

# VISUAL PERCEPTION OF LANDSCAPE - THE APPROACH FROM SHIJO STREET TO YASAKA SHRINE AND MARUYAMA PARK

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The paper aims to find ways for describing and understanding the perceptual interaction of person and landscape as expressed in the case of Kyoto city. Concurrently, it presents an experimental method to the visual perception of landscape, in which there is reciprocity between the perceiver, who moves and views the landscape, and the landscape itself, that affords directional qualities. The study focuses on the perceptual (visual and kinesthetic) transition between the urban and the non-urban domains, and presents conceptual and analytical models, applied on a particular case study. The underlying assumption is that places and spaces along the transitional space between the urban and the non-urban domains, although constructed in different historical periods with different social and political contexts, direct spatial and perceptual continuity between the city and its surrounding mountains.

**Key Words:** *perceptual interaction of person and landscape, Kyoto, reciprocity between perceiver and landscape, directionality and landscape and built form, transitional space*

## 1. INTRODUCTION

### (1) Background

A stroll along the various streets and pathways of Kyoto exhibits the complexity and richness of its landscape. From every spot, at every glance, the appearance of the surrounding mountains is varied, affording numerous views and spaces. The proximity of the city to its surrounding mountains enables the observer not only to view the mountains as scenery, but also to climb up to the mountains, and be part of the scenery. The climb is also symbolic, as various temples and shrines constructed on the foot of the mountains, thus, mediate between the domains of the city to the domain of nature. Accordingly, the spatial structure of present-day Kyoto, perform various perceptual and existential (symbolic) qualities, which interrelate with the observer's spatio-temporal position and location within the landscape.

### (2) Purpose

The purpose of this first-person study is to find ways for describing and understanding the perceptual interaction of person and landscape as expressed on the particular landscape of Kyoto. Accordingly, the study intends to suggest a conceptual link between the visual and spatial structure and patterns of the landscape to the perception of landscape. The study aims to focus on both the structure of the landscape and built form, and on the perceptual (visual and kinesthetic) and symbolic transition from the city to nature, as expressed on the passage from Shijo street eastward. (Fig.1)



Fig.1 Passage from Shijo street to the mountains (left to right)

### 3) Review of related literature

#### a) Reciprocal relations of perceiver and landscape

The landscape generates a process of interaction with the perceiving subject, as the linking mechanism is perception. Seeing the landscape is considered as an active exploration of the whole body by locomotion, relative to the environment<sup>1</sup> Yet, the environment "...is not wholly dependent on the perceiving subject; it also imposes itself in significant ways on the human person, engaging one in a relationship of mutual influence".<sup>2</sup> The environment affords information that can be picked up through the process of visual perception. This theory of "affordance" by J.Gibson emphasizes the possibilities afforded by the surfaces of the environment.<sup>3</sup>

#### b) Directionality of urban space and landscape

The surfaces of the environment can refer also to the bordering elements of urban and non-urban spaces. Urban planner and scholar Thiis-Evensen analyze the way those elements 'guide us', composing 'directionality of space'. Thiis-Evensen regards the human response to this directionality of space "to be referential base which supplements cultural and personal experiences".<sup>4</sup>

#### c) Movement, rest and visual encounter

Geographer and environment-behavior researcher David Seamon examines the way people move through space, and suggests a triad of environmental experience, as of 'movement', 'rest' and 'encounter'. The environment imposes places and spaces of 'rest' and 'movement', as the observer explores the landscape in different levels of awareness.<sup>5</sup>

#### d) Spatial structure of Japanese landscape

The landscape scholar Higuchi suggests a typology of Japanese landscape in terms of boundary, domain, focus-goal and directionality. Complementary to his study of patterns, Higuchi implies various visual and spatial attributes, regarding the perception of landscape, mostly from static view points.<sup>6</sup>

### (4) Method and process

The method suggest a conceptual link between the theories and methodologies presented in chapter 1.3. In addition, it suggests a more concrete architectonic analysis of a case study in Kyoto. Further on, the paper presents spatial, perceptual and symbolic analysis of Kyoto (chapter 3), and visual and spatial sequential study of the approach from one of the main streets of Kyoto (Shijo street) to Yasaka shrine and Maruyama park, both on the vicinity of its western hills (chapter 4). The results and conclusions of the study are presented on chapters 5 and 6.

## 2. MODELS FOR VISUAL PERCEPTION OF LANDSCAPE

### (1) Perceptual interaction model

The model is based on experiential approach to landscape perception, in which there is reciprocity between the perceiver, who moves, rests, and views the landscape, and the landscape itself, that affords directional qualities. The model binds the affordance theory, the directionality of space, in correlation to the triad of environmental experience. The various applications and feasibility of the model are further examined. (Fig.2)

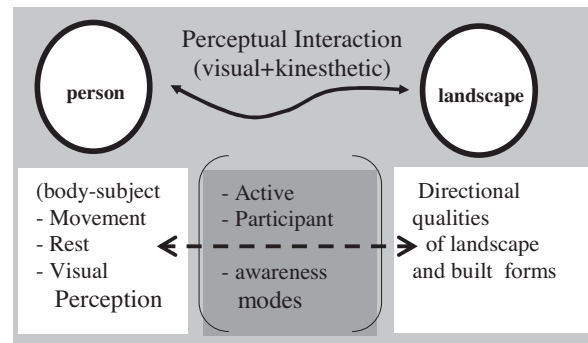


Fig. 2 Perceptual interaction model

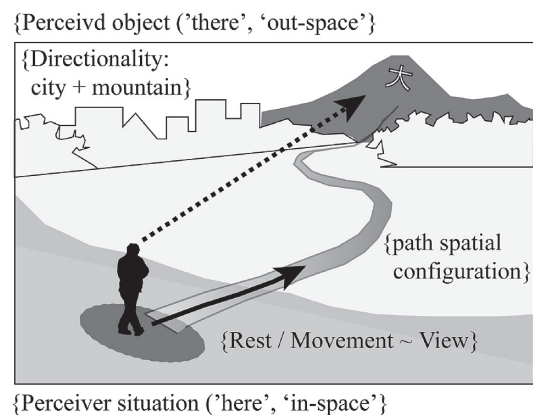


Fig.3 Model for visual perception of landscape

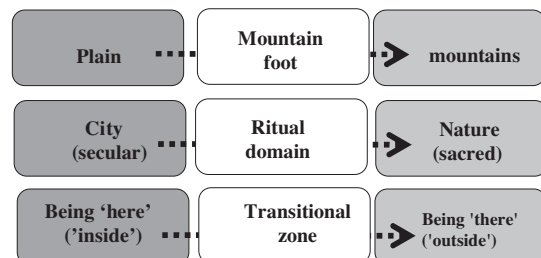


Fig. 4 Transition from city (plain, secular, 'here') to nature (hills, sacred, 'there')

## (2) Model for visual perception of the landscape

The model presents both, the perceptual relations between the perceiver, who moves and views the landscape, and the patterns of landscape, that affords directional qualities. In the model, the observer is either in 'movement' or 'rest' situations while being 'here', 'in-space', in a particular domain (urban or non-urban) bounded by various spatial elements.<sup>7</sup> The landscape is set as 'there', 'out-space' as the connective element between the city and the landscape, between 'here' and 'there' is the pathway (Fig.3). The model is dynamic, varying according to the observer's spatio-temporal position and location, and contains also symbolic meanings. (Fig.4).

## 3. VISUAL PERCEPTION OF KYOTO

### (1) City enclosed by mountains from three sides

Kyoto is constructed on a wide basin, distinguished for two primal topographical units, the plain and the mountains. This topographical structure enables complementary relations between 'being in the city' and observing the mountains as scenery, and between 'being inside nature', taking an active role (participate) in the scenery. (Fig.5a)

### (2) Directionality of streets and mountains

The orientation and directionality of the main streets of Kyoto relates to the directionality of the surrounding mountains, as the main streets are relatively perpendicular to mountains, thus, enables visual and kinesthetic continuity between the city and the mountains. (Fig.5a)

### (3) Urban, natural and ritual domains

Kyoto can be conceptually distinguished to three primal domains according to its topographical features and urban and symbolic functions, the city, its enclosing nature, and various ritual compounds, constructed on the foothills, as transitional spaces between the urban ('secular') and natural ('sacred') spaces.<sup>8</sup> (Fig.5b)

### (4) Proximity of the city to the mountains

The proximity of the city to the mountains (about 5 km. from the city center to the foot of the mountains) enables accessible approach from the domain of the city to the domain of nature. (Fig.5b)

### (5) Symbolic landscape

The landscape scholar Higuchi, in his typology of Japanese landscape considered Kyoto as composing the attributes of *zofu tokusui* type (literally "storing

wind-acquiring water"). This symbolic type was defined with consideration to its spatial configuration in terms of boundary, domain and directionality.<sup>9</sup>

### (6) Spatio-temporal position and location

The observer perceives the enclosing mountains (long, middle and short distances) regarding the position (on the plain, foot hills or mountains) and location within the basin. His perceptual encounter interrelates with its symbolic meanings.

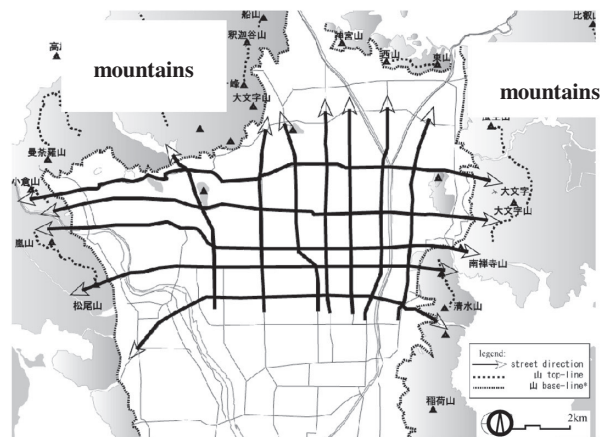


Fig.5a Directionality of main streets and mountains (horizontal)

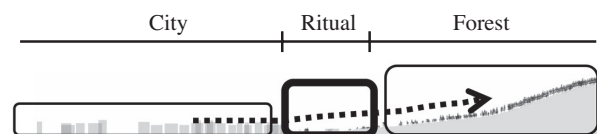


Fig.5b Perceptual and symbolic directionality (vertical)

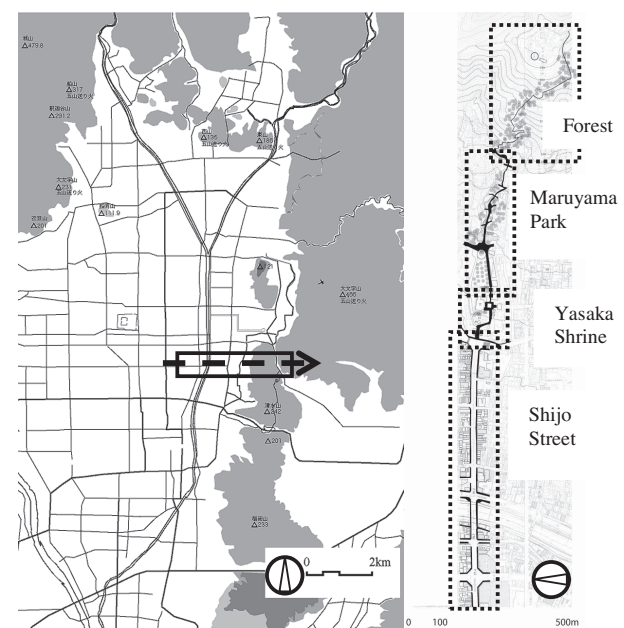


Fig. 6 Approach to the mountains from Shijo street

#### 4. APPROACH FROM SHIJO STREET TO YASAKA SHARINE AND MARUYAMA PARK

The examined sequential space comprise of four different places and domains, constructed in different historical periods with various social and political contexts, that of the eastern part of Shijo street (urban domain, main street), Yasaka shrine (ritual domain, shrine) Maruyama park (urban and non-urban domains, park), and forest on the top of the hill (non-urban domains, forest. (Fig. 6)

##### (1) Street typology: Main street and landscape

###### a) Section 1: mountains 'framed' as street 'leads'

Shijo street, on the section between Karasuma street (a) eastward to Shijo bridge (b) can be defined as a 'cutting street' with background vista to the mountains. The spatial pattern of the buildings bound the space, and further directs it to the frontal, 'framed' view of the distant mountainous landscape. (Fig 7a)

###### b) Section2: panoramic view as street 'rests'

Shijo Bridge composes both, a place of rest and a place of continuous movement. On the 'floor' level, the bridge is continuous with the street, whereas the 'wall' level suggests a break, a pause in the continuity of the buildings volume. The frontal view from the bridge is wider, affording panoramic middle distant view to Higashiyama ridge. (Fig. 7b)

###### c) Section3: the street as an approach to the shrine

The third section of the street is less intensive in spatial and functional manners. (Fig 7c). Along the sequential progression the wooden vermilion gate of Yasaka shrine gradually appears as a focal object, and a distinct terminus for the street. At this point, the mountain ridge is screened behind the mass of trees behind the gate. Further on, at the end of the street, the longitudinal walls 'open' and 'prepare' to the entrance of the shrine. In that sense, the gate 'hides' the mountain, yet, determines the entrance for the ritual domain of the shrine. (Fig. 7d)

###### d) Summary: Shijo street as an approach space

Along the examined sequential progression, the typology of the street and landscape change from a 'goal street' with mountains in its background (section1), to a 'goal street' with two primal goals, the gate as a primary goal and the mountains as secondary (section2), and ends with a physical entrance to the gate. In the three phases the leading function of the street interrelates with the invitational qualities set by the gate. In that sense, the gate can be considered as both, a landmark at the end of the

street, and as physical entrance for the ritual domain of the shrine. Accordingly, the visual and spatial structure of Shijo street can be regarded as an approach space in urban level.<sup>10</sup> (Fig. 7e). In addition, the approach can be considered as multi-directional, as the street leads eastward to the shrine and landscape, on the same time-space as the shrine and mountain 'invites' the street to its vicinity. (Fig. 7f)



Fig. 7f Shijo Street as an approach space

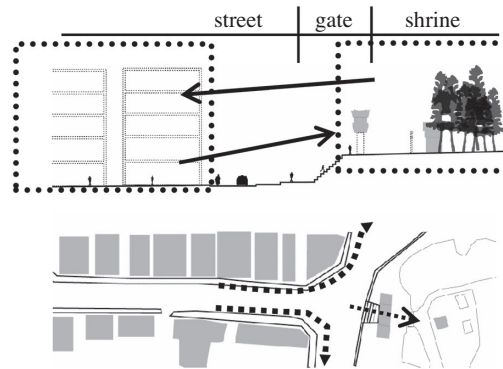


Fig. 7e Interaction of street and shrine



Fig. 7d The Entrance

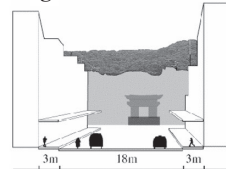


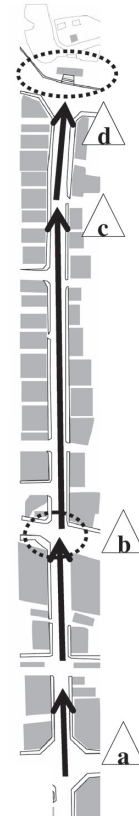
Fig.7c Approach space



Fig. 7b Panoramic view



Fig. 7a Street view





## (2) Yasaka shrine typology

In this section, Yasaka shrine compound is divided to three sub-spaces, the entrance area of the shrine (a), the pathway leading to the shrine (b), and the central area of the shrine (c). (Fig. 8)

### a) The gate as landmark and transitional space

The entrance to the shrine is considered as a spatial unity of the pedestrian artery, the stairs leading to the gate and the gate itself with its massive platform. This spatial element is set as a transitional space between the secular space of the city to the sacred space of the shrine, between 'outside' to 'inside'. The gate functions as a break in the continuity of the street, yet, as a 'preparation' for the ritual experience in the shrine compound. The two storied vermillion gate (*Muromachi* style) is set as an architectonic monument by itself, yet, affords an intimate entrance to the shrine. (Fig. 8a)

### b) Alternating turn to the shrine

From the gate, an alternating turn (*sando*) leads to the main hall. Varied sanctuaries and tall trees define the spatial formation and of alternating qualities of the path. This transitional space can be regarded a space of 'hidden and seen' (*miegakure*), as the goal of the passage, the main compound of the shrine and the mountains are hidden from view. (Fig. 8b)

### c) Shrine compound: an 'open' ritual enclosure

The main compound of the shrine is an enclosed space of religious worship continual to the sequence of the passage. This 'ritual enclosure' can be regarded as a place of interaction, enclosed, yet, affords an opening to the next phase of the passage. (Fig. 8c)

### d) Summary: Shrine as part of the sequence

Yasaka shrine compound, including the entrance area, the pathway leading to the shrine, and the central area of the shrine, enables on the one hand a pause, a break in the continuity, yet, enables topographical and man-made directional opportunities to the next phase of the passage, Maruyama park. (Fig. 8d)

## (3) Maruyama Park

Maruyama park is a public park, designed in the 'modernization' period. The park is divided to three sub-spaces, the leading path (a), the plaza space (b), and the garden space (c). (Fig. 9)

### a) Leading path

The exit is marked by a *torii* gate, leads to Maruyama park. A narrow pathway leads to the main square of the park. The significance of the pathway is mostly regarding its linear qualities that 'prepare' for the spatial opening around the plaza. (Fig. 9a)

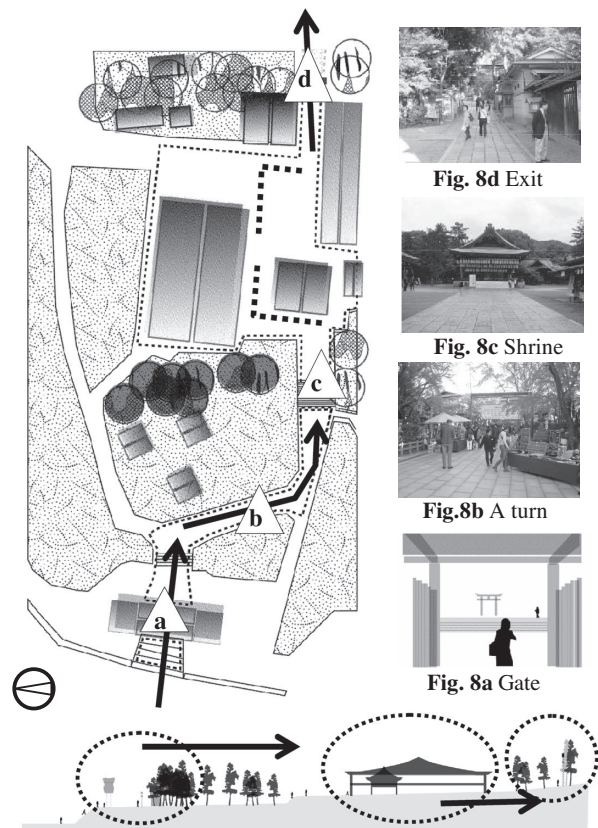


Fig. 8 Yasaka Shrine: Directionality

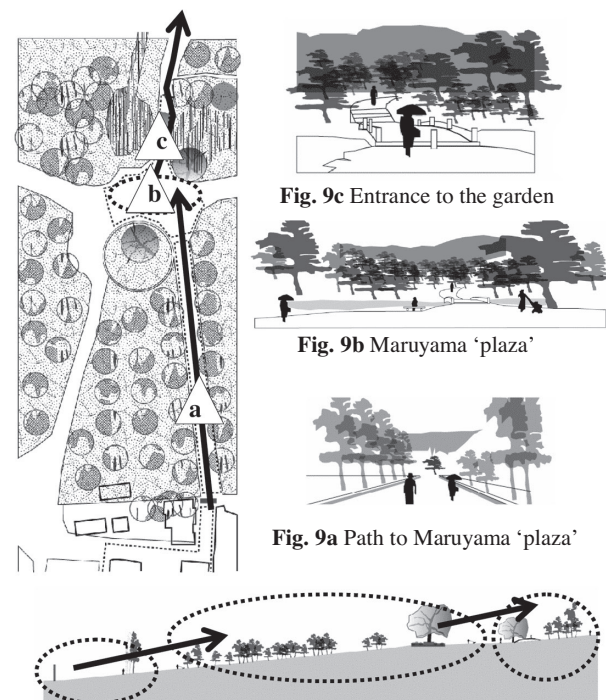


Fig. 9 Maruyama park: directionality

### b) Plaza space

The park plaza affords a distinct place for rest and observation. A place to sit and to contemplate in the panoramic scene revealed in the frontal view. In addition, the plaza is set as an entrance space to the garden. In that sense, the plaza is set as a transitional node from a space of rest to a space of movement, from panoramic landscape of view to participatory landscape of physical entrance. (Fig. 9b, 9c)

### c) Garden space

The garden, also designed in the 'modernization' period is divided to three spatial elements, the 'entrance' (a), the garden itself (b) and its eastern 'exit' (c). A meandering path leads to a small arched bridge, and further to the garden. The condensed vegetation along the path supplements to the spatial and intimate quality of the pathway (Fig. 10a). The path further directs to the main part of the garden, dominated by a moderate slope (Fig. 10b). From the garden, the view to the western mountains is obstructed, as steep stairs lead further up, to the exit of the garden (Fig. 10c).

### (4) Forest space

The proceeding forest in not directly continuous with the examined spatial progression, yet, 'invites' the observer to a further stroll up to the mountain's top. This passage is also distinguished for three sub-spaces, the forest 'entrance', the forest pathway, and the forest 'exit'. The forest 'entrance' is seen from close range. The narrow 'floor' of the path, defines its function, as an intimate path for one person. The forest pathway meanders in a steep elevation (Fig. 11a), as the forest 'ends' with a garden and observation spot at shogun-zuka (Fig. 11b)

## 5. RESULTS

### (1) Continuity between places and spaces

As described, each examined space prepares and leads to the proceeding space. The street leads to the shrine, which directs to the park, which directs to the garden, which directs outside to the vicinity to the forest. In that sense, the progression is continuous, 'cutting' through the various places and domains, emphasizes the pathway as a connective element.

### (2) Directional elements along the approach

Along the approach, three spatial elements were observed as primal transitional nodes which lead or invite to the next proceeding place, that of the main

entrance gate of Yasaka shrine, the eastern exit gate of the shrine and park square in Maruyama Park.

### (3) Spaces of rest and view

It was observed that there is a correlation between the places of rest, and the view afforded from those places. Those places, are set as observation nodes, enable increased level of awareness. The dominant viewpoints are the open spaces (nodes) of observation, Shijo bridge, and park's plaza, affording in addition to orientation a possibility to 'enter' the observed scene.



Fig. 10 Maruyama garden: directionality



Fig. 10c Exit from garden

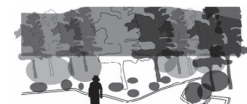


Fig. 10b Meandering path



Fig. 10a Entry Path

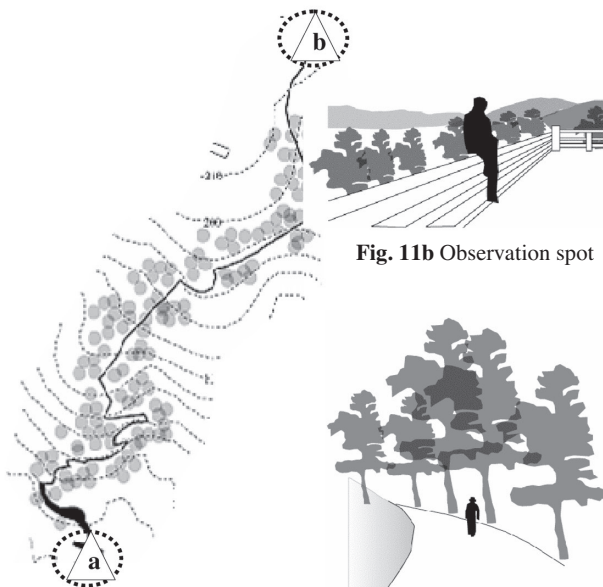


Fig. 11b Observation spot

Fig.11 Forest pathway

Fig.11a Forest pathway

#### **(4) Compositional type: Yasaka Shrine and Maruyama park ('organic type')**

The approach can be further abstracted to an 'organic' type. The directionality of the street, its width and enclosure, in addition to the moderate slope, and the focal objects in front compose an organic unity, as all the components fit and support each other in a total composition of man-made and natural elements.

#### **(5) Continuity of man-made and natural spaces in various scales**

The continuity between the spaces along the approach occurred in three different scales, local, urban and abstract. In the local scale, the shrine leads to the park, which leads to the garden. In the urban scale, the street leads to the shrine, which further leads to the forest. In a rather abstracted scale, it is assumed that the leading attributes direct continuity from city to the vicinity of nature.

#### **(6) Dynamic unity of perceiver and perceived**

Barleant wrote about the mutual influence of person and environment. The approach from Shijo street to Yasaka shrine and Maruyama park is a unique example for this thesis. It has been observed that the street directs to the shrine, yet, simultaneously 'being directed' by the Shrine itself.

## **6. CONCLUSIONS**

The approach from Shijo street to Yasaka shrine and Maruyama park is composed of places and spaces constructed in different historical periods with various social and political contexts. The perceptual and existential experience of this approach composes a unity of place and space, of

domains, boundaries, and goals to a continuous whole. This perceptual continuity has also existential meaning, as a symbolic passage from city to nature. The examined relations of person-landscape set in this case study are specific to Kyoto, yet, compose universal and existential characteristics, and can be applied for a better understanding of perceptual and existential interaction of person and landscape.

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