Abstract: This study examines the design processes in contemporary Japanese landscape architecture. It is framed by the question whether exposure to smallness and dense environments generates knowledge that motivates and enables Japanese landscape architects to approach small spaces different from large-scale projects. The aim is to investigate if design strategies exist that reveal specific methods in designing for small spaces and to further understand how these methods are applied in designing for small spaces. Interviews as well as a specific design task focus on designers’ understanding, perception, and appraisal of design possibilities for small urban spaces through investigation of their design process and work practice. The study reveals that rather than a single approach on designing for small spaces differentiated design strategies are utilized, which consider spatial context, sensory experience and processes and emphasize the understanding of site specific-ness in the design process for these spaces.

Keywords: Design Process, Japan, Landscape Architecture, small space

1. Introduction

With diminishing spatial resources and continuing urban growth current landscape architecture design practice, concerned with designing for large spaces [8], has to be reconsidered and it has to be evaluated whether smaller or even miniature spaces can be considered a valid terrain for securing open spaces in ever-denser cityscapes. However, designing for small spaces is considered more complex and challenging in regards to creative, economic and functional concerns due to specific physical constraints associated with smallness. As Jane Talbot [11] states: “In many artistic domains, the small form is considered the most demanding and the closest to perfection”. (p. 290) Thus, it can be argued that in order to explore their full potential, small spaces require design strategies, which can only be generated through specific design considerations. This paper therefore explores Japanese landscape architecture design practice and asks the question whether the cultural context reveals specific or intrinsic design methods, approaches or strategies that are utilized in designing for small spaces. Comprehensive insight into design processes, approaches and spatial analysis of small spaces is gained through semi-structured in-depth interviews with seven contemporary, distinguished Japanese landscape architects: Hiroki HASEGAWA, Studio on Site; Hajime ISHIKAWA, Landscape Design; Yasuhiko MITANI, Nikken
Sekkei; Toru MITANI, Studio on Site; Yoji SASAKI, Ohtori Environmental Design Consultants; Ryosuke SHIMODA, Placemedia Landscape Architects; Ryoko UEYAMA, Ryoko Ueyama Landscape Design Studio.

Education and professional background, publication, lectures, design philosophy, office environment, and experience are considered in the sampling process, as these factors are expected to generate different design strategies. Questions focus on the landscape architect’s understanding, perception, and appraisal of design possibilities of small urban spaces through investigation into their working practice.

Throughout the interview, the designers were asked to give rather theoretical and analytical information on design related topics, either on their personal verity and practice or on their evaluation of the design discipline in general. Aiming to capture what can be loosely described as a personalized creative answer to the set problem of designing for small urban spaces the interviewees were additionally asked to provide a sketched concept design idea for a small vacant lot in Tokyo. Subsequently, the outcome of this design task is set in context with the positions the designers offered on their practice.

2. Framing smallness in the Japanese cultural context

Miniature landscapes (bonkei), miniature plants (bonsai), small gardens and courtyards (tsubo-niwa) form examples that suggest a particular approach to smallness in Japanese landscape architecture. As Meeus & Vroom [6] argue, landscape design is a “cultural phenomenon in which form and process, space and meaning are interconnected” (p.281) and notions of space and landscape cannot be separated from human behavior.

While a profound exploration of Japanese spatial concepts lies far beyond the scope of this paper, it shall be attempted to collate key aspects and relate them to the discourse on small urban space. The exposure to smallness rooted in Japanese culture is often tracked back to cultivation technique of rice and religious concepts. [3,10] For example it is argued that rice cultivation requires a certain density of settlement and infrastructure and this in return requires socio-political systems that are based on that density. Thus, small spaces emerge as a consequence and can be viewed as a reflection of socio-political systems. The development of modern Tokyo illustrates the link between urban form and socio-political system, where the rapid urbanization (from 1603 on) led to the emergence of distinct spaces that reflect the strata of the feudal society. One example for this are the small courtyard spaces (tsubo-niwa) of particular merchant houses which often are viewed emblematic for Japanese garden design, a relict of particular conditions.

It has widely been described that the Japanese architectural context offers distinct spatial concepts in dealing with dense conditions through efficient structuring and sequencing of space through intervals (e.g. ken, ma). [2,5,7] In addition, cultural concepts such as kai-haku-tan-sho (light, slim, short, small) are a direct reaction to dense spatial conditions. Here smaller versions of objects of daily life are manufactured to accommodate the smallness and density of the environment. Prominent examples are the Walkman and the micro-car that both reflect a specific spatial context through efficient, compact useability.

Spatial efficiency also lies behind saiku, the “small is cute syndrome” prevalent in Japan for centuries. Here, the object becomes the focus of attention and miniscule precision extends its value – a concept that is exemplary for bonsai culture. Small trees are cultivated and pruned to precisely emulate their natural counterparts with distinct excretion of processes of growth and withering.

Yet another concept of dealing with smallness is the metaphysical extension of size and blurring of boundaries through borrowing landscape. The concept shakkai describes the use of adjacent spaces that are integrated in the
design as many historic small gardens and to some extend religious entities show. Here a clear accentuation of the interior space is combined with the borrowing of the landscape as background scenery. [7]

Despite these cultural concept of smallness, contemporary Japanese landscape architecture practice often does not seem to reflect this rich traditional background both in design “language” and quality. One reason for this discrepancy to name is that the mastery of garden design is viewed in most cases as entirely separate form professional landscape architecture, which is rather linked to architectural practice or even civil engineering. [9]

Moreover, landscape architecture is generally understood as a fairly new “western” concept. The discipline still struggles to precisely identify the subject of landscape architectural practice in the Japanese language as multiple terms suggest, such as ランドスケープ landscape (the foreign model), 景観 keikan (the technical term), or 風景 fūkei (the metaphoric reference), the latter terms both being used to express different notions of scenery. Summarizing it can be stated that, a rich cultural background of strategies for designing for smallness exists, and it will be examined in the following how contemporary Japanese landscape architects utilize this knowledgebase in their design approaches.

3. Designers' perception and definition of landscape architectural space

Starting from the entity space there are universal, physical attributes describing any given site regardless of its organization, utilization or exposure to other kinds of influences. Owing to this universal quality, it is not surprising that a major part of the interviews corresponded in most of these basic spatial descriptions.

All participants mentioned spatial extensions in definitions such as large, small, wide or dense; limits of spaces when referring to fringes or inside and outside; dimensions of space in terms of plains, volumes and the consideration of time; and finally the variety of scales that apply to their spaces.

One particular noteworthy factor is the issue of time, which many interviewees declare as one of the most important influences on spatial characteristics and the distinctive character of landscape architectural work in contrast to other design disciplines. It was highlighted that with vegetation as a living material, the design outcome is in a constant process of change. The professionals argue that the initially imagined design character needs time to establish in reality. Thus, spatial quality and experience altering in time as well. This does not only apply to years or decades it needs to establish a proper spatial framework with vegetation, such as hedges or growing a large shading tree but moreover to seasonal changes adding varying colors and textures to a place. In small spaces the complexity of time processes is even accelerated as pointed out by most of the informants.

Attributes that had been mentioned to describe the inner character of a space can be summarized in structure, position, exposure and meaning. Structural qualities define the relation between open parts and objects arranged in space that can create partitions and sequences. The result can be noticed in various shapes, textures or topographies. Position on the other hand, describes the relation in terms of distances and directions, through which we can decode locations in space such as ‘above’ or ‘under’, ‘front’ and ‘back’, among others. In this context, it has been pointed out that the physical condition of space is perceived in intervals, so to say in a series of many single pictures that will merge into one big image of that particular space, and that the perception of these sequences highly depend on our viewpoint and position in space.

Moreover, all objects within a space, in particular trees or vegetation, as well as the surrounding environment of outdoor spaces, define the degree of exposure in terms of the amount of sunlight or shade that will be experienced on a site. This, links back to the explanation about time, since the quality of daylight depends on
both, the geographical and immediate location and period of the day and year. The importance of climatic influences on spatial perception and appreciation as mentioned above has been stressed in the interview responses as well. Thus, landscape designers are well aware of the impacts of light, moisture or wind on spatial qualities, and often actively consider to manipulate site conditions in order to create subtle experiences. The application of textures, patterns and quality of material are crucial considerations to achieve intended expressions. T. Mitani suggests that landscape designer should conduct site visits under bad weather conditions, because rain or storm add a different sense of space and perspective on the atmospheric quality of the place.

Whereas many scholars approach space from either its physical attributes or its social meaning [4,11,12] this distinction is not regarded as relevant for the interviewed landscape professionals. Hasegawa points out that space is only the “starting point” for the profession to alter or manipulate landscape. In this regard, a space is not in the center of interest, as it only forms the existing precondition that landscape designers are dealing with in order to define something new. Thus, the focus all interviewees laid on the definition of landscape architectural space, emphasized the sense of place rather than highlighting merely physical components. Space is recognized as an abstract terminology to describe an enclosed entity whereas the association with place on the other hand includes a deeper understanding of its character, individuality, and qualities. Ishikawa goes even so far as to claim that space cannot be designed, Sasaki exemplifies the deeper meaning of place by referring to ふけい, one of various Japanese expressions for landscape full of suggestions and connotations.

Turning back to Hasegawa’s statement that design should not create spaces for the sake of the site but for the sake of a greater meaning, it can be argued that providing the opportunity to perceive and experience space emotionally, as well as participate actively is one of the main tasks in landscape design. Moreover, participation could shape the spatial structure also directly as illustrated in Sasaki’s work, where local resident are allowed to alter the space within a framework, initially established by the designers.

It has been argued that landscape design “is the result of manipulating or managing a site to a prescribed design in order to create useful (...) spaces and places.” [1] (p. 122) There is a great correspondence between the interviewees regarding the difference between space and place. The ultimate attribute underlining the transformation from space to place, from site to something more important to people, is the notion of an additional layer and meaning on the land as described in terms such as image or identity. Hajime Ishikawa points out that landscape or outdoor spaces are not “empty” in terms of meaning, contexts or references, since geology, nature, history and human intervention all leave traces on the land. Functional distinction and material detailing ranging from vegetation to water features, and hard and soft surface proved to be important to define the character and quality of a place through contrast, complexity, and contextual situation.

4. Spatial Analysis and Individual Design Processes

To link the designers’ understanding of landscape architectural space with their design approach the interviewees are asked to evaluate a photo of a vacant space in Tokyo [fig.1.1] and to spontaneously develop a design for the small space. Through this design experiment is aimed to test each designers practice under the constraints of designing for a small space. In their proposals the designers stress, which factors are most important, striking or disturbing in their considerations. As anticipated, suggestions show a wide range of alternatives and the diverse definition of potentials and restraints, depending on the designers approach, field of interest, philosophy or principles.
4.1 Hiroki Hasegawa

Hasegawa acknowledges his fascination with vacant lots, as he frequently photographs this phenomenon in Tokyo. Whereas other informants are excited about contrasts to surrounding urban context, scale, functions and land uses, Hasegawa’s interest lies more in exploring the vacant situation itself. Thus, instead of judging the current condition, he tries to investigate the causes and to predict future developments on that site. Hasegawa analyses in this regard forces exerted on landscapes worldwide, including capitalism, local politics, police, and building guidelines, among others. Passing a vacant lot, Hasegawa would stop and reflect on possible forces and future options. His investigation always starts with the question “What will be the next step?” In this particular example, Hasegawa recognizes the place to be protected by a light fence that might prevent people from entering the site, allowing weeds to grow over summer and turning the site into a small, ephemeral, natural sanctuary. Hasegawa diplomatically points out the speculative nature of this scenario. Arguing that the multiplicity of reasons, causes, and actions, make it impossible to consider a design independently, he is reluctant to describe more details to one particular scenario. To proceed with a design, he would consider gathering more information on the neighborhood and to listen to demands and perspectives, in order to clarify power relations and reasons for the development. Although it would be easy to claim the site should remain an open space, Hasegawa stresses that he would never base a final decision merely on photographic images. Rather in this particular neighborhood, which he reasons to “suffer” from aging population, alternative options such as a low-rise family condominium might be “more profitable”, whereby “profitable” in this context does not only stand for a
monetary bonus. In regards to the current investment-driven regeneration projects in Tokyo, Hasegawa exemplifies his concerns about the future direction with some images from Shanghai, claiming, "There is no green space, no light. [Thus] it is very dark and scary.”

4.2 Hajime Ishikawa
Ishikawa’s attention focuses in this example on spontaneous vegetation. His personal interest is “to see things growing in urban situations”. As plants illustrate intrinsic local characteristics, time and processes he is fascinated with, he instantly recognizes several peculiar species on the photographs.
In terms of the spatial condition of the vacant lot, Ishikawa characterizes a ubiquitous neighborhood of dense, low-rise, residential properties, which he concludes to be situated in eastern Tokyo based on straight roads, close buildings and scarce topography. Resulting from this context, he estimates the site to be turned into either another residential housing or a parking lot, since he senses a high demand for parking space in that precinct. In his proposal on the other hand, Ishikawa emphasizes on openness and vegetation. Although he claims further suggestions would depend on his role in this development process as well as the client, he nevertheless sketches two alternative scenarios for the site both focusing on visualizing time processes in a small garden.
The first option, concentrates on potential natural processes occurring on site if protected by a three-meter high fence. Ishikawa anticipates after a decade the rare character of massive vegetation would grow on the site with possibly never expected species. The fascination in this approach would be for him to expose the potential natural vegetation and rare plant communities in an extremely constraint space. Although his intention is to prohibit access to this habitat, Ishikawa proposes an observation bridge be an option to perceive the processes more closely. For his second proposal, Ishikawa offers a simple spatial framework for a community garden. Without further intervention, Ishikawa anticipates local residents to appropriate the site, cultivating their own vegetables, flowers or small trees within the parcels due to the local culture in that area. According to his estimations, his “meta-design” would be transformed into a very personal, vivid, and flexible garden within three years. This example represents for Ishikawa the typical space-place relation: he designs the space, which would become the place through people’s appropriation. He argues that this appropriation is very likely in shitamachi neighborhoods, as people “see streets as a continuous place of their residences, which makes it easier for them to make personal commitment to the urban situation”.

4.3 Yasuhiko Mitani
Y. Mitani approaches the vacant lot from the neighborhood conditions visible in the photo, concluding from the backside or corner location that there used to be a building. However, in its present vacant condition, the site has for Mitani no expression of human intervention or feel, yet he admits the site to be an interesting situation nevertheless.
Concerning a proposal for the site, Mitani is first hesitant, trying to elucidate the economic value of the lot and its surrounding based on building structure and street life. Stressing the variety of possible options how to develop this site, depending on his position as either landowner or hired landscape architect, Mitani in the end opts for a multi-story building, including upper-floor living and business on the ground floor with a setback, both to keep the view on the street corner open and to allow the public to use parts of the small space. In favor for a larger and functional setback, and in order to ensure some profit for the landowner of this tiny lot, Mitani argues
for a higher structure, which in the upper floor comes closer towards the street. The transition between the business on the ground floor (small café or restaurant) to the street should be gradually, including plants and offering seating options for elderly people. Even though he first argued for a tree to offer some shade, Mitani in the end decides against it, claiming the building to provide enough protection for the setback.

Although this architecture should not be understood as a temporary solution for the small space, Mitani states that temporal structures have a significant value. Arguing for significance that would include a comprehension for quality materials, and consequently a higher budget, which in his opinion is the only option to create powerful, long-lasting achievements.

4.4 Toru Mitani
The first, spontaneous reaction of T. Mitani on the small vacant lot is a positive and very personal: “I love it!”. He highlights the potential, this current vacant status evokes as an option or source of inspiration and stimulation not only for children to play but as well for common people. The privacy plus the very uncontrolled condition, allowing weeds to grow spontaneously and exposing natural soil, creates for Mitani the image of a “good urban landscape” as opposed to the “modern functional urban system”. In this regards, the lot becomes a transitional space between functions and times. Within the “stuffy”, perfectly controlled urban context, this side represents for Mitani real freedom and looseness.

Despite his honest appreciation of the present vacant condition, Mitani does not argue for this site to remain an open space. Rather, he points out that vacancy always is a temporary state that looses both its stimulation and authorization the longer the condition remains, and he even claims that an “eternal vacant lot” would inevitably become “boring”. The attraction within temporary vacancy lies in his opinion in the flexibility in time and space and the shared memories of residents, which seem to be the core value of this condition.

Consequently, Mitani’s proposal foresees an ordinary, favorably prefabricated, detached house on the plot. Although he is not opposing ideas of a public open space such as a pocket park, he nevertheless argues from the perspective of common residents, whom he believes to expect a building to be constructed in this situation. Aside form the aspect of shared common memory he also highlights the contextual issue, which would allocate an ordinary house better in the “townscape” than a contemporary star-architecture. However, in order to maintain some of the positive qualities, he pointed out in the beginning, Mitani proposes this new building with a small strip of private garden and open soil, allowing people to “smell moisture” or children to dig the ground. In contrast to the highly surfaced surrounding, this place could evoke a sense of nature in the urban context. In order to leave this space a stimulus for children, Mitani suggests that the backside garden should be open during the daytime, but might be secured over night. The street-facing façade should represent transparency, which enables a discreet communication between inside private and outside public life.

4.5 Yoji Sasaski
Sasaki observes the lifestyle around the vacant lot as he points to the residential land use, to the old people outside on the street walking the dog, the flowerpots put on the street and the open carport. From all these images, he concludes the location of the lot to be in a shitamachi area in either Tokyo or Osaka. Doing so, he is the only interviewee who precisely locates the site in a particular urban context that evokes deeper associations than the mere description of the space and the surrounding.
Although Sasaki does not specifically emphasize the contrast of vacancy and density, he nevertheless proposes a homogeneous, integrating solution in form of a building with a small garden. He argues that an open space would be difficult to pursue, as due to the lack of connectedness resulting in a very isolated condition it would have a “very lonely” atmosphere. The corner position, however, inspires Sasaki to open the proposed multi-storey building to the intersection and to include roof gardens on different levels within the floating structure that would give various options despite the small size. Although the owner can be private, Sasaki explicit highlights the general function to remain public in order to improve the lifestyle in shitamachi. He exemplifies this with images of Kyoto with its rich private-public intersection in the wooden machiya housing districts. In this case, the building could be developed into a community center, including a café or service station that would become a “good space for a city corner”, since “people can see everywhere and it is very easy to access”. Sasaki suggests for the entire structure a “private and shallow feeling” with a gradual transparent connection of inside and outside, but nevertheless clearly separated from the adjacent buildings through a small buffer zone of bamboo plantings. In the end, he even considers a branding name: “Maybe I call this ‘Shitamachi Café’”.

4.6 Ryosuke Shimoda

The condition of the vacant lot represents for Shimoda a very “generic” situation yet he shows his appreciation for the current condition, which is rather lively and natural than a “tabula-rasa”. Shimoda is interested in the ambiguous history and the rational behind this current vacancy.

Concerning the prospect what would happen to this place Shimoda estimates that a new small residence could be built and in terms of other probable functions, he is undecided, because he would need further information on the exact location and distance to next train station. According to his personal preference, however, he proposes to keep the current open, unoccupied condition. Shimoda therefore takes the position of a potential prosperous owner, suggesting that after he purchased the lot he would not intervene and just return frequently to observe changes, particularly in the growing vegetation. Since he chooses not to enclose and secure the site, this would allow people to enter and alter the land at any time. The three drawings represent the potential situation in unspecified time frames, illustrating his interest in the un-known processes.

4.7 Ryoko Ueyama

Due to the impression of the surrounding neighborhood Ueyama argues for the lot to remain open with the possibility to transform into a community space. However, to describe the space more detailed she would need more information on the “memory of land”: maybe she would discover a little shrine or temple in vicinity so that festivals could be held on the site.

In terms of open space utilization, Ueyama stresses the accessibility of the lot as a crucial necessity, yet she questions whether the owner would support a community open space. In case, the government would alternatively purchase the lot, Ueyama claims that the site might undoubtedly be transformed into a little park or meeting place for locals, conceivably even with a small restaurant to cook together.

Ueyama clearly focuses on utilizing the space for the neighborhood in close proximity and she stresses repeatedly the enormous impact of a small park on the neighborhood. The improvement of a single lot could function as an initial in redeveloping the dense, “cramped” neighborhood. From the perspective of local residents, she suggests that a small park could lead to more awareness of openeness and aesthetical quality that could
encourage people to improve their own properties: e.g. refurbishing or – in a more radical measure – rebuilding their houses, which might include in the end even some small private garden. Considering the short lifespan of Japanese houses, the entire neighborhood might successively change within one generation.

5. Conclusion Japanese Landscape Architects’ view on small space

The study aimed to investigate if design strategies exist that reveal specific methods in designing for small spaces and to understand how these methods are applied in designing for small spaces. Rather than defining small spaces as a singular entity, the interviewees agreed on perceiving the smaller space as part of a larger entity. “The larger space is sort of a pile of a smaller scale”, thus “when you make a smaller space, you need to understand the larger space, too… (this) is a sort of continuous thing” summarizes Y. Mitani. Hasegawa underlines this, by stating that “every site is small in comparison to the universe”, Ueyama too emphasizes the metaphorical “memory of the land”, imprinted in any place on earth- regardless to its size. The interviews show, that no pre-set specific approach to small spaces exists in the design process and that there is no single approach on how Japanese landscape architects design for small spaces. However, differentiated strategies from diverse angles are found to be applied, revealing site-specific qualities. The derived strategies can be grouped into three clusters: focusing on spatial context (theoretical approach), sensory experiences (behavioral approach), and process orientation (natural systems, visibility of time).

(1) Consideration of spatial context: This approach defines the understanding and conceptualization of spatial considerations, which reflect the designer's position in the theoretical discourse on space and place. In this approach, the designer commences the design process with the analysis of quantitative spatial components such as size and dimensions, boundaries, exposure, openness, among others. Toru Mitani for example approaches the space from a rather architectural perspective and argues for volume and thereby spatial context. Yasuhiko Mitani also stresses mass and voids but he refers to the landscape as a subtle form of space in-between architecture and architecture. Traditional Japanese artisanship with its notion of simplified space by arranging minimal objects and voids into an impressive composition is one sources of inspiration for Y. Mitani’s spatial conception: “That’s the space we are dealing with on a daily basis. That means, when you do the flower arrangement, you are not trying to fill up a bunch of flowers in a vase. You are trying to make some space between flower and flower […] That is the same way of thinking” in landscape design.

(2) Sensory experience: Tangible and intangible cultural and spatial layers can be used to frame the approach of both, Sasaki and Ueyama. Sasaki for example describes scales in terms of functional relations between building and humans or between nature and humans, as well as on the emotional level between humans, referring to the sense of the private (personal) and public (common) space. The basis for these relations is his concept of territories, connected within a larger network. For this, he refers to the image of cells as single entities that are connected in the broader context of an organism. Ueyama’s philosophy follows rather metaphorical principles. Here scales include the cosmos, expressed in “Cosmophilista”, and the land in terms of “concealed memory” and canvas, the platform of imprinted design (Ueyama, 2005). The surrounding context and locality are as much important as the time frame both in the past and future dimension.

(3) Process orientation: This category includes the investigation of natural systems and visualization of time as a method to reveal the genuine quality of a place. In this, the analysis and design focuses on uncovering intrinsic characteristics of a site through research and speculation about the historic legacy. Property of time includes

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recognition of cultural events or significant interventions, legible through remaining or spontaneous vegetation on site. The design processes and proposals eventually formulate a method of storytelling, discovering and acknowledging the invisible layers of the site. Ishikawa for example values spatial experiences, and likes to take his children to his site visits, in order to experience the atmosphere form distinct perspectives and to explore natural features that might be of different interest and quality for children than for adults. Moreover, the children’s’ curiosity and desire to explore, forces Ishikawa to explain various phenomena very detailed. In this regard, he addresses the importance to consider various scales in projects, both in physical and human dimensions.

In conclusion, the study reveals that even though no culture specific distinction in designing for small and large spaces can be derived from Japanese landscape architecture design practice, distinct, site-specific design approaches are found that emphasize the understanding of site specific-ness in the design process in designing for small urban spaces. With diminishing spatial resources it is suggested to utilize the understanding of the derived design perspectives as tools to developing the underrepresented small urban spaces of Japan that possess high potential in sustainable urban regeneration in dense urban environments.

6. Bibliography


