

Public Space Design for Inclusive and Sustainable City : A Brief Evaluative Overview of Design Seoul Guidelines^{*}

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ABSTRACT: This paper sets out to understand the scope of public space design in vitalizing public spaces' use in an inclusive way and evaluate currently available design guidelines to grasp an appropriate approach to design high-quality public space that is inviting and available to everyone. The 'Design Seoul Guidelines' were evaluated along with the issues taken from WHO's and I'DGO's guidelines. Additional points that this guideline did not cover were found, which was related to designing public spaces in a holistic, integrated, inclusive way that combines all physical, psychological, environmental, social, and economical concerns.

Keywords: Public Space, Public Space Design, Design guidelines, Inclusive Society, Inclusive Design

1. INTRODUCTION

1.1 Background and Purpose

As Seoul was selected as 'World Design Capital 2010' in 2007 at ICSID (International Councils of Societies of Industrial Design) Conference in San Francisco, specific city design strategies have been groped to make a goal into practice. In response to this, Seoul announced the 'Design Seoul Guidelines' in May 2008 that have major concepts of 'emptiness, integration, companion, and

Design could provide an opportunity to convert quantitative growth to qualitative growth of Seoul as it is the core factor of deciding life quality, individual's happiness, human dignity, diversity and inclusiveness, city brand, community consciousness, identity and tradition of a city and so on (<http://wdc2010.seoul.go.kr>). This is a chance for Seoul to be revitalized so it becomes more desirable place to live in. Therefore, establishing an appropriate design guideline was significant and as the 'Design Seoul Guidelines' has been released, it is essential to review the guideline before applying in comparison to the world's well-established guideline. The reason is that once the guideline is applied in designing a space, changing problematic areas post its use

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becomes not only difficult but also expensive and the most importantly problematical spaces lead to lack of public usage. As in the words, ‘People make places, more than places make people (www.jrf.org.uk)’, place and people cannot be considered separately.

This paper sets out to review the ‘Design Seoul Guidelines’ and suggest additional points that require to be reflected on designing vital and inclusive public space in Seoul. It starts with an assumption that the guideline does not cover all issues of ‘physical, environmental, social, economical’ aspects that integrates every one of actual users.

1.2 Methodology

The methodology that is used in this study is a content analysis, which is to review the ‘Design Seoul Guidelines’ in comparison to WHO (World Health Organization)’s ‘Global Age-Friendly Cities: A Guide’ and I’DGO

(Inclusive Design for Getting Outdoors)’s guideline’s key categories. WHO’s guideline indicates that outdoor spaces affect the elderly in mobility, independence, and quality of life and I’DGO’s guideline suggests various factors to consider for diverse people including the disadvantaged to use public spaces easier. The common dimensions that are suggested in these two guidelines to be considered in designing parks and open spaces can be summarized into ‘Accessibility’, ‘Facility’, ‘Nature and Greenery’, ‘Safety’, ‘Aesthetic’, and ‘Maintenance’ and these are the dimensions to review the ‘Design Seoul Guidelines’ with (See Table I).

In terms of a scope of the study, only ‘open space and parks’ category in all guidelines were investigated and in detail ‘neighborhood open space and neighborhood parks’ categories in the DSG were looked at.

Table I: Showing how the dimensions to review DSG were drawn out from the other two guidelines and comparing all guidelines’ dimensions

Guidelines/ Published year	Dimensions (overall)	Detailed Dimensions (outdoor spaces or parks)	Approach	Summarized dimensions to review DSG
WHO 2007	- Outdoor spaces and buildings - Transportation - Housing - Social participation - Respect and social inclusion - Civic participation and information - Community support and health services	- Pleasant and clean environment - Importance of green spaces - Somewhere to rest - Age-friendly pavements - Safe pedestrian crossings - Accessibility - A secure environment - Walkways and cycle paths - Adequate public toilets	Bottom-up participatory approach: The results from the focus groups in 33 cities in all WHO regions led to the development of a set of age-friendly city checklists.	- Accessibility - Facility - Nature and Greenery - Safety - Aesthetic
I’DGO 2006	N/A	Without nuisance, i.e. dog mess or	Bottom-up participatory	

		undesirable people 2. Facilities – café, toilets, and seats 3. Trees and plants – nature 4. Travel to the open space – easy accessible by public transport, a car park nearby, light traffic on route, enough seats on route 5. Aesthetics – things to watch 6. Well-maintained 7. Easy to find access, with no barriers to open spaces 8. Enjoyable walkways	approach: The design guidance on this is based on open spaces' 2 cross-sectional surveys of 15 focus groups (86 participants in total), 9 on-site behavioral observations and 5 accompanied visits to local open spaces with the group.	6. Maintenance
DSG 2008	1. Public space: pavements, streets, squares, open spaces, urban parks, etc 2. Public buildings: public government buildings, performance theaters, welfare centers, police stations, etc 3. Public facilities: benches, wastebaskets, street lights, overpasses, station shelters, etc 4. Public visual medium: traffic lights, station-subway signage, traffic safe signs, street guide signs, etc 5. Outdoor adverts	1. Topography 2. Facility Arrangement 3. Material 4. Plant 5. Pattern and color 6. Additional: Detailed guidelines of neighborhood open spaces and parks	Top-down approach: Design Seoul Headquarter was in charge with developing this guideline, which was administration orientated. It only recommended a bottom-up approach in the guideline, yet top-down approach was used during the whole decision making process of the guideline.	N/A

2. PUBLIC SPACE AND INCLUSIVE DESIGN

2.1 Public Space

‘A public space is a place where anyone has a right to be without being excluded because of economic or social conditions (Wikipedia).’

Public means as an adjective, something is open or available to, used or shared by all members of a community and is not restricted to private use (Oxford Dictionary). Although the meaning of public is like this, it is not necessarily available to everyone all the time. This refers to cases where people like the elderly or the disabled who are physically frail find accessing public space

difficult for various reasons. Mostly, it relates to mobility issues. When they find public space badly designed to access, it automatically stops them to use the space and this means their rights have been removed from them regardless of their will (Carr et al, 1992, Imrie et al, 2001). This is a serious matter as it is related to quality of their lives because not being able to get easy access to public space means they are restrained within their houses most of their daily routine. Therefore, when public space is designed it is important to consider people with impaired physical functions. Once it is well designed for them to use easily, everyone else can use the space naturally. Including everyone as users is the key issue to consider in well-designed public space and every built environment.

Furthermore, there are various values and benefits of high-quality public spaces. Firstly, it is economically valuable to have well-maintained and well-designed public spaces because companies are drawn into places with good open spaces and parks etc nearby as they attract people and services. Secondly, public spaces help to maintain good physical and mental health as open spaces and parks stimulate people to walk, play more and provide natural environment i.e. vegetation, wildlife to take pleasure in. Lastly, public spaces facilitate strong social ties within local communities as they provide meeting and socializing places to interact and mix with others and create their own local character that fosters sense of belonging and feeling attached to their locality (Dines et al, 2006, www.cabe.org.uk, www.jrf.org.uk).

2.2 Inclusive Design

In broad terms, Inclusive Design approaches in a macro way for accessible built environments and suggests the design for everyone, not only the disabled and the elderly, but people who consider themselves as individuals who do not have special difficulties in their lives, also known as Universal Design. By having a good design that is easy to use for the disabled and the

elderly, general public would find the design more accessible and available even for them. Inclusive Design tends to require user involvement and iterative assessment throughout the whole design process as it starts off with considering the minority of our society who demands adaptations and changes in their built environment to permit them to use the space in a greater level, which is likely to be excluded in a design process at present (Imrie et al, 2001). When Inclusive Design concept is applied in the design process there are principles to follow, which are 'simple and intuitive use', 'equitable use', 'perceptible information', 'tolerance for error', 'flexibility in use', 'low physical effort', and 'size and space for approach and use' (Center for Universal Design, 1995).

3. CONTENT ANALYSIS

The 'Design Seoul Guidelines' is planned to provide a space that is pleasant, healthy and available to everyone and to enhance the scenic landscape standard and public space use of Seoul. Both in open spaces and parks categories, 'Topography', 'Facility Arrangement', 'Material', 'Plant', and 'Pattern and Color' are the main dimensions that the guide was mapped around. In each section there were 'Must' and 'Consider/Encourage' lists to follow separately. 'Topography' is for guiding a space's macro and micro levels, forms, gradient grades and flatness of a ground. 'Facility Arrangement' is to regulate inter-relationships between public facilities and public visual mediums in public spaces. 'Material' is to direct a material's generic character and 'Plant' is to rule vegetation materials and their planting methods. 'Pattern and Color' is to stipulate visual elements' character.

The guideline was evaluated by 6 dimensions of 'Accessibility', 'Facility', 'Nature and Greenery', 'Safety', 'Aesthetic', and 'Maintenance' as shown in Table I. The

frequency of 6 dimensions covered throughout the DSG in open space and parks category is found as Table II presents. Table II shows how it was checked partially as putting all guidelines here would take up so much space. By going through the DSG like Table II, Figure 1 was obtained.

Table II: Partial presentation of how the DSG was categorized with 6 dimensions

Part of the DSG open spaces and parks guide	Categorized dimension
Topography Establish vertical mobile equipments i.e. lift for the weak to access easily and outdoor stairs could be integrated into stair open space or performing stages (multi-use space). [Consider/Encourage list]	Accessibility and Facility
Facility Arrangement When placing waterscape related facilities; consider convenience of maintenance and make sure they relate with a park design concept. [Must list]	Facility, Aesthetic and Maintenance
Material Use safe and healthy materials in the area for children. [Must list]	Safety
Plant Suggest the ways to provide the shade during summer season, if plants are not placed due to neighboring buildings' character. [Must list]	Facility and Aesthetic
Pattern and Color Prohibit the use of irritating colors and exaggerated patterns. [Must list]	Aesthetic
Detailed guidelines of neighborhood open spaces and parks Introduce play elements, facilities for the convenience of local community members, and somewhere to rest to maximize utilization of open space. [Consider/Encourage list]	Facility

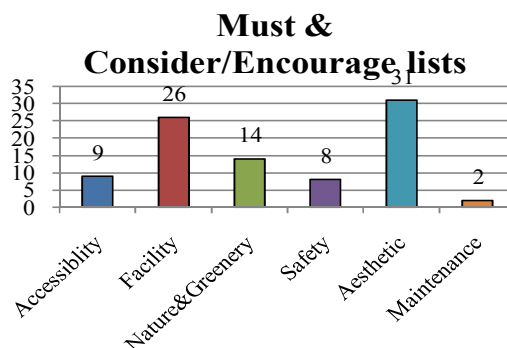


Figure 1: The frequency of 6 dimensions covered in both Must and Consider/Encourage lists of Design Seoul Guidelines

Through the review, issues that could be added for a better guidance to design public spaces in Seoul are found. Many of addressed guides are mostly physical accessibility and safety, aesthetic aspects. Even if dimensions that relate to facilities are mentioned a lot (see Figure 1), they are mainly about how to arrange them to harmonize with surrounding environment. Facilities that have connection to frequent public space usage by the public and convenience for them i.e. café, toilets, seats are not specifically mentioned in the guideline. When Safety issues are addressed both physical and mental health sides should be covered. Yet, in this guideline mental health related safety subjects are hardly mentioned which is associated with having crime-free public spaces i.e. no unwanted people.

As Figure 1 shows, maintenance correlated matters are not covered at all other than a waterscape facility cleaning issue. When a place is not well maintained and becomes to have an atmosphere that creates under cared spaces, the space becomes a scene for crimes and much worse incidents. Meanwhile, 'Accessibility', 'Nature and Greenery' and 'Aesthetic' sections dealt related issues well. Additionally, creating a public space, i.e. open spaces and parks as a community space was dealt in the guideline very little, much more detailed guide for the

public to participate within the public space and the design process should be provided.

4. CONCLUSION

This paper looked into the Design Seoul Guidelines and evaluated to see whether it would guide a public space to be designed well that are available and easy to access and use by all people and make the space desirable to be in. As results indicate, the guideline contains mainly physical and visual orientated issues. Covering how to arrange facilities were more focused than providing appropriate public facilities within public spaces. Physical safety issues that are also related to accessibility concerns were more frequently addressed than psychological safety issues. Although, managing and maintaining the space is related to aesthetics of the place, it was hardly covered. This needs to be considered thoroughly as maintaining the space well directly links to the space's appearance and usage. Even if the guideline is one side orientated, what is been addressed is all essential points to consider when public spaces are to be designed, especially aesthetic issues as good design is a key issue for sustainable development as it ensures a space to be attractive and usable.

To support a sustainable public space design that enables to boost everyone's life quality, a right design guideline that covers holistic and integrated aspects of physical, psychological, environmental, social, economical issues should be applied. Moreover, the end users should be included in a decision making process to avoid one sided results as making public space vitalized and inclusive, the public has to be included in every possible way, which is a bottom-up approach, not a top-down approach and this was what the DSG was lacking of (See Table I). Because vitalizing the space means many people are using it and to make people to use space more the space should meet everyone's needs. Including end users in a developing stage promotes the users' higher satisfaction and this would direct to natural management from the users as they participate their sense

of pride and belonging would increase. One might raise an issue that the DSG is just a generalized public space design guideline for a city competitive power and comparing to WHO's and IDGO's guidelines that dealt with specifically the elderly is inappropriate. However, the main users of public spaces are the public and they are diverse, therefore designing them with consideration of the disadvantaged like the elderly is the core issue as this is the key to design the space that is available to all. If not, that would be opposed to what Seoul claimed to aim for since the early 2008 which was designing Seoul as age-friendly and female-friendly city.

For further studies, investigation of good public space design examples with good points could be done to find aspects to learn from and improve them before more public spaces in Seoul get to be re-designed with taking issues that require additional attention which were found from this study into an account.

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