strategy that consults concentrations of the young demographic (schools, nursing homes, youth clubs) as well as elderly creates a holistic and nuanced park archetype that complies with the functional demands of the varied ages.

The "Project for Public Spaces" initiative from USA that aims to "renew" parks, identifies observing the way people use pre-existing spaces and measuring the public's perceptions as the way to develop an understanding of the community's concerns. From these metrics, experimental changes are made accordingly and thus evaluated based on both the effect these have on usage and public feedback; these ideas can form part of the "dynamic feedback loop" mechanism, that adopts suggested and perceivably meaningful changes and assesses the impact on the target groups at a continuous rate – a style that reflects the rapid and pertinent nature of Chinese urban development. Continuous engagement, when operated on a targeted and loop-basis, leads to cycles of improvement of services. The community canvassing approach was used by "Project for Public Spaces" for the renovation of a linear park in Laguna Beach, California. The fieldwork indicated towards a lack of child-friendly amenities, and so a range of sporting facilities and game areas geared to a younger crowd were enforced; as such, the Laguna Beach park now serves as a considerable and well-utilized asset to the local community [19].

4. "Interactive" Public Spaces: Case Examples

Idea for an innovative and "interactive" type of public space is relatively a new concept. This interaction can be on various levels in relation to management and maintenance of the park as well as certain design criteria they bear.

The first example to be revealed is located in Kona, Hawaii ranked as one of the top 50 playgrounds in the States by the Early Childhood Education Zone, an online platform supporting the education of young children in United States [20]. The space seeks to instill pride in cultural heritage from a young age, while providing a safe and fun playground. The space's maintenance is also a model for community involvement through a feedback loop, as the local government, non-profit organizations and community volunteers can work together to keep the park in good condition.

The second example is about a partnership between a nonprofit organization and a parks department in Indianapolis, Indiana. This partnership has led to the development of a parks system, which engages community members through interactive programming and spaces to foster a unique sense of belonging to the city.

4.1. Kamakana Playground, Hawaii

What sets the Kamakana playground as a unique example, apart from other parks designed for children in United States is its innovative focus on Hawaiian culture and history. By immersing young children in an environment with reminders of their island's Hawaiian heritage, the playground seeks to instill a sense of cultural pride in those who visit. Park structures include a traditional Polynesian double-hulled canoe, a Kona Sugar Company model train, tribal carvings and picnic tables shaped like the Hawaiian islands [21]. The playground fence is engraved with traditional Hawaiian art and play facilities include a concrete whale and a volcano replica made from lava rocks. Though the playground's focus is on the young, it also includes recreational facilities for the elderly such as horseshoe courts and chess and checkers tables [22].

The playground's current success is largely attributable to extensive community involvement. Originally constructed in 1996 by community volunteers, the park was recently the site of extensive renovations, which repaired and upgraded over a decade of wear. In 2009, two nonprofit organizations, the Rotary Club of Kona and the Ironman Foundation, donated $10,000 each to refurbish the park. Combined with $30,000 from local government support, this funding aided volunteers from the community in overhauling the playground. In all, volunteers gave over 8,000 hours towards making the playground safe again [23].

4.2. 'Keep Indianapolis Beautiful': A partnership model between nonprofit and park department

Indianapolis, Indiana has some of America's best public parks, in large part because of the efforts of the not-for-profit organization Keep Indianapolis Beautiful, Inc. (KIB). The nonprofit is big enough to seriously impact decision making surrounding parks, with $6.2 million in donations and volunteer support, 100 full- and part-time staff and

20,000 volunteers supporting an average of 500 projects a year [24]. This formidable size and resources enable it to launch creative, interactive programs, which involve a sizable proportion of the community

For instance, the KIB's has planted nearly 45,000 trees since 1990 through its Community Forestry program, which provides volunteers and specially trained arborists to neighborhood tree plantings, and its Youth Tree Team summer program, which provides seven-week long summer jobs to local high school students. These programs give volunteers and students a closer connection with their neighborhoods, as well as essential leadership skills and teamwork experience. In fact, research finds that volunteer tree planting and tending is strongly correlated with increased collective action [25]. Furthermore, the KIB's pocket parks initiative, which converts vacant lots into small parks in often run-down neighborhoods, has been measured to have quantifiable positive impact on local communities. A Butler University-KIB joint project surveyed 400 neighborhood residents and found that the pocket parks "increase residents' pride in their neighborhoods, their interest in living and staying in their neighborhoods, and involvement in their neighborhoods"[26].

Despite its size and authority, the KIB remains local enough to retain a close enough connection to the citizens it serves. The organization remains confined to the Indianapolis area, drawing volunteers and staff mainly from local residents. Moreover, it holds office hours every weekday, giving members of the community easy access to organization staff to voice valuable feedback through suggestions and concerns.

5. Conclusion

The benefits of interactivity and dynamic feedback loops for public programming expand far beyond the physical boundaries of the curated public spaces. As the young and elderly actively engage with the spaces of their community, they gain a sense of agency and responsibility for the things around them not often afforded to them by their life stage. Indeed, as so much of their worlds are controlled by forces external to their control, programs that grant these two groups authority over some element of their life, even an element as simple as a community space, sparks a sense of responsibility and proactivity that soon spreads beyond that single element.

Especially for children, it is essential to instill at an early age a sense of social responsibility towards the greater community. This is essential for both the community's sustained health and also for the individual's identity as a member. As the child grows into an adult, the relationship they maintain with the physical space anchors them to the community's human elements, facilitating meaningful interaction across between individuals and groups. Indeed, these are the sorts of interactions and participations that form the education of more informed, responsible and engaged Chinese urban dwellers.

Meanwhile for the elderly such agency is essential for reclaiming and maintaining a sense of relevance in today's rapidly changing society. For these members of the community, who have contributed the most time and energy, and hence invested their lives in their local community, it is essential that they too feel their voices are acknowledged in shaping the environment of their lives – in the interest of ensuring the environment suitably serves their needs, and through doing so, improving too their own mental and physical well-being. It is not only the built space environment that they help to curate, but also their legacy and values that are passed onto future generations.

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