

## 論文の内容の要旨

Abstract of Dissertation

論文題目 **Small is Beautiful?: The Role of Space in Landscape Design**

**A Study on the Impact of Spatial Conditions on the Design for Small Public Spaces in Tokyo**

(Small is Beautiful?:ランドスケープデザインにおける空間の役割について  
-東京の小さな公共空間のデザインにおける空間の状態がもたらす影響についての研究-)

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### 1. Introduction

This thesis is about *small public spaces in Tokyo*. Tokyo is a city known for many contrast: large scales vs. small scales, commerce vs. tradition, and vast areas of dense urban sprawl vs. a scarcity of open space. For the increasing interest in the progression of open spaces development there is yet an additional contrast: whereas privately-owned spaces in lucrative locations constantly attract enormous crowds, abundant small public parks are hidden behind the dense urban fabric and widely unnoticed by the public audience. This demonstrates an evidently paradox situation: privately-owned spaces become the authentic public spaces while official public parks turn out to be deserted places. The fact that Tokyo lacks public open space on the one hand, whereas numerous small parks are not serving peoples demands on the other hand, shows a serious, uncultivated potential.

Since E. F. Schumacher published his book “Small is beautiful” in 1973, arguing for human-scale concepts in economies, the appreciation of smallness grew in many disciplines. Jane Talbot (1988) argues that “In many artistic domains, the small form is considered the most demanding and the closest to perfection: in poetry, the haiku or sonnet”. (p. 290) Both the challenge and degree of perfection can certainly be affirmed for numerous traditional Japanese gardens as well. But what happens in the public realm? If we transfer the concept to open spaces in Tokyo, is small still beautiful? If we look upon Tokyo’s uncountable small parks we see a wide range of qualities: there are good examples and less convincing examples. Yet, what these parks generally are missing is a collective quality – a powerful statement of their importance for the people.

It might be suggested that the full potential of small public spaces in a mega-city such as Tokyo is only evident, if miniature spaces get a face in the giant urban fabric. They need an authority.

## 2. Question , assumptions and hypothesis

The aim is to identify (new) approaches in designing small public spaces and to point out potentials respectively. This research examines spatial and design issues from the perspective of landscape design. In the center of interest are the questions:

- to what degree do size and other spatial structures affect the quality of small urban spaces?
- how do these conditions influence the design process?

Two claims have been made to answer the research questions. The first claim is that the interrelation of spatial parameters at small public spaces is very complex so that with smaller size, the impacts of certain surrounding parameters become more important (Space-Space challenge). The second claim is that spatial impacts on the small open space challenge design processes regarding creative, functional and economic considerations (Space-Design challenge, Space-Function challenge, and Space-Economy challenge)

Deriving from these assumptions the **hypothesis** is that

*due to physical constraints, small public spaces require particular design concepts and considerations in order to generate quality solution, which support their potential.*

## 3. Method

The research subject comprises theoretical and practical issues in landscape design, urban planning and environmental behavior. A qualitative research approach was chosen in form of the case study method with multiple units of analysis. These include 1. literature review, 2. the investigation of 142 small spaces (<300m<sup>2</sup>) in four case study areas in Bunkyo, Meguro, Taito and Toshima wards, 3. explanatory surveys (oral/written) at Park and Greenery Sections within the four ward administrations, and 4. semi-structured in-depth interviews with nine renowned landscape designers.

The case study analysis focuses on the evaluation of the spatial qualities of small public spaces in Tokyo, for which each site was analyzed in terms of its positive, negative or neutral inclination concerning quality criteria and finally clustered into similar qualities.

The interviews obtain a comprehensive spatial analysis, testing the theoretical concepts of production and revealing objections concerning small urban spaces in Tokyo<sup>1</sup>: For the analysis, interview data were transcribed and coded in order to arrive at themes and typologies, describing the respondent's attribution of space and their design process.

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<sup>1</sup> The interviewed landscape architects were: Hiroki HASEGAWA, (Studio on Site, Tokyo), Hajime ISHIKAWA (Landscape Design, Tokyo), Yasuhiko MITANI (Nikken Sekkei, Tokyo), Toru MITANI (Studio on Site, Tokyo), Gabriele PÜTZ (Gruppe Freiraum, Berlin), Yoji SASAKI (Otori Environmental Design Consultants, Osaka), Christoph SCHONHOFF (Nagel, Schonhoff & Partner, Hanover), Ryosuke SHIMODA (Placemedia Landscape Architects, Tokyo), Ryoko UEYAMA (Ryoko Ueyama Landscape Design Studio, Tokyo)

## 4 Findings

### 4.1 Spatial theories

The greater environment can be considered as a pile of smaller fractions, thus in order to value small spaces it is necessary to understand the larger environment. Scholars in environmental psychology and spatial analysis point out that preferred environments, first, are decodable via borders and spaces in-between and, secondly, express a degree of attraction that evokes the sense of connectedness and involvement. The first refers to the concept of *space*, the latter one to the concept of *place*. Landscape architectural professionals interviewed for this thesis support these concepts. The question how landscape designers define space, and about their most important considerations when

dealing with it revealed that space is only the “starting point” or existing precondition for the profession to alter or manipulate the landscape into some meaningful place. Thus, *space* is not in the center of interest anymore, as the emphasis is laid on the sense of *place*. Consequently, the interviewees’ definitions included aside from core properties (addressing *space*) also information on transitional and design properties (defining the characteristics of *place*). (Fig 1)

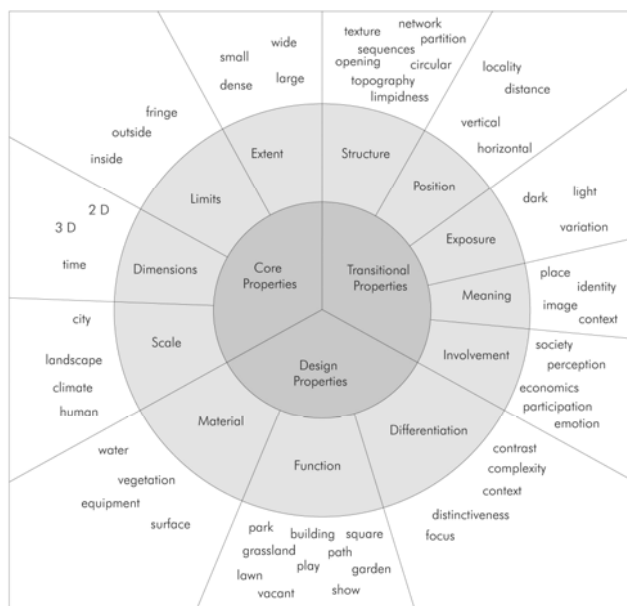


Fig 1: Three levels and subcategories of landscape architectural space as derived from interviews with professionals

Deriving from the theoretical analysis, following six spatial and design considerations proofed to be essential quality criteria for small public spaces in Tokyo.

	Quality criteria	Design element
spatial considerations	spatial interaction	the space's ability of contrast or integration
	embracement	the degree of openness, clear spatial structure and protection
	geographic features	the existence of topography waterways or woods – sense of locality
design considerations	composition	the arrangement of objects and framing boundaries – dealing with smallness
	restorativeness	providing activity and retreat – degree of connectedness and involvement
	social interaction	people & people and people & space – degree of connectedness and involvement

## 4.2 Evaluation of small public spaces in Tokyo

The scarcity of public open space in Tokyo and increasing importance of large privately-owned public spaces evokes the need to concentrate again on public open spaces at “the basis”, in local neighborhoods, where the people are. Rooting in the first creation of public spaces at the beginning of the last century, numerous small public parks have already been created in many neighborhoods throughout the city. However, changing urban contexts and social demands increasingly put pressure on these places and require alternative concepts and solution in their design.

The evaluation of small public spaces in Tokyo was based on quality criteria shown in table1. Five quality categories could be found:

1. Positive tendency spaces indicate a high degree of complexity and mystery while simultaneously demonstrating spatial coherence and legibility.
2. Peculiar spaces illustrate on the one hand remarkable spatial situations, which are on the other hand not yet fully acquired.
3. Undefined spaces reveal a lack of definition either in terms of spatial formation or in terms of functional determination; coherence and legibility are reduced; in some cases, however, the design improved the evident deficit.
4. Substandard places miss a statement and justification for an open space function, often both sense making and involvement are not identified.
5. Mediocre places present a medium level of spatial and design quality; their physical conditions are easy to decipher, but present limited stimuli and possibility for involvement

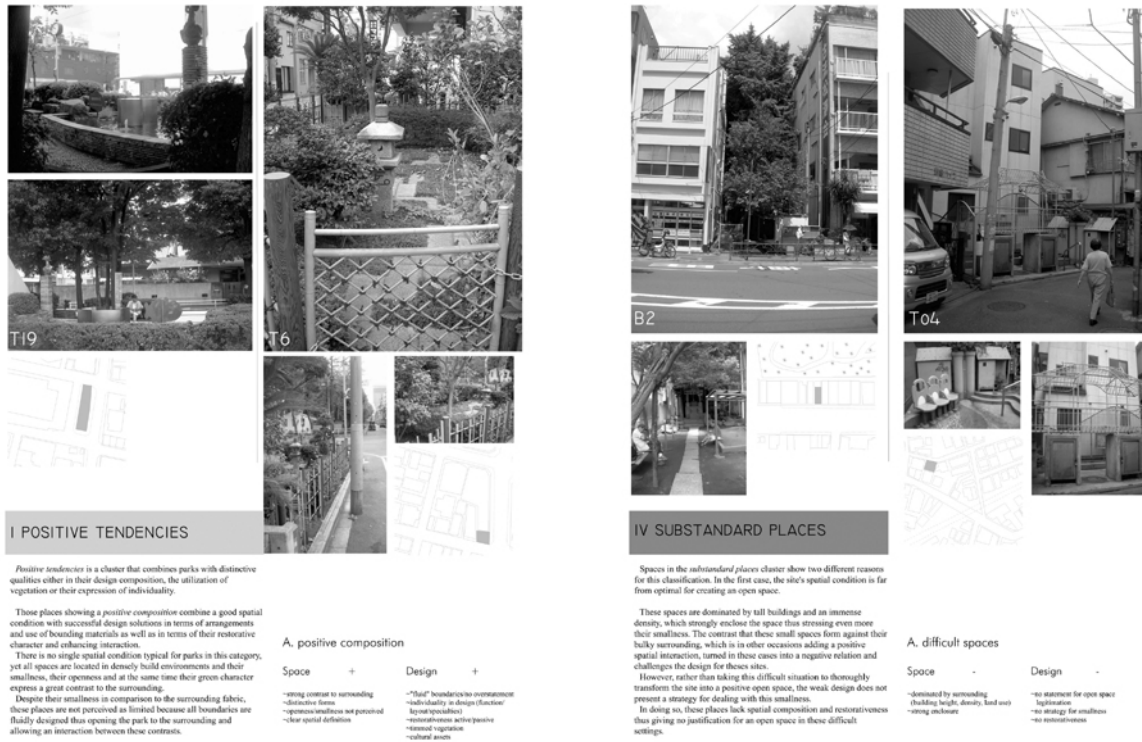


Fig 2 &3: Qualities of small public space: positive tendencies (left), substandard places due to difficult space (right)

This investigation reveals that several examples already imply alternative approaches and generate a few positive places. These spaces include e.g. distinctive solutions, successful interaction with the surrounding environment and a statement towards changing social demands. Other examples draw their better performance from spatial conditions with positive potential, which call for a mitigation in design solutions. So far, these interventions are however, only individual phenomena without broader effects on the city.

Conventional approaches focus on quantities rather than qualitative solutions by creating generalities for better efficiency. The design for small spaces therefore becomes also very political. Moreover, it proves that with smaller size, the impact of surrounding parameter on a site becomes more important and that a dominant surrounding environment evokes the risk for the small open spaces to lose its autonomy in the urban setting. The interrelation of spatial parameter at small public spaces are therefore more complex compared to large spaces – especially concerning the balance of inside and outside and the importance of boundaries. Design concepts and considerations for large public spaces can only partially be applied on small open spaces.

## 5. Conclusion

This thesis concludes that there are spatial, design, socio-functional and political-economic constraints challenging the quality and design of small public spaces, which can be summarized in four categories:

a) Space – Space Relation: Ensuring autonomy of small open spaces

One of the most influential parameter on small open spaces is the degree of enclosure. This defines, first, whether the site is perceived as a positive or left-over space. So far, small public spaces in Tokyo are predominantly located in low to medium rise residential districts, which provide a fairly good environment to develop their potential considering the limitation in size. Yet, there are already numerous examples of conversion where small spaces have lost their autonomy in the urban fabric, turning into isolated and disconnected places.

b) Space – Design Challenges: Enforcing spatial definition of small open spaces

Small public spaces have in general a high degree of coherence and are decidedly legible. On the other hand, the examples in Tokyo often face a lack of complexity and mystery. Since exterior conditions present little variety, it is only possible to differentiate parks through interior conditions, which would require individual designs.

c) Space – Function Challenges: Generating meanings for small open spaces

Rather than merely developing physical conditions (constructing *spaces*), there is a need to focus on creating meaningful outcomes (production of *places*). Visualization of time and the possibility for human intervention and alteration come into focus. In this context, conventional open space functions are quickly confronted with their own limitations and need to be reconsidered. For small public spaces, alternative utilizations are therefore required, which additionally need to reconsider images, identities and contexts and that emphasize the peculiar “feeling” of a place.

d) Space – Political/Economic Challenges: Regarding small open spaces as necessity instead of an amenity

First, there is the emphasis on strong separation between public and private interests resulting in extremely controlled situations; secondly, governments addressed their desire for efficiency concerning implementation and maintenance management; and third, rigid planning regulations emphasize on quantity rather than on quality aspects. The majority of small parks still manifest conventional planning strategies. Thus so far, small public spaces have been considered as an amenity rather than a necessity to serve local neighborhoods in Tokyo.

## 7. Suggestions

The main conclusion that can be drawn from this thesis is that, although small spaces function on a local scale, they can yet not be regarded isolated. In contrast to large open spaces as self-sustaining entities, the real potential of small parks only derives from the broader connectivity. There is an evident need to formulate the authenticity of small public spaces in Tokyo’s urban landscape. Regarding statements on design this would address two levels: on the small-scale local level the open space should open to its surrounding in order to attract involvement. On the large-scale city level small

spaces should be connected in a *resourceful diversity network*, which formulates the genuineness of small public spaces, while accentuating each site's individuality.