



Study of Public Space Use and Design Based on Japanese and Foreign Perceptions

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Abstract

Public space will be studied regarding history, use, and the evolution of urban space. Through culture, architecture, and behavior, this paper investigates how Japanese and foreigners use public space. Foreigners use open spaces such as neighborhood parks more frequently than Japanese people, who consider space sacred and private. Because of this study, urban space will be analyzed from the perspective of Japanese culture and customs as well as foreign culture to qualify the precise meaning of space, urban space, and cultural space, within the context of diverse conditions and ethnicities. Residents who frequently use neighborhood parks recognize that foreigners are more welcome and that spatial accessibility contributes to the creation of a unifying space in their neighborhoods. Understanding cultural views and ethnic behavior is critical to the design and implementation of effective and creative urban spaces.

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Keywords

Public Space; User Perception; Culture; Design; Urban Ethnicity

1. Introduction

Traditionally, public space has played an important role both in terms of physical and psychological dimensions of people's day-to-day lives (Carr, Francis, Rivlin, & Stone, 1992, p. 3). In urban environments, the provision of public space as a place for physical and emotional regulation will indirectly create a platform for social community space (Chitrakar, 2016). Public space has two different shapes formal and informal, which is determined by the size of the created spaces. Public spaces that focus on public life, activities, and events will play an important role in the city center, whereas public spaces that function as a place to rest or play offer a simpler look, are interior, and sometimes challenge users' perceptions both physically and socially of new spaces (Cho et al. 2016). Several research of public spaces support this assertion. Overall, public spaces play an important role in decreasing stress, enhancing health, and sustaining spatial and social ties in residential areas (Liu et al., 2017; Tan & Samsudin, 2017; Wan et al., 2020; Wang et al., 2021; Zanon et al., 2013). In this context, it is important to design public spaces well and of high quality in order to provide enormous economic, social, and environmental benefits for the region and its people without encouraging ambition (CABE, 2004).

There is a broader definition of public space, which includes a variety of places where people can participate in social interaction, including streets, city parks, and buildings. Urban parks as public spaces are one of the most important components in urban planning, since they are accessible to all citizens and provide an opportunity for interaction between them and the city. However, parks, especially those in residential areas, have changed over time and have been influenced by various cultural traditions. As new environmental developments, including the case study area,

public spaces are being provided and used in different ways. Neighborhood Park as a Public Space between Kitakyushu Science Research Park and Orio Station, Japan remains unclear how such changes affect residents' perceptions of contemporary public space and their sense of community. There has been an ongoing debate in recent years regarding whether residents need parks or whether parks are just urban green spaces without any activities. Specifically, this occurs due to the perception that parks are individual spaces that are closely associated with the place where the individual resides (Caballero, 2007). As small private spaces, parks create fragmentation of separate space characteristics within the community. In turn, this creates a paradigm of content space for the community as a whole, resulting in parks becoming urban public spaces. As much as parks do not have a specific purpose as meeting places, they still represent an important part of people's daily lives for a variety of reasons (Carr, Francis, Rivlin & Stone 1993, p.3). Through their dynamics, parks act as communication nodes that facilitate human well-being (Hagenbjörk, 2011; and Rupprecht, 2017). Since public space is not simply a physical setting, it has several subjective meanings for its users that accumulate over time (Cattell et. al., 2008).

In reality, this dynamic is not well captured by some groups of people. This is due to several behaviors that are influenced by age, physical condition, gender, and ethnicity. Physical condition and ethnicity have a major impact on the use and management of public spaces, especially parks in the neighborhood park as Public Space between Kitakyushu Science Research Park and Orio Station, Japan. This raises the question of whether Japanese or foreigners are interested in using parks as part of their daily lives. Another question is whether the local community has the desire and time to manage parks as public spaces. Individuality and urban lifestyle of Japanese people have indirectly led to the loss of priority of parks as public spaces, where problems faced by local communities cannot be solved through neighborly cooperation and tend to be solved through the public administration system at the government level (Kurasawa, 1987). However, Japan's resident has unique behavior practically all people join neighborhood associations (Chounaikai) in most urban areas (Nakata ed. 2003). According to Nakata (2003:17), for parks to serve as community public spaces and not be neglected, the participation of urban communities in the construction of common public spaces is needed to increase community social mobility.

The objective of this paper is to analyze the relationship between the existence of parks as part of a city and their usefulness to residents. As a result of this study, the researcher is able to observe how parks serve as community public spaces where no parks are unutilized or abandoned. During this research, the level of community involvement in the development and use of parks as shared public spaces will be observed to improve the social mobility of the community. This research shows that community involvement in activities has a major impact on stakeholders or the public. Community perception is an important factor in the success of a design that inspires creativity and social equality (Barton, et.al. 2003; Njunge et.al., 2020). The social interaction created plays an important role in ensuring that people's needs and desires are met in public spaces. By applying this principle, not only can a certain type of group make better use of the public space, but it can also gain support for public life.

2. Research Motivation and Methodology

2.1. Research Motivation

To understand the motivation behind the proposed study of Japanese and foreigner's perceptions of the design and use of public space, it is important to understand the historical and cultural background of each of these societal groups. Cultural knowledge of citizens can provide clues about people's needs and desires for public space. In addition, theories, developments, and current issues of public space can also become map patterns of public space, particularly in Japan. The function of public space as the urban instrument has a high responsibility to provide space for urban society to express itself. However, this perception will be difficult to capture in several public spaces in Japan, which are considered standard and less flexible. Therefore, by studying the use and design of public space based on Japanese and foreigner perceptions, the researcher will explore the concept of public space, especially neighborhood parks, and then evaluate the design of public space and the intensity of its use. These two factors - design and intensity of use - are examined from the point of view of Japanese and foreigners through a questionnaire survey. In addition, the design of public spaces is examined based on a review of Japanese government literature and

standards. Finally, this research will be completed based on the results of the public perception assessment and the review of the Japanese government's design standards.

2.2. Research Methodology

In this study, a behavior mapping approach was employed, utilizing both observation and interviews. Behavior maps serve as both an outcome of observational research and a valuable instrument for the analysis and design of designed places (Cheung, et.al., 2022., Han, et.al., 2022). This mapping technique was originally introduced by Ittelson et al. (1970) to document the behaviors that transpire within the designed space (Marušić and Damjan, 2012). The process of behavior mapping entails two distinct stages of data collection and subsequent analysis.

As the first step, The researcher conducted observations at 39 neighborhood parks located between Kitakyushu Science Research Park and Orio Station, Japan. These observations were carried out on a daily basis, encompassing both weekends (Saturday and Sunday) and weekdays (Monday to Friday), during the morning (08.00 - 11.30), afternoon (13.00 - 16.30), and evening (17.00 - 19.00) periods. The data collection period spanned six months, commencing in October 2022 and concluding in March 2023. Observational data will be divided into three main characteristics, i.e.

- park condition (facilities, area, number of visitors, and history of park development),
- users' behavior (visitor activities, gender and age, user house location, and a sense of resident's comfort)
- city block pattern (Location, building typology, traffic pattern)

During the second phase of the mapping analysis, a series of interviews will be conducted with a sample of 50 individuals, comprising students, workers, and residents of the case study area. The respondents will be drawn from diverse ethnic backgrounds, including Japanese and foreigners of Malay, Chinese, Arab, Indian, European, and American descent. The primary objective of these interviews is to elicit participants' perceptions regarding the presence of small parks in urban areas, particularly in residential neighborhoods. Additionally, the interviews will serve to gauge the frequency and intensity of park usage, as well as to identify respondents' expectations for future park development.

The present study aims to investigate the impact of park design and the presence of parks in residential areas on the intensity of use. To achieve this objective, two stages have been identified as the basis for analysis. Furthermore, the study will employ behavior mapping in conjunction with spatial analysis to generate a people-moving analysis. This approach will enable park planning to align with the identity and desires of the community, thereby facilitating the creation of public spaces that are conducive to place-making.

3. Public Space: Used and Design

3.1. Public Space Design Initiative

The debate over public areas in cities is advancing quickly. According to social geographers and urban planners, public space is a neutral, naturally occurring, and not just spatially bound container that has been produced by society. Idealistically, public space serves as a platform for fostering a sense of community. Nevertheless, according to some researchers, public space is defined as hardscaped, vacant space that is still present outside of buildings and transportation hubs. Western nations, where public spaces are perceived as being rigid and having only a few uses, tend to hold this opinion more widely. Public space is defined as accessible to all types of users, such as streets, parks, markets, libraries, museums, and so forth. Public spaces have been thought to need physical forms that can be easily distinguished from their surroundings. Numerous communities that use this area collectively create the appearance of a "private" area. The sense of closure that is produced will elicit various emotions, which will change based on the interests of those who are interested in public space. This opinion, which holds that public space can be used by one group to boost the economy and build a secure and sustainable urban environment, is largely unchallenged. This is due to the increased activity in public spaces, which has a strong correlation with welfare and property values (Schmidt and Jeremy, 2020).

The way that public space is perceived in Western culture is not consistent with Japanese cultural history. Since the development of language literacy in Japan, which divides Hiragana ("vocabulary for Japanese") and Katakana ("separates vocabulary for foreigners"), the word "private" has not been historically recognized by Japanese society. According to Japanese culture, public areas are flexible and can be used for events, emergencies, or open areas at any time. This idea emphasizes how shared things do not include things with fixed locations or physical boundaries. This is evident in the way the Japanese government categorizes public areas, such as parks and other public buildings. In terms of architecture and urban planning, parks and public facilities like schools serve a variety of purposes. According to Hidaka and Tanaka (2001), the idea of flexible public space fosters psychological closeness among users.

When American culture first arrived in Japan in 1964, it introduced the fundamental idea of privacy, which had an impact on how Japanese spaces and barriers were created. A separate social space has been created in each society because of the Western idea that "public" and "private" should be divided. Urban space planning has become rich, complex, and diverse due to the shifting perceptions of the flexibility of public space. Nevertheless, this perception has a detrimental effect on the atmosphere of modest public areas, such as neighborhood parks. Other public structures that are in keeping with the design of urban space blocks can take the place of neighborhood parks that serve as public spaces at the level of neighborhood homes. In line with the trend of combining urban spaces, abandoned, useless, and disconnected park spaces in the city block. This pattern will offer opportunities for change.

3.2. Community Perception of Public Space

Public space use is a hot topic in urban spatial design, with the intensity of public space use being influenced by the concept of space shaped by community behaviors and spatial practices. The dynamics of urbanism are closed based on the stages of analysis of spatial conditions, and social and spatial change experiences (Aelbrecht, 2010). In other words, the use of public space can be measured by public acceptance of the planning, design, and management of public space. The limitations of planning, design, and space management at the government level encourage a sense of indifference to the existence of public space. Public space can be called public space when people use it in different ways, at different times, or simultaneously or sequentially, without considering a particular social group. The contribution of public space to the social life of the community will spontaneously develop the use of open space in ways that could not be imagined or designed. Community initiatives for the inclusive use of public urban spaces can turn people into owners and designers of public spaces. However, this condition does not affect every public space equally (Massip-Bosch, 2017). Behavior and cultural backgrounds are also factors that decide whether this concept can be implemented correctly.

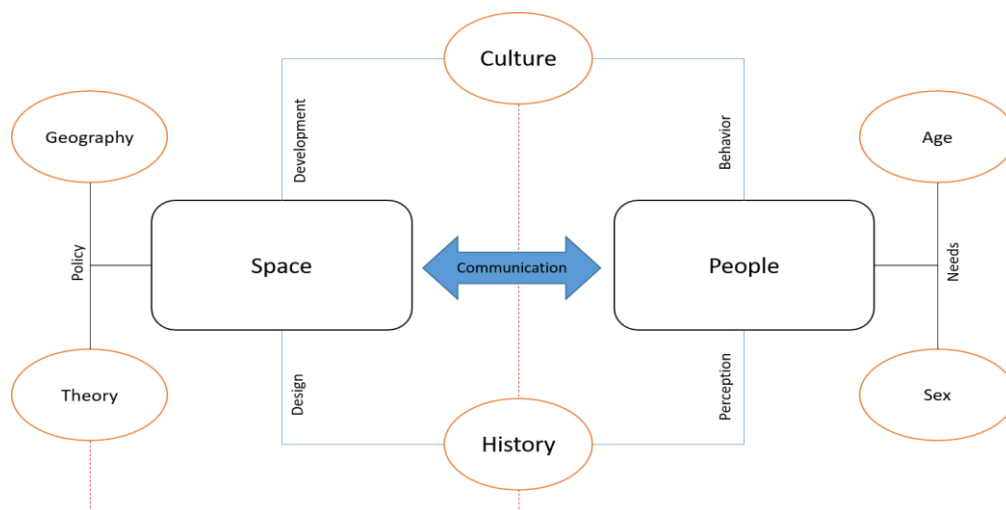


Figure 1 Relationship between Space and People

Japanese people tend to be more individualistic and closed and interact on a small scale, which leads them to use spaces that are more private as living and interacting spaces. This condition was also affected when the Covid pandemic hit, forcing people to stay at home, thus changing their social relationships with the community, including

park-visiting activities. Parks are considered public spaces that are less attractive and require high maintenance costs, but their existence is something that is difficult to separate from people's lives. Although the Covid pandemic has ended, the existence of parks as public spaces for Japanese society remains tenuous. This is due to a shift in the perspective of Japan's younger generation, where the presence of streets and parking lots are seen as more attractive for use as art, commercial, and public spaces, rather than a park. Projects and research on future urban design have shown that people in cities such as Tokyo have a strong desire to use parks as public spaces, which can express themselves through festivals, exhibitions, and concerts (Nikken Sekkei LTD, 2021). There are limited parameters for the use of public spaces that may be more specialized, combining economic and social aspects to provide important points for the future development of the park. Parks can create spaces that can draw the attention of Japanese society, which is a need for increased branding of parks as public spaces, so the connectivity of Japanese lifestyles and parks occurs more densely according to the characteristics of each public space user.

In contrast, Foreigners have a background that is more open than Japanese society as a whole in terms of traditions and culture. Some ethnic groups' shared religious beliefs or historical experiences have an impact on how similar their social customs are. Muslims in Japan, for instance, frequently greet and converse with one another in parks and other public areas without coming close to one another. Liberal Westerners also have a more open identity. The difference in habits between Japanese and foreigners is evident when both groups spend the same amount of time in public spaces. The fear of Japanese people - especially those in small towns - to interact with foreigners creates a large gap, so one of the groups reduces the intensity of visits to public spaces.

Therefore, to understand people's perception and desire for parks as public spaces, it is important to examine the development of public spaces in Japan. The cultural uniqueness of Japanese society must be appropriately associated in order to recognize the characteristics of citizens, allowing maximum appreciation of the design of park development and ensuring the fusion of public spaces with its owner, the Japanese people themselves. Some researchers have interpreted this relationship as a dichotomy between humans and nature in Japanese literature, which regards parks as natural spaces rather than commercial and public spaces (Rupprecht. et.al., 2015). Small public spaces such as parks should be a priority for the design of community behavior approaches in order to build a design consistent with the community's desire

3.3. Residents As Stakeholders in Public Space's Sustainability Development

The concept of public space refers to a physical environment that can facilitate social exchange and interaction among neighbors (Chitrakar, 2016). However, it is important to note that the mere presence of physical proximity does not necessarily guarantee social contact and interaction, as common ground is often required. Public space is therefore considered a significant social territory (Abu-Ghazze, 1996), and its role in social integration is shaped by the meanings attributed to it by individuals (Peters, 2011). As a key design feature of urban environments, public space has the potential to foster place attachment and encourage the development of place meaning through social interaction (Abu-Ghazze, 1996, 1999).

In general, the design of public parks has a significant impact on the frequency of visits. Nonetheless, the responsibility for this design does not necessarily fall solely on the designer or urban planner. Rather, community participation, as a means of involving local residents in the conservation of parks as public spaces, is a straightforward process. Through this process, residents can act as leaders or partners in ongoing planning efforts, and the long-term success of such projects is contingent upon the community's comprehensive understanding of the park's condition and its role in their lives (Satherly, 2009). As proprietors and influencers, the inhabitants of a given locality play a crucial role in ensuring the long-term sustainability of a park as an accessible and functional public space. However, community participation is only effective if cultural considerations and community background are given due consideration.

The sustainable development of public space has historically overlooked cultural considerations (Fitnian, 2009), thereby diminishing the significance of public space as a component of community identity. The facets of identity, social cohesion, and creative development are heavily reliant on the preservation of cultural heritage (UNESCO-Culture Agenda 2030, 2018), which in turn promotes local energy security and sustainable activities within public

spaces (Ragheb, 2022). The design of public spaces, such as parks, that fail to acknowledge the international identity of urban spaces, risks erasing the unique identity of the locale and creating a sterile environment (Aly, 2011). As a fundamental element of the city, public spaces must cater to the needs of the community while also promoting sustainability. By respecting social and cultural traditions, a deeper understanding of the community's perspectives can be gained, leading to a revitalization of urban identity. The cultural value of local communities will indirectly contribute to balanced development, and this value should be considered in future public space development plans.

4. Case Study: Neighborhood Park as Public Space between Kitakyushu Science Research Park and Orio Station

A neighborhood park acts as a public space and serves as a place for physical activities at the neighborhood level. The Japanese government provides neighborhood parks every 200 m from residential areas. In general, the neighborhood park is an ideal public space for residents of residential areas. This space can serve as a common space for the community around the park. In reality, however, the public spaces provided by the Japanese government are not all used to a great extent, although neighborhood parks theoretically serve the function of emotional spaces, play, reading, and gathering spaces. The government's view, which emphasizes the city's development and focuses on economic development, creates a bustling society and uses more private or public-private space than housing (both formal and informal). As a result, the traditional functions of parks are often challenged by new trends in the provision and management of public spaces, and several important trends have emerged. The provision and management of public space are becoming increasingly privatized, with property developers, property managers, and local business associations taking the lead in park provision and maintenance. This condition then raises the question of how the neighborhood park as a public space relates to urban society. Answering this requires an initial identification of the design and use of neighborhood parks, taking into account the background of park planning and development, as well as the culture of the community.

For instance, between Kitakyushu Science Research Park and Orio Station, there are a number of public areas (neighborhood parks). The population in the Kitakyushu Science Research Park area is more diverse than that of other parts of Kitakyushu. Because there are three universities in this area, the Japanese residents are very eager to interact with visitors. The park is the destination of choice for gathering and playing among the diverse backgrounds of foreigners who reside and commute as families and students, particularly young children. An online questionnaire survey was administered to a number of students or the families of students from Japan, America, Indonesia, Malaysia, and India in order to determine how parks are perceived and how frequently they are used as public spaces. Because non-student Japanese people have a tendency to be closed-off and constrictive, the sources were chosen based on the author's proximity to the source.

Based on the identification results, it was found that 69.2% of Japanese people in this area never visit the park as a public space or make 1 to 3 visits a year. The main cause of the low frequency of visits is the perception that Japanese people cannot use neighborhood parks in accordance with their needs and wants. Additionally, the majority of them do not consider parks to be lovely and enjoyable public areas. The mobility created in these areas is not as high as in large cities like Tokyo, despite the fact that some parks are situated near supermarkets. The performing arts event, which took place in the park in front of the Tokyo Metropolitan Theater, was organized by Tokyo (Baba, 2020). Temporary structures, like cafes, were set up there for people to enjoy for a month after attending a performance. In Western nations like the United States, utilizing neighborhood parks for fun public events is a major priority. It is thought to be quite difficult to apply public spaces, such as neighborhood parks in Japan, including parks in the case study area, as picnic and festival areas, or shared spaces where there is the freedom to interact with strangers. The laws dictating how people should behave in public, which are cultural norms that have been passed down from generation to generation and have become ingrained in Japanese society, inadvertently cause issues with how people use public spaces, particularly parks. However, the loss of parks as a component of public space also raises issues regarding the loss of a vital component of society. People still believe that they want parks close to their neighborhoods.

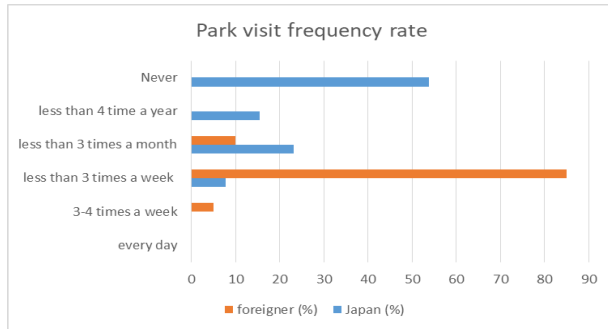


Figure 2 Park Visit Frequency Rate

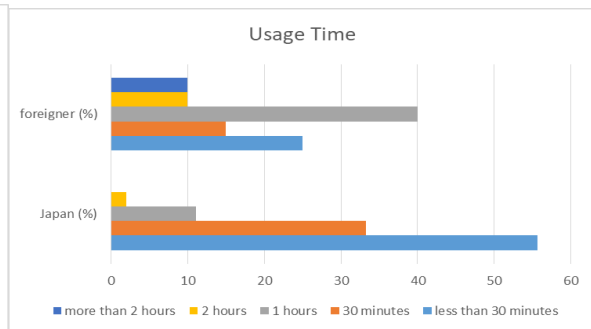


Figure 3 Usage Time

Contrary to Japanese society, foreigners from America, Indonesia, Malaysia, China, and India have similar habits in social interaction, although they have different histories and cultures. The results show that Indonesians, Malaysians, and Indians who belong to the same religion, like Islam, tend to share similar feelings of brotherhood. Additionally, Indonesian society is heterogeneous and fosters a sense of togetherness and mutual collaboration, making it easier for it to blend in with other communities. Despite the fact that brotherhood and unity are not central to American culture, open-mindedness and willingness to speak in front of large crowds contribute to the group's ease in society. Parks and other public areas become a beneficial part of daily life as a result of the need for a strong social life. This finding contrasts with the negative perception that Japanese people have of public spaces as well as the urban gap, where parks are gradually replaced by empty spaces. Ninety percent of visitors from outside countries visit parks two to four times per week, demonstrating the impact parks have on people's quality of life.

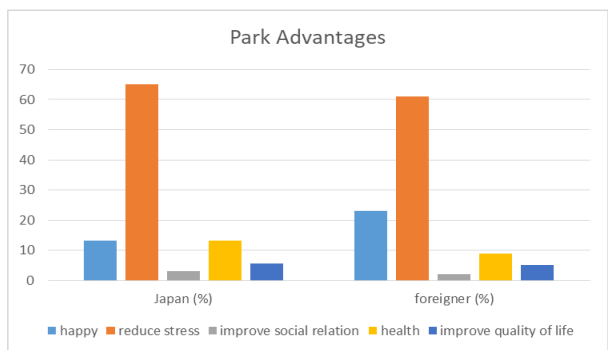


Figure 4 Advantages of Visiting a Park

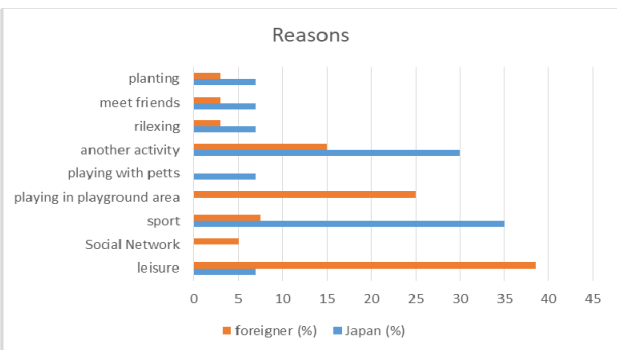


Figure 5 Reason for visiting the park

The existence of parks as public spaces in Japan does not give benefit to improve social relations for both Japanese and foreigners, as shown by the data graph above. This is due to the distinct personality differences between Japanese and non-Japanese people. It follows that neighborhood parks are seen by the Japanese as a double-edged sword that simultaneously has negative and positive effects on society. Although the views on stress relief are different in Japanese society and among foreigners, both the Japanese and foreign cultures agree that parks have a stress-relieving effect. The park is seen by foreigners as a place to relax, play, and engage in other activities that can strengthen ties between neighborhoods. While parks are seen as a place to engage in physical activities like sports to improve one's health by the Japanese.

5. Conclusion

Despite having a low usage intensity, it can be inferred from this study that public spaces, particularly Neighborhood Park, are essential a part of Japanese society's life. Many strategies have been made by planners and designers to resurrect the park's use, particularly in big cities like Tokyo. A different strategy is needed to increase the level of park's use, which is located between Kitakyushu Science Research Park and Orio Station. Japanese citizens who live in big cities can easily accept foreigners to some extent, where social and communication patterns are formed naturally. Small towns like Kitakyushu have a more closed social pattern, where interaction with foreigners is rare. Additionally, public space in a residential area is used less frequently than public space, which is located in commercial, educational, or Main Street. In other words, public areas that offer a variety of attractions tend to pique

Japanese citizens' interest more. Foreigners including Indonesian citizens perceive public space as an open space that is an integral part of life, which is a very different perception from the Japanese. Therefore, it can develop some recommendations and plans for public space – Neighborhood Park – through the influence of citizen perception. Meanwhile, this paper did not provide a deeper analysis related to redevelopment strategies of public space, especially Neighborhood Park between Kitakyushu Science Research Park and Orio Station. Because most of the analysis aims to the general evaluation of citizen's (both Japanese and foreigners), perceptions toward neighborhood parks as public spaces. There are many challenges in data technologies, including storage, organization, management, and analytics.

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Conflict of interest:

The authors declare that there is no competing interest.

References

- Abu-Ghazze, T. M. Reclaiming public space: The ecology of neighborhood open spaces in the town of Abu-Nuseir, Jordan. *Landscape and Urban Planning*, 36(3). 1996. p. 197-216.
- Abu-Ghazze, T. M. Housing layout, Social Interaction and Place of Contact in Abu-Nuseir, Jordan. *Journal of Environmental Psychology*, 19(1). 1999. p.41-73.
- Abdel-Aziz Gasser Gamil, Osman Khaled Abdul-Aziz. The importance of cultural dimensions in the design process of the vernacular societies. *Ain Shams Eng J*. 2018. 9(4), p. 2755–65.
- Barbara Goličnik Marušić and Damjan Marušić. Behavioural Maps and GIS in Place Evaluation and Design. *INTECH: Application of Geographic Information System*. 2012. <http://dx.doi.org/10.5772/47940>
- Blakey, N., Guinea, S., & Saghafi, F. Transforming undergraduate nursing curriculum by aligning models of clinical reasoning through simulation. In R. Walker & S. Bedford (Eds.), *Research and Development in Higher Education: Vol. 40*. Higher Education Research and Development Society of Australasia. Curriculum Transformation. 2017. p. 25-37). <http://www.hersa.org.au/research-and-development-higher-education-vol-40-25>
- Carmona, M. The Place-Shaping Continuum: A Theory of Urban Design Process. *Journal of Urban Design*. 2014. p. 19 (1): 2–36.
- Carmona, M. Re-theorising Contemporary Public Space: A New Narrative and a New Normative. *Journal of Urbanism*. 2015. p. 8 (4): 374–405.
- Carmona, M., Tiesdell, S., Heath, T., & Oc, T. *Public Space- Urban Space: The Dimension of Urban Design* (Secod ed). London. Architectural Pres. 2010.
- Carr, S., Francis, M., Rivlin, L. G., & Stone, A. M. *Public Space*. Cambridge: Cambridge University Press. 1992. p. 3
- Cheung, Stephanie Y. S., Danyang Lei, Faye Y. F. Chan, and Hendrik Tieben. *Public Space Usage and Well-Being*:doi.org/10.17645/up.v7i4.5764
- Chitrakar, R., M. Meaning of Public Space and Sense of Community: The Case of New Neighborhood in Kathmandu Valley. *Archnet-IJAR*, Volume 10, Issue 1. 2016. p. 213-227.
- Cho, Im Sik, Chye Kiang Heng, and Zdravko Trivic. *Reframing Urban Space, Urban Design for Emerging Hybrid and High-Density Conditions*. Routledge: Abingdon Oxon. 2016.
- Della Spina L. Historical cultural heritage: Decision making process and reuse scenarios for the enhancement of historic buildings. *Smart Innovation, Systems and Technologies*, vol. 101. Deutschland GmbH: Springer Science and Business Media; 2019. p. 442–53.
- Fithian C, Powell A. *Cultural Aspects of Sustainable Development*, 2009.
- Hagenbjörk, Linnea. An Analyse of Chinese Urban Public Space –Beijing as an Example. Blekinge Institute of Technology Commission for Architecture and the Built Environment. 2011. p. 4b. *Green Space Strategies, a Good Practice Guide*. <http://webarchive.nationalarchives.gov.uk/20110118095356/>, <http://www.cabe.org.uk/files/green-space-strategies.pdf>.
- Han, Shuyan, Dexuan Song, Leiqing Xu, Yu Ye, Shurui Yan, Feng Shi, Yuhao Zhang, Xiaodong Liu, Hu Du. Behaviour in public open spaces: A systematic review of studies with quantitative research methods. *Building and Environment*. 2022. volume 223. 109444

- Kurasawa, Susumu. Tshiteki Seikatsuyoshiki Ron Jyoron. Edited by Suzuki, Hiro, Kurazawa, Susumu, Akimoto, Ritsuo Toshika no Syakaigaku Riron. Chicago Gakuha karano Tenkai, Minerva Shobo. 1987. p.293–308.
- letcher, D. P. Disrupters: Success strategies for women who break the mold. Entrepreneur Press. 2018.
- Massip-Bosch, Enric. 2017. Tokyo: Towards a New Publicness. Agora. vol.4. no.7.2017. pp.165-182. doi: <http://dx.doi.org/10.6035/Kultur.2017.4.7.7> - issn: 2386-5458
- Nakata, Minoru ed. Building Local Democracy – A Sociological Study of Community-Based Organisation among Eleven Countries. Jititai Kenkyu-Sya. 2003.
- Nikken Experience Integrated Project. YOUR PARK: Transforming Japan's restrictive public spaces "YOUR PARK," a new business venture, is set to kick into full gear in Tokyo. Nikken Sekkei Ltd. 2021.
- Njunge, Evans Kimani; Buket Asilsoyb. A Study about Public Participation in the Universal Design of Public Spaces. Mimarlık Fakültesi Dergisi. Journal of Faculty of Architecture Cilt. 2020. Volume:2 Sayı-Issue:2
- Peters, K. Living together in multi-ethnic neighbourhoods: The meaning of public spaces for issues of social integration. The Netherlands: Wageningen Academic. 2011.
- Ragheb, Amany, Riham Aly, Ghada Ahmed. Toward sustainable urban development of historical cities: Case study of Fough City, Egypt. Ain Shams Engineering Journal 13. 2022. 101520.
- Rajabi, Maryam and Elham Shrifian. User activity impact assessments in a sustainable public space: a measure by regarding visual graph analysis. International review for spatial planning and sustainable development, B: Planning Analysis and Simulation, 2022. Vol.10 No.2. p.111-130
- Rupprecht, Christoph D.D.; Jason A. Byrnea; Hirofumi Uedac; Alex Y. Lo. 'It's real, not fake like a park': Residents' perception and use of informal urban green-space in Brisbane, Australia and Sapporo, Japan. Landscape and Urban Planning. 2015. p. 143 (2015) 205–218.
- Ruxton, C. Tea: Hydration and other health benefits. Primary Health Care. 2016. p. 26(8), 34-42. <https://doi.org/10.7748/phc.2016.e1162>
- Opoku A. The Role of Culture in a Sustainable Built Environment. In: Chiarini A, editor. Sustainable Operations Management. Springer International Publishing; 2015. p. 37–52.
- Schmidt, Stephan & Jeremy Ne Meth. Space, Place and the City: Emerging Research on Public Space Design and Planning. Journal of Urban Design, Vol. 15. No. 4. 2010. 453–457, November 2010
- Tian, Beh Hui, Sumarni Ismail, Azmal Sabil, Ernaning Setiyowati. Sustainable Development of The Historical City: Revitalization of Bukit Mertajam Through Hybrid Architecture Approach. Ijsce: International Journal of Sustainable Construction Engineering and Technology Vol. 14 No. 2. 2023. p. 131-138
- Tweed C, Sutherland M. Built cultural heritage and sustainable urban development. Landscape Urban Plann 2007;83(1):62–9. doi: <https://doi.org/10.1016/j.landurbplan.2007.05.008>.
- UNESCO. Culture for the Agenda Culture For the 2030 Culture For the 2030 Culture For Agenda Culture For Agenda Culture For Culture For the 2030 Agenda Agenda, 2018
- United Nations Department of Economic and Social Affairs. The Sustainable Development Goals Report 2016. New York, NY, USA: United Nations Department of Economic and Social Affairs. 2016.
- Aly, S. S. A. Modernization and regionalism: Approaches for sustainable revival of local urban identity. International Conference on Green Buildings and Sustainable Cities. 2011. pp. 503-512
- Othman, R. N. R. The Impact Of Gentrification On Local Urban Heritage Identity In Old Quarter, Melaka Heritage City. Planning Malaysia, 2017. 15(2), pp. 123–134