Environmental Justice and the Lawn: Urban Parks in Shanghai, China

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Abstract

There is an increasing awareness of the human need for green spaces within cities as more people move to urban areas. This issue is of particular importance in highly polluted areas, such as Shanghai, China. This study addresses the human/nature intersection within metropolitan green spaces in Shanghai and asks the question; are Shanghai parks designed to be people friendly? To answer this question I collected observational data in relation to park structure and use, focusing on lawns. Analyzed with a framework of environmental justice, my observations show that although Western and Asian traditional intertwine in garden design and park layout, cultural differences remain for park use, creating a partial landscape of exclusion. Urban parks in Shanghai provide a welcoming place for its residents in the more traditionally Asian spaces, but not in the Western influenced landscape of lawns.

Keywords: China, Urban Green Spaces, Environmental Justice, Lawn

Introduction

Most humans have a need to connect with nature (Miller 1997). The inclusion of green space is particularly necessary in areas where people are more divorced from natural ecosystems, such as cities. As increasing urbanization decreases accessibility to nature, researchers argue that planners need to emphasize the role of nature in today's cities (Matsuoka and Kaplan 2007). Although many geographic studies explore parks, little research has addressed the historical and political-economic processes that affect park design and how people use the spaces (Bryne and Wolch 2009). Access is an important emphasis, as research indicates that the provision of access to nature in cities is unequal and that the social production of nature explains why there is an uneven creation of admittance to use these green spaces (Heynan et. al. 2006). This study explores the role of the landscape in a case study of parks in Shanghai, China. The research focuses on the appropriateness of design, especially with reference to the Westernized aspect of lawns.

City parks contribute to a higher quality of life by offering both social and psychological benefits (Chiesura 2004; Beatley 2011; Kabisch and Haase 2014). Time in parks enhances thought, re-energizes people, increases social integration (Kuo 2003), provides a sense of tranquility within a city (Kaplan and Kaplan 2003) and provides necessary ecosystem services (Wolch et al. 2014). Park design, including aesthetics, scale, and setting, are a fundamental part

of people's enjoyment and feeling welcome (Gold 1972; Matsuoka and Kaplan 2007; Peters et al. 2010).

The issue of justice and greenspace arises when looking at the concept of access and exclusion, specifically in relation to places within a park. Many of the justice aspects of the environment draw on political ecology. The construct focuses attention on the role that power plays in resource use and management (Heynen 2001). Political ecology also focuses on how ideology, state agency and power within institutions affect residents' rights to natural resources (Robbins 2012). Drawing from political ecology, environmental justice looks at these issues specifically in reference to nature. Numerous studies address aspects of environmental justice in relation to parks (eg. Wolch et al. 2014). Furthermore, this theory frames research that explores what people are allowed to do in public spaces (Poe et al. 2013).

Another angle from which people have looked at exclusion from parks, especially in relation to park design, is how public green space can be configured to influence use or non-use in relation to people's cultural background (Kabisch and Haase 2014). Environmental justice looks specifically at people's rights of access and activities in reference to nature, and in this research I draw on aspects of this theory to analyze the patterns noted from my observations. This work adds to the literature of the numerous studies addressing environmental justice in relation to parks (eg. Kabisch and Haase 2014; Poe et al. 2014; Wolch et al, 2014). Specifically, it demonstrates that park design, particularly the presence of western influenced lawns, has a direct effect on how park goers utilize space and how they are excluded from portions of the park physically and sociologically, illustrating a lack of environmental justice.

China is redeveloping its cities by incorporating green space through creating more parks. Certain cities, such as Shanghai, have high pollution and thus the need for usable green spaces is even more apparent (Jim and Chen 2008). There has already been an increase in the number of parks, partly due to the Socialist Spiritual Revolution (SSR) of Deng Xiaoping in the 1980s. The SSR gained momentum in the 1990s, adding to China's focus on improving their urban environment (Wu and Gaubatz 2013). As China increases its relationship with the world, the trend of external influence in parks has increased (Gaubatz 2008). The extensive lawn space now occupying parks, taking the place of the more traditional Asian trees, paths, shrubbery, ponds and pavilions is one indicator of this phenomenon (Figure 1).

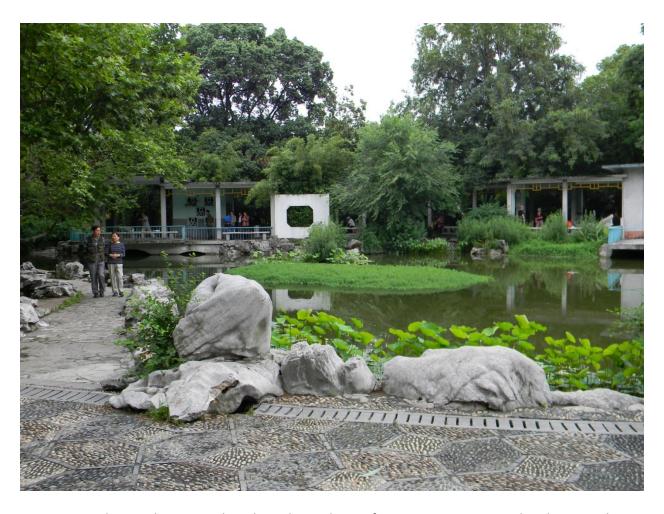


Figure 1. Gucheng, Chinese park with traditional use of vegetation, water and architectural structure.

Interestingly, except in one park (Fuxing) people were barred from going onto the grass. This raises the question about what the issue is. Is it access to lawns? Or is it the presence of lawns—in and of themselves—the exclusionary features? Although one must take into account the visual aspect of looking at an empty lawn as meditative, peaceful, or just simply pleasurable in and of itself, taking into account people's illegal entry to other lawns and activities on the one where it is allowed, it still stands that given the current barriers to access in all parks but Fuxing, the answer in this case, is the lawn itself. The increase of turfgrass in Chinese parks represents a new kind of exclusion, although a certain kind of prohibition was also prevalent in Chinese green spaces in the past. For example, initially in China urban green space was restricted to private gardens walled off from the public (Gaubatz 2008). Later, a different kind of exclusion was enacted as a result of foreign concessions in Shanghai during the Treaty Port Era (1840s) in the French Concession and the Anglo Saxon Territories. Although Europeans opened public parks they initially excluded the Chinese (Rihal, 2009; Wu and Gaubatz 2013).

Looking at the design itself, early parks in Shanghai emphasized natural design with additions of the French and Anglo-Saxon landscape features, one of which was the lawn. In 1908 the Europeans planted lawns to create a familiar setting (Rihal 2009). The Chinese do not share a Western history of lawn use. Thus, the increase in grass coverage in the parks in Shanghai represents the adaptation of Western landscape planning approaches in an Eastern city.

In looking at the lawns in Chinese parks, it is relevant to note what some researchers have concluded about lawns in any geographic and cultural context. Some state that the lawn is not just a piece of managed landscape, but a political and economic phenomenon. Lawns did not become part of the Western landscape until the 16^{th} century (Robbins 2007). The upper class in France established managed grass spaces during the 1500s, and turf then moved to England in the 18^{th} century, where aristocratic estate lawns were popular in the pre-romantic gardening era (Eisenberg 1999; Harris et al. 2013; Robbins and Birkenholtz 2003). The lawn indicated upper class privilege, partly because the owner needed to have sufficient funds to hire workers to cut the grass (Steinberg 2006). Thus, from its inception, the managed plot of grass was designed for the elite, becoming a political piece of landscape connected to economic status (Robbins 2007)

The United States borrowed the concept from the English aristocracy, and lawns became common in New England and the South starting in the 1700's (Robbins 2007). Not only for private land holdings, but grass also had become popular in public spaces in New England and Washington D.C. In the United States lawns stayed in the hands of the wealthy until lawn mowers became universally available (Steinberg 2006). After World War II and the expansion of the suburbs, the personal lawn became a common yard design (Harris et al. 2013; Robbins and Birkenholtz 2003). Political overtones also became part of the lawn landscape, as everyone's' lawns were to look alike (Steinberg 2006).

Going beyond the personal yard into public spaces, some argue that common greens have also traditionally been spaces of social control. Bryne and Wolch (2009) found that park use is connected to certain environmental, social, political and economic aspects of governing. Looking at an example of social manipulation in relation to a well-known urban green space, Frederick Law Olmstead who created Central Park in New York and Fens in Boston was forthright in his opinion that he hoped to encourage inter-class interactions by increasing contact amongst all kinds of people in a park setting (Rosenzweig and Blackmar 1992). Furthermore, in looking at the social control of lawns, Frederick Law Olmstead felt that parks harbored a moral code and that the lawn itself was conducive to virtue (Harris et al. 2013; Robbins 2007). However, despite these ideals, in the United States and Europe parks were originally for the wealthy (Bryne and Wolch 2009). In looking at the concept of how parks are a reworking of nature with fewer freedoms than "real" wild areas, one notes the elements of power structures within these green landscapes (Gandy and Gottlieb 2002).

The political and economic power of the lawn is partly exemplified by the ecological hazard of grass upkeep, and that even knowing this, people still feel obligated to maintain this particular vegetation (Harris et al. 2013). Since lawns exclude the natural world, Eisenberg (1999) refers to them as "green sterility". More pesticides are applied to United States lawns than for agriculture (Harris et al. 2013; Robbins 2007). The argument that lawns provide oxygen has been disproven since the amount of carbon dioxide that mowers create offsets the oxygen created through photosynthesis (Eisenberg 1999).

Using these examples from the Western world, they relate to the significance of this study in China, in that it looks at people's needs in relation to the presence of Western lawns in public parks; a distinct landscape from the ponds, paths, and small intimate spaces of traditional Chinese parks (Farquhar and Zhang 2012; Tuan 1984). This paper addresses the basic question put forth by Jane Jacobs (1961) in her seminal work *The Death and Life of Great American Cities*, are urban planners taking the people's needs into proper account? Is meeting these needs being done in an exclusive way? And, in this case, what role does Western influence play? This study shows that the implementation of a western-influenced design feature leads to a series of exclusionary practices. In addition, the maintenance of the lawn and the ecological demands of turfgrasses places further responsibilities on park managers. The research addresses these questions through looking at parks in Shanghai and analyzing the information through an environmental justice framework.

This investigation adds to the body of literature on Urban Green Space, by addressing the previously unexplored area of the role lawns play in Chinese parks. Little research has been conducted looking at the specifics of grassy areas in Shanghai. This paper argues that although the current design of parks in Shanghai meets many needs of the people, lawns are a design feature from the West that take usable space away from Chinese citizens and the customary practices within parks that create the common social and psychological benefits (Chen and Wu 2009; Chiesura 2004).

Methods and Study Area

This study is an exploration in park use in relation to park design and decision making. I use qualitative data collected through direct and indirect observation to understand people's actions in reference to the built environment (Bernard 2011). During June 2013 I studied seventeen parks and one garden in central Shanghai, China (Figure 2). I chose these parks for proximity to the city center. The only park chosen outside of this area was Century Park in Pudong, because it is one of the city's new parks of international and local interest. The parks and times were chosen were based on a type of convenience sample. The number of parks was determined by the amount time available for visits within the study period.

I spent both weekdays and weekends at the parks, and although there were more people in the parks on the weekends, I observed the same basic trends independent of the day

of the week. Furthermore, as it was the rainy season, I visited parks on both wet and dry days. Even though more people used the parks on dry days, the activities observed on both types of days were similar. Parks were visited in the mornings, evenings and the middle of the day, thus covering all hours of park use. I spent 2-3 hours in each park. I recognize that this was a limited amount of time and more hours would have increased the depth of the study. However, within this time frame I could make substantial observations about lawn use, validated by the number of parks visited as opposed to more time in each park.

Using observation I combined continuous monitoring and spot sampling. For the continuous monitoring, I would watch a group and record their behavior, using an ethology, a method that has been used to study how people interact in architectural spaces (Bechtel 1977). With an ethogram, a list of the activities and items in the parks (Table 1), I noted each time a behavior happened, or a specific element of the landscape occurred. For spot sampling, I noted what people were doing in the moment of my arrival (Erasmus1995). Most people observed were adults. During observation, I sat on benches, walked and ate. I also took pictures and made notes. There was no deception in my activities as the camera and notebooks were visible. I conducted randomized visits, so although it is not fully representative my observations do give a sense of people's actions and locations.

Data were compiled in notebooks taken at the time of observation and then entered into a data base and analyzed for patterns of behavior. These were then in turn examined in relation to specific park locations and the landscape distinctions within each area, with special emphasis on lawn areas. Issues related to access and exclusion were determined through the analysis of the observational data about the activities in which people engaged and about the spaces in which they did, or did not, occupy park space.

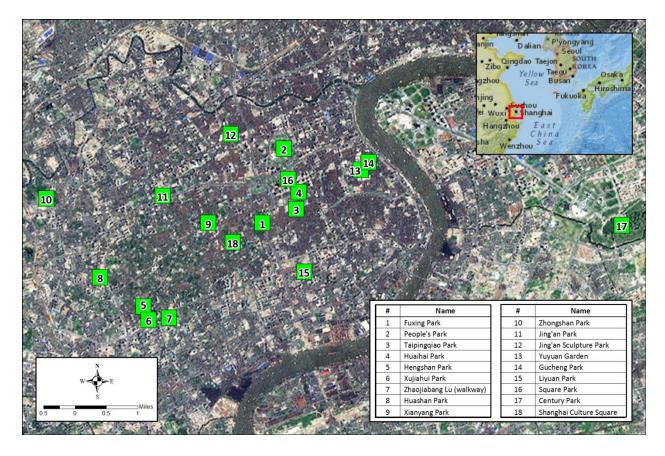


Figure 2. Map of the location of the study parks in Shanghai.

Results

Park Activities and Location

People used the study parks for numerous activities (Table 1). Residents danced, practiced Tai Chi and other martial arts, did personal exercise, walked, played instruments, sang, and used gym equipment, all of which were also noted by (Farquhar and Zhang 2012 and Wu and Gaubatz 2013). Furthermore, numerous people played cards and mah jong, and grouped together to watch others pursue these latter activities. The location within the park where people conducted these activities was where trees and low vegetation grew, pathways were built and where stones and benches were placed.

<u>Park Name</u>	1	Activity and Park Feature 1 2 3 4 5 6 7 8 9 10 11												14
					Э						11	12	13	
Fuxing	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ
People's	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	
Taipingquiao	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ		Χ	Χ	
Hengshan	Χ	Χ	Χ	Χ			Χ			Χ		Χ	Χ	
Zhaojabang	Χ	Χ	Χ	Χ			Χ		Χ			Χ	Χ	
Huashan	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ		Χ	Χ	
Xiangyang	Χ	Χ	Χ	Χ		Χ	Χ		Χ	Χ		Χ	Χ	
Zhong Shan	Χ	Χ	Χ	Χ			Χ		Χ	Χ		Χ	Χ	
Jing'an S.P.	Χ	Χ	Χ	Χ			Χ	Χ	Χ	Χ		Χ	Χ	
Jing'an	Χ	Χ	Χ	Χ			Х					Χ	Χ	
Huaihai	Χ	Χ	Χ	Χ	Χ	Χ	Χ			Χ		Χ	Χ	
Gucheng	Χ	Χ	Χ	Χ		Χ	Χ		Χ	Χ		Χ	Χ	
Century	Χ	Χ	Χ	Χ			Χ					Χ	Χ	
Shanghai C.S.	Χ	Χ	Χ	Χ			Χ		Χ	Χ		Χ	Χ	
Square	Х	Х	Χ	Х			Х	Х	Х			Χ	Χ	
Xujiahui	Х	Х	Χ	Х			Х		Х	Χ		Χ	Χ	
Liyuan	Χ	Χ	Χ	Χ		Χ	Χ		Χ			Х	Χ	

- 2) Dancing
- 3) Tai Chi
- 4) Assorted Martial Arts
- 5) Birdmen
- 6) Cards/Ma Jong
- 7) Walking

- 9) Playing Instruments
- 10) Singing
- 11) Matchmaking
- 12) Posted Rules
- 13) Lawns
- 14) Lawn Access

Table1. Presence/Absence of activities and park features in study parks in Shanghai

Lawns and Non-Use

Citizens used the park areas where there were trees, benches, stones and paths for community interactions and physicality. This amount occupied these latter features occupied in relation to lawn space, varied from park to park. From small (ten people) to large (over 100 people) groups lined the park boulevards and squares for dancing, (traditional and ballroom). Others practiced sword work, Tai Chi, and other assorted martial arts. Many stood on bridges patting their bodies, rotating their knees and stretching. Others used gym equipment in specified fitness spaces In terms of the soundscape, individuals and groups gathered to sing, play wind instruments, practice drums and participate in karaoke. In People's Park formal matchmaking occurred through signs strung on cords and bushes. Many played cards and mah jong, and hung their bird cages on trees and walls (Table 1).

In looking at some of the distinctions within the park in relation to lawns, we see examples of the influences of the English and the French built parks during the Treaty Port era still existing today. For instance, planners constructed part of Fuxing in the French design. The signs in these areas specifically noted the foreign origin of form: "The lawn is... integrating French Style with Chinese" (Figure 3). A particular element of this historical influence and current adoption of western landscaping was the number of parks with lawns.



Figure 3. Sign noting the French origins of the lawn in Fuxing, Shanghai, China.

While all seventeen parks in this study have lawns, only one park allows access to this area (Table 1, columns 13 and 14). A few specific examples will be noted here of the manner in which people are barred from lawn access and how this effects their activities and location. Posted signs clearly tell park goers not to use the lawns for stepping, playing, kite flying or numerous other activities. At the entrance of each park stands a sign stating the rules and expected behavior in the grassy areas (Figure 4, Table 1).. The lawns themselves have signs reemphasizing what is stated at the park entrance (Figure 5).



Figure 4. Sign indicating some of the rules at Century Park, Shanghai, China.



Figure 5. Sign emphasizing at the lawn what the rules are at the entrance in Century Park, Shanghai, China.

In addition to the signs, low fencing prevented most people from going onto the lawns. Some parks, for example, Xuijahui, had benches that faced the lawn, but the lawn itself was roped off (Figure 6). In People's Park planners carved out spaces for benches, complete with a small fence bordering the seating area keeping both benches and users from the lawn (Figure 7).



Figure 6. Benches facing fenced off lawn, Xujiahui, Shanghai, China.



Figure 7. Benches with low fencing surrounding the bench and the border to protect the lawn.

What many westerners do on lawns, such as exercising, playing ball and picnicking, the Chinese in Shanghai usually do on cement or stone areas. For example, in the Shanghai Culture Square, children playing ball, adults strolling, dancing and stretching filled the cement walkway, while the lawn, occupying more space than the cement and guarded by a small white fence about a foot in height, remained empty (Figure 8, 9). There are some areas, such as Century Park, where even without any suggestive fencing people for the most part still did not trespass onto the lawn.



Figure 8. People using the stone areas of Shanghai Culture Square, China.



Figure 9. Empty lawn space at Shanghai Culture Square, China.

The one exception was Fuxing, where people filled the large lawns. Users enjoyed the grass, because Fuxing permitted park goers to use the turf. Interestingly, the activities people practiced on the lawn were different than in other areas of the park. For example, there was no dancing, singing, instruments or card games. Instead, lawn goers played with bright plastic items, many of which people sold at the edges of the lawn. Examples of these items included: spinning tops hanging on a string between sticks, flying tops with sashes, kites, and whistling shapes to toss through the air (Figure 10).



Figure 10. People using plastic toys on Fuxing lawn, Shanghai, China.

Discussion and Conclusions

Poe et al. (2013) argue that urban people should have the right to control their own culturally appropriate activities, which connects to the right to use public green space in a way that enhances their quality of life. Park use, planning and management occur within a complex environmental and recreational city landscape (Bryne and Wolch 2009). This paper raises awareness about the justice and the use of space within parks, and hopes to provide ideas to develop more efficient use of space within urban green spaces for Shanghai citizens. Urban green space provides social and health benefits and are integral to a healthy city (Chiesura 2004, Peters et al. 2010). Given their important role, parks should not only exist, but appropriately provide proper space for city dwellers to participate in desired activities.

Addressing the questions of this study: For what do people use parks and are these areas conducive to these activities? In short, are the parks for the people (Jacobs 1961)? And, what role does westernization, the lawn, play in fulfilling or hindering these needs?

Parks in Shanghai were for the most part appealing constructs of nature and culture, creating activity-filled spaces. Miao (1992) argues that the Chinese have an affinity for natural scenes. Associated design principles create procedures for sustainable Chinese landscape design (Chen and Wu 2009). Yi-Fu Tuan (1984:24) notes that Chinese landscaping usually has curved lines, "...to reproduce the subtle lines and spaces of nature." Tuan emphasizes that the Chinese prefer hiddenness, secrecy, and restricted views. Tuan's theory would stand in opposition to much of what lawns give to a space.

In addition to historical globalization, in modern cities traditional Chinese mixed with western landscape ideas are growing (Wang and Ye 2004). Eastern and Western landscapes, although different, will continue to increase (Chen and Wu 2009). Each of the study parks had an element imported from the West, the lawn. However, the parks did not bring the culture that goes with this landscape. In Western areas, it is common for people to walk, sit and play on lawns (Harris et al. 2013; Robbins 2007), all of which were prohibited in Shanghai. Thus, the lawn space in this case study was wasted space. Jim and Chen (2009: 658) note:

"Some new green spaces have been designed with little regard to ... societal recreational needs and without systematic assessment of participation patterns. This could imply wasteful use of a precious public resource."

In summary, people used the non-lawn areas for dancing, (traditional and ballroom) Tai Chi and other assorted martial arts, personal exercise, walking, playing instruments, singing, matchmaking, and using gym equipment. People played cards and mah jong, and visited with each other while hanging birds and reading newspapers. People partaking in all of the latter activities filled the spaces where there were benches, trees and stones. On the other hand, the lawn areas in each park were blocked from use, with the exception of Fuxing.

Drawing from political ecology in looking at the political and economic aspects of space, although the case study does not address the socio-economic differences in access, it does look at the overall political ecology of the situation. This research is about the right to do certain actions in park spaces. Since the park authorities ban people from activities on the lawn, the residents are excluded from a piece of the park landscape. Thus, their rights are curtailed in using public green space in a way that improves their experiences. They cannot do their activities on the turf grass, and the area itself does not conform to what they like to do. If they do go onto the lawn, then regular activities become forbidden (Klooster 2000).

Shanghai does not have space it can afford to waste (Wu and Gaubatz 2013). Jim (2004) argued that new sites should plant high-quality vegetation, such as trees for visual and environmental benefits. Although some believe that because lawns are living material they are ecologically beneficial, most environmentalists consider conventional lawns detrimental to the

environment because they are a monoculture, require high quantities of pesticide, fertilizer and water, and end up as an oxygen sink due to mowing machinery (Eisenberg 1999; Robbins and Birkenholtz 2003; Steinberg 2006

Furthermore, it is important to note the argument that lawns represent broader ideologies of political economy and power, and we see these ideas exemplified in the restrictive nature of the lawns (Robbins 2007). In terms of design and in reference to cultural tradition, the observations showed that the lawns excluded the traditional Chinese ideal of "unity of man with nature," which requires that the design should flow with the natural rhythms and ecological principles of a particular location (Chen and Wu 2009; Steinberg 2006). Chen and Wu (2009) wrote that eastern philosophy for the most part emphasized a greater harmony with nature, while western culture sought to "tame" the natural world. The lawn in many ways represents this western ideology.

Historically, western influence excluded Chinese people from the European-built parks. Currently, a new kind of exclusion comes from western ideas, although this time people from within the culture create and implement this restriction. Given the situation that certain parts of the parks work well for people's needs, certain actions could be taken for better utilization of the entire area. As Kabisch and Haase (2014) found for parks in Germany, planners in China should prioritize the kinds of spaces the residents use when designing parks. The patterns of how people use parks can vary in specific relation to the physical aspects of a park landscape and can affect non-use (Bryne and Wolch 2009). In this study, we see the phenomenon with lawns.

In the United States, American parks have been designed according to Anglo-Celtic landscape aesthetics. While Bryne and Wolch (2009) and Gold (1972) address this in terms of how it affects immigrants, in this case study the research addresses not how it affects the Chinese as immigrants, but as citizens in their own country. Furthermore, beyond ethnicity, in Germany older people wanted trees while younger people wanted grassy areas for sitting, sunbathing and playing (Kabisch and Haase 2014). Thus, it is not that lawns inherently are unappreciated, but they need to be included only within logical cultural contexts.

In looking at the efficacy of the methods for this research, ethnographic observational methods have proven to be effective for studying human interactions with particular plants and types of landscapes (Kinzig et al. 2005). However, there are methodological limitations, such as interpretation of observed activities and limited days and times of observation. The strength of observation as a method is that it can give more accurate results about behavior than sometimes people's own reporting, as with interviews (Bernard 2011). However, the main limitation with only using an observational approach to gathering data is that this method does not provide the meaning of the data for the people being observed. Thus, I had to interpret what was noted, and all interpretations were filtered through a personal lens. However, most actions were straightforward and a reasonable assessment of what was seen could be accurately interpreted.

Given the small sample size, the observational data gathered, and the randomized visits, the data gathered should not be considered representative and no universal conclusions can be stated about the design of urban parks. A deeper investigation is needed in order to better understand the observations, which would require interviews with park users and planners. Improvements for future research should include structured and semi-structured interviews in order to make a more in-depth analysis, and to specifically further study the citizens' opinion of the aesthetic value in the lawn.

Even so, some conclusive remarks can be made and the findings do provide insight into how people use parts of the urban landscape and increase the understanding of Chinese park design. The results confirm the conclusions about park use in terms of environmental justice and provide insight into Jane Jacobs' concept of addressing park design in relation to users' requirements. In order to consider the needs of the people, the researcher recommends two avenues of possible action. First, the park officials could remove the lawn barriers so that people can use the grassy spaces, as in Fuxing. When people had access to the lawn, they used the space. However, this idea has flaws in that it does not negate the environmental disadvantages of lawns. Furthermore, what people did on the lawn were different from the activities enjoyed in other parts of the parks and thus could erode tradition. On the other hand, culture is fluid and these plastic play items may be the inceptions of new traditions. Another possible problem mentioned to me by numerous locals, is that the large number of people could destroy the grass.

The second, and arguably the more logical recommendation is to replace the lawn areas with landscaping that lends itself to the activities that people do in the parks. Parks with design characteristics that do not foster proper use can be renovated (Jim and Chen 2006). In order to meet the needs of the citizens, planners and builders should consider designing urban parks for the human/environmental interaction that is actually taking place.

This raises the question, why are there lawns in the parks? Since people are not allowed to use them, could they be a political economy of power? Or, are they historical relics from the European controlled times? Or, alternatively, do people enjoy the aesthetics and prefer the parks this way? Without answers to these questions that additional data could provide, the results from this case study contextualized through environmental justice advocates utilizing more park space in such a way that directly benefits the people.

Peoples' needs ought to be addressed in urban planning, as espoused by Jane Jacobs (1961). Further findings could lead to a deliberative process about the social needs and environmental aspects to design landscapes that meet the aesthetic and cultural requirements of the residents (Chen and Wu 2009). Cultural nuances in regard to space need to be addressed, and thus it is necessary to have citizen participation in urban environmental decisions (Poe et al. 2013). Planners should consult local residents so that interested citizens have a chance to voice their opinions. These could be consolidated in the form of focus groups, workshops and surveys, as recommended by Kabisch and Haase (2014). Furthermore, there

needs to be support for public communication (Jay and Schraml 2009). Admittedly, these ideas must be taken within the context of China, as citizen participation in decision-making is sometimes limited (Li et al. 2012). Urban parks in Shanghai for the most part provide a welcoming and accessible place for its residents, and the area that can be revisited is the implementation of the lawn. This case study suggests the need for more environmental justice that includes a more culturally appropriate physical landscape so that people can use the green space set aside for them.

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