

A Study on the Impact of Tactical Urbanism Applied in Seoul on Change in Perception of Placeness - Focused on the case of Seoul, South Korea -

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Abstract

The purpose of this study is to analyze the impact of tactical urbanism applied in Seoul on the formative factors of placeness and change in perception of placeness. To this end, a survey of visitors to ten locations that have used tactical urbanism in Seoul has been conducted, and the results were analyzed. The findings of research are as follows: First, the better the characteristics of tactical urbanism were perceived, the better the formative factors of placeness of a target area were also recognized. Second, the characteristics of tactical urbanism did not directly affect change in perception of placeness. Third, the formative factors of placeness of a location using tactical urbanism had a significant effect on change in perception of placeness. Fourth, when the characteristics of tactical urbanism affect change in perception of placeness, the formative factors of placeness play a mediating role.

Keywords

Tactical Urbanism, Sense of Place, Formative Factors of Placeness, Change in Perception of Placeness,

1. Introduction

The use of tactical urbanism – bringing about long-term changes through the verification of short-term effects – has recently been on the rise overseas (Silva, 2016; Haydn & Temel, 2006; McGuire, 2017; Webb, 2018). A growing uncertainty about the success of long-term urban planning, combined with the failure of existing urban regeneration schemes, has played a part in increasing urban regeneration projects using tactical urbanism (Lydon & Garcia, 2015; Mould, 2014; Douglas, 2020). Tactical urbanism constitutes an approach employed to achieve goals by compensating for existing urban planning schemes' limitations and responding to pending urban regeneration issues in a flexible manner.

Tactical urbanism has the characteristic of being actively propagated through the Internet medium. Having spread through the Internet, it creates a new culture in harmony with existing urban spaces and has the effect of attracting visitors. A case in point is the Rubber Duck project. Rubber Duck is a series of several giant floating sculptures of yellow rubber ducks, designed by Dutch artist Florentijn Hofman, which have appeared in many cities around the world. This has led numerous people to upload related photos on their SNS accounts and attracted an increasing number of visitors.



Figur 1. Rubber Duck Project (<https://florentijnhofman.com/>)

To date, tactical urbanism has been mainly adopted in Western countries such as Germany, the United Kingdom and the United States (Lydon, Bartman, Garcia, Preston & Woudstra, 2012; Douglas, 2020). Overseas, the application of this approach has brought about positive effects. In Korea, however, South Korea still lacks awareness of tactical urbanism, and case analysis and research for policy proposals have been mainly carried out so far. In addition, tactical urbanism has yet to be applied often in domestic urban regeneration projects, and few studies have verified its effectiveness in Korea. Against this backdrop, it is necessary to conduct an empirical analysis of its current state and effectiveness. The purpose of this study is to analyze the impact of tactical urbanism applied in Seoul on the formative factors of placeness and change in perception of placeness.

This study has been structured as follows: First, a theoretical review is conducted on tactical urbanism's concept and characteristics. On the foundation of this theoretical review, a research model is established, and the target areas are determined. An online survey is conducted among the general public who've visited the selected target areas. For the analysis of the data collected by the survey, AMOS 25.0 program is employed to analyze a structural equation model. Finally, the conclusion and relevant implications are presented based on the results of the analysis.

2. Tactical Urbanism

2.1. Related literature

Lydon & Garcia (2015) argue that the emergence of tactical urbanism is mainly attributable to uncertainty about the future, a prolonged economic recession, changes in the demographic structure induced by population decline and aging and an increased use of the Internet driven by the development of information and communication technologies. Politics, the economy, society and the environment, which have so far been considered to be permanent, are undergoing rapid changes, and large-scale urban planning projects could no longer guarantee a definite success relative to the huge amount of capitals invested and lots of time spent (Nemeth & Langhorst, 2014; Talen, 2015; Webb, 2018).

Tactical urbanism is the term first used by urban regeneration activists in North America (Lydon & Garcia, 2015) to refer to an approach that verifies effectiveness through temporary experiments before establishing long-term policies in urban planning. In other words, it is a method of seeking a certain location's potential and the possibility of its future development through small-scale, temporary changes as well as discussing the directions of sustainable urban planning (Bishop & Williams, 2012; Nemeth & Langhorst, 2014; Silva, 2016; Yassin, 2019). Son, Ko & Yun (2018) explained that tactical urbanism was a practical urban design theory to compensate for the limitations of New Urbanism, which has emerged to replace conventional urban planning schemes and to deal with their failures. Although the tactical urbanism-based planning is subject to a time constraint at the outset, it can last long once it starts off

successfully and replace an already drawn up plan (Lydon & Garcia, 2015). And, a variety of events taking place in the cities for a short period of time make it possible to discover the potential of existing spaces and to establish sustainable urban plans. In other words, tactical urbanism – unlike conventional urban planning – can be said to be an urban planning strategy to propose possible long-term changes by investing in a small way and verifying its effectiveness for a short period of time.

Lydon & Garcia (2015) noted tactical urbanism's characteristics as follows: a deliberate, phased approach to instigating change; a bottom-up intervention; short-term commitment and realistic expectations; and low-risks with a possibly high reward. Its overriding attribute is to bring about long-term changes through temporary small-scale experiments in urban areas. As the duration of empirical experiment gradually extends from one month to one year based on public consensus between local residents and citizens, this approach is characterized by very low initial costs and an injection of huge amount of funds for projects that are highly likely to succeed in the long run (Park, 2020; Yassin, 2019).

2.2. Tactical Urbanism and Change in Perception of Placeness

A tactical urbanism strategy temporarily occupies space and holds pop-up events, thereby recreating public spaces by changing their mood and surroundings to be different from before. The use of tactical urbanism in public spaces has so far failed to move beyond its role of constructing spaces for pop-up events. Arguing that the use of tactical urbanism in public spaces helps improve and alter sense of place, Lee (2018) has analyzed Korean laws and systems as well as advanced overseas cases for its continued application. Lee (2014) argued that tactical urbanism necessitates a strategy to respond in a flexibly way to time and place in public spaces.

Past the process of housing redevelopment and reconstruction, now in Korea, urban regeneration projects are intensively carried out. However, the one-size-fits-all approaches adopted have often revealed limitations. Tactical urbanism is an efficient strategy that can induce continuous changes in a region through various attempts – not through the plans already fixed – and compensate for urban regeneration's limitations from the perspective of revitalizing the region in question, securing the diversity of local resources, preserving its sense of place and ascertaining the possibility of regional revitalization (Nemeth & Langhorst, 2014).

Accordingly, it has become necessary to clarify the causality between the characteristics of tactical urbanism and their impact on the formative factors of placeness and change in perception of placeness.

Jorgensen & Stedman (2001) noted that sense of place is personal feelings toward a place that are formed through complex interaction of various elements such as physical attributes and semantic features. Sense of place – an identity a place has separately from other places – gains a meaning through human behaviour (Tuan, 1976). Cities with long history are in a better position to have sense of place and place image. A perception people have toward a place, sense of place is a concept that incorporates their memories and experience; it is created based on the correlation of elements that people and places have. Therefore, the longer history a city or place has, the more distinct the formation of sense of place tends to become. Reinforcing local sense of place mingles harmoniously with the uniqueness and peculiarity of a region's culture as well as the region's differentiated characteristics from other regions, becoming a source of regional competitiveness (Choi & Kim, 2001; Jacobs, 1961; Tuan, 1976). However, tactical urbanism, being applied in a short period of time, faces difficulties in forming memorable place images and sense of place. In order to successfully lead urban regeneration and regional revitalization projects through the continuous use of tactical urbanism, relevant discussions should also cover the issue of sense of place. Choi & Kim (2001) substantiated the causality between the formative factors of placeness and the generation of value added through a survey of visitors to Daehak-ro, Seoul's theatre and performing arts district, and Rodeo Street, one of the most upmarket shopping streets in Seoul. Kim and Choi (2016)

ascertained the impact of commercial gentrification on change in perception of placeness in Samcheong-dong and Sinsa-dong, both specialized areas of culture. The Internet medium has been employed to categorize and analyze place image-related adjectives into aesthetic, attractive, unique, amusing and famous. Lee (2020) conducted a survey of residents in Seoul, where the overtourism phenomenon is underway, and found that change in perception of placeness is influenced by human behaviours.

3. Research Methods

3.1. Study area

A total of ten locations in Seoul to which tactical urbanism had been applied were designated as the target areas for this study. Unlike in other countries, the concept and scale of tactical urbanism are not clear in Korea as it has been introduced only recently. Therefore, this study examined the target areas by referring to previous studies related to tactical urbanism and the cases found in urban regeneration projects. Based on this, the city of Seoul, where tactical urbanism has been applied most actively, was designated as a spatial range. And, ten places in Seoul with the most distinct characteristics of tactical urbanism and sense of place were selected as the target areas for an empirical analysis of this study. They include Sinchon BOXQUARE in Seodaemun-gu; a complex cultural space on Nodeul Island in Yeongdeungpo-gu; Platform Changdong 61 in Dobong-gu; Common Ground in Gwangjin-gu; Under Stand Avenue in Seongdong-gu; Dongdaemun Rooftop Paradise (DRP) in Jongno-gu; a novel playground *ddegul ddegul* (rolling) in Seodaemun-gu; Box Park in Jongam-dong, Seongbuk-gu; Ttukseom Outlook Cultural Complex in Gwangjin-gu; and Sewoon Rooftop in Jongno-gu.

3.2. Research Hypothesis

This study aims to analyze the impact of tactical urbanism applied in Seoul on the formative factors of placeness and place value perception. To this end, the characteristics of tactical urbanism were set as independent variables, the formative factors of placeness as parameters, and change in perception of placeness as dependent variables. The research hypothesis is as follows:

Tabel 1. Research Hypothesis

Hypothesis	Content
H1	The characteristics of tactical urbanism will have a significant positive (+) effect on the formative factors of placeness.
H2	The characteristics of tactical urbanism will have a significant positive (+) effect on change in perception of placeness.
H3	The formative factors of placeness of a place using tactical urbanism will have a significant positive (+) effect on change in perception of placeness.
H4	When the characteristics of tactical urbanism have a significant positive (+) effect on change in perception of placeness, the formative factors of placeness will play a mediating role.

3.2. Data and methods

The sampling method employed in this study was an online survey of ordinary citizens over 20 years old who've visited the locations in Seoul that used tactical urbanism. For about three months from April to

July, a total of 540 copies from all questionnaires collected were finally used for the analysis after excluding those judged to be poor in content or unreliable.

Two programs – SPSS 22.0 and AMOS 25.0 – were used for the statistical analysis of the data collected. A frequency analysis was conducted to look into the demographic characteristics of the samples, and a descriptive statistics analysis was carried out to explore the distribution of measurement items. An exploratory factor analysis was conducted to examine the validity of the measurement items, and the reliability coefficient value – Cronbach's α – was calculated in order to examine reliability. A confirmatory factor analysis was carried out to prove the validity of the measurement tool. In addition, to verify the research hypotheses, AMOS 25.0 was employed to confirm the model fit of the hypotheses from [H1] to [H3] and to analyze the structural equation model.

4. Discussion

To begin with, a structural equation model was analyzed to verify the fundamental research hypotheses from [H1] to [H4]. Model fit indices are CMIN=155.566, CMIN/DF=6.482, $p=0$, GFI=0.939, AGFI=0.885, CFI=0.934, RMR=0.017, RMSEA=0.51, NFI=0.934 and IFI=0.943, being found to meet relevant criteria by and large. The results of a structural equation analysis and path coefficients are shown in Figure 2 and Table 2.

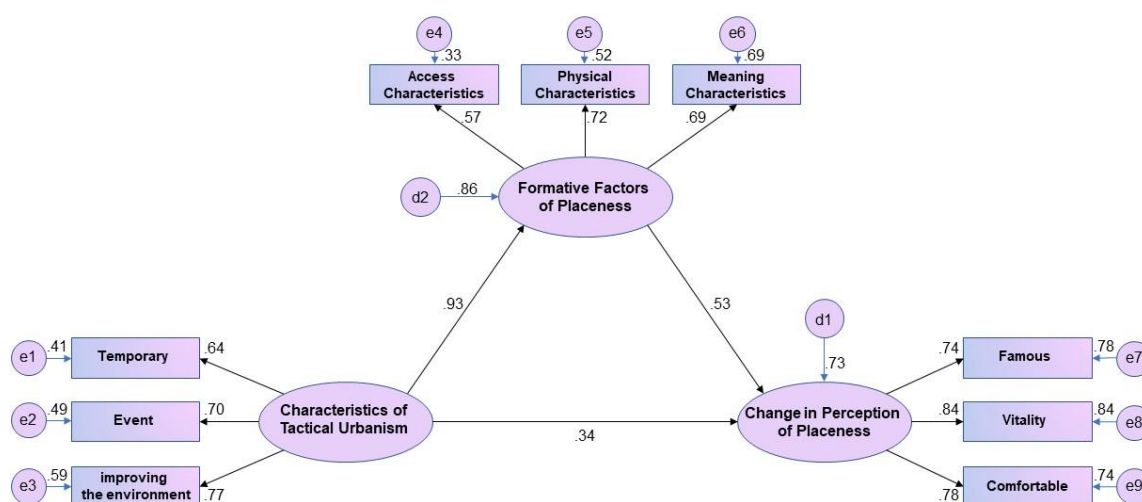


Figure 2. Results of a Structural Equation Analysis

Table 2. Results of Path Coefficients

		coefficient	standardized coefficient	S.E.	C.R.	P
Formative Factors of Placeness	<--- Characteristics of Tactical Urbanism	0.86	0.93	0.076	11.294	***
Change in Perception of	<--- Characteristics of Tactical	0.425	0.339	0.264	1.611	0.107

Placeness	Urbanism					
Change in Perception of Placeness	Formative Factors of Placeness	0.718	0.531	0.287	2.502	0.012
CMIN=155.566, CMIN/DF=6.482, p=0, GFI=0.939, AGFI=0.885, CFI=0.934, RMR=0.017, RMSEA=0.51, NFI=0.934 and IFI=0.943						

The verification results of the first hypothesis [H1] are as follows: The standardized coefficient value is significant at 0.93, and the C.R value – at 11.29, which is higher than the absolute value of 1.96 – is also significant at the 95 percent confidence level. Therefore, the hypothesis [H1. The characteristics of tactical urbanism will have a significant positive (+) effect on the formative factors of placeness.] has been adopted. This signifies that the better the characteristics of tactical urbanism of a place are perceived, the stronger the formative factors of placeness are recognized as well. A tactical urbanism strategy temporarily occupies space, thereby recreating public spaces by changing the mood and surroundings to be different from before. The use of tactical urbanism in public spaces has so far failed to move beyond its role of constructing pop-up spaces. This lends support to a theory that short-term strategic, temporary occupation of space and changes in surroundings can have immediate effects.

The verification results of the second hypothesis [H2] are as follows: The standardized coefficient value is significant at 0.34, but the C.R value is 1.611, which is below the absolute value of 1.96 and not significant at the 95 percent confidence level. Therefore, the hypothesis [H2. The characteristics of tactical urbanism will have a significant positive (+) effect on change in perception of placeness.] has been rejected. It means that strong perception of the characteristics of tactical urbanism has nothing to do with visitors' awareness that sense of place of the place in question has changed. As sense of place is formed over a long period of time, it is judged that it's difficult to perceive changes in a place through tactical urbanism being applied in a short period of time. Given that the characteristics of tactical urbanism have an effect on the formative factors of placeness, which in turn affects change in perception of placeness, however, it can be said that the attributes of tactical urbanism have an indirect impact on change in perception of placeness. To put it another way, the better the characteristics of tactical urbanism in a place are perceived, the stronger its formative factors of placeness are sensed, affecting its place value perception.

The verification results of the third hypothesis [H3] are as follows: The standardized coefficient value is significant at 0.53, and the C.R value – at 2.502, which is higher than the absolute value of 1.96 – is also significant at the 95 percent confidence level. Therefore, the hypothesis [H3. The formative factors of placeness of a place using tactical urbanism will have a significant positive (+) effect on change in perception of placeness.] has been adopted. This means that the stronger the formative factors of placeness created through tactical urbanism are perceived, the more visitors sense that placeness of the place in question has changed.

The verification results of the fourth hypothesis [H4] are as follows: The hypothesis [H2] – which is about the correlation between the characteristics of tactical urbanism and change in perception of placeness – has been rejected. However, the hypothesis [H1] – which is about the correlation between the characteristics of tactical urbanism and the formative factors of placeness – and the hypothesis [H3] – which is about the correlation between the formative factors of placeness and change in perception of placeness – have shown significant results. Therefore, the hypothesis [H4. When the characteristics of tactical urbanism have a significant positive (+) effect on change in perception of placeness, the formative factors of placeness will play a mediating role.] has been adopted. Although the characteristics of tactical

urbanism do not directly affect change in perception of placeness, it can be said that they have an indirect effect as the formative factors of placeness play a mediating role.

5. Conclusion

This study has analyzed the impact of tactical urbanism applied in Seoul, Korea, on the formative factors of placeness and change in perception of placeness. To this end, a theoretical review has been conducted on tactical urbanism, research models and hypotheses have been established, and the structural equation model has been analysed for the verification of the hypotheses. The finding of research are as follows:

First, the characteristics of tactical urbanism had a significant effect on the formative factors of placeness. It means that the better the characteristics of tactical urbanism are recognized, the better the formative factors of placeness of a target area can be perceived.

Second, the characteristics of tactical urbanism did not have a significant positive (+) effect on change in perception of placeness. However, although the characteristics of tactical urbanism did not directly affect change in perception of placeness, it has been found that the characteristics of tactical urbanism affect the formative factors of placeness, which in turn has an indirect effect on change in perception of placeness.

Third, the formative factors of placeness of a location using tactical urbanism had a significant effect on change in perception of placeness. This means that the stronger visitors perceive the formative factors of placeness of a place using tactical urbanism, the more they sense that the place in question has changed a lot from its previous state.

Fourth, when the characteristics of tactical urbanism affect change in perception of placeness, the formative factors of placeness play a mediating role.

This study conducted an empirical analysis of tactical urbanism, about which research has been actively carried out of late, through a theoretical review, case analysis and a survey of the general public. The empirical analysis has found that tactical urbanism is being applied to an increasing number of locations in Korea and that their types, scale and developers are becoming more diverse. From the perspective of urban regeneration, the use of tactical urbanism has the advantage of strengthening a city's resilience and making it possible to deal with changing urban planning paradigms in a flexible manner. To date, studies over tactical urbanism have been mainly focused on case analysis and policy proposal. Meanwhile, the significance of this study can be found from the fact that it has conducted a survey to analyze how urban residents perceive tactical urbanism and its actual impact on the formative factors of placeness and change in perception of placeness.

Future research directions are as follows: Further research should be conducted by conducting an expert survey based on the target areas that reflect well the characteristics of tactical urbanism. This study has delved into the perception about the selected target areas and change in perception of placeness through a survey of the general public. For the analysis of the correlation between tactical urbanism and sense of place, opinions from urban design experts should also be taken into consideration.

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Acknowledgments

This research was supported by the BK21 FOUR (Fostering Outstanding Universities for Research) Funded by the Ministry of Education (MOE, Korea) and National Research Foundation of Korea (NRF)

This research was supported by the Germany-Korea Partnership Program (GEnKO Program) through the National Research Foundation of Korea funded by the Ministry of Education (NRF-2018K2A9A2A15075843).