

Study on the Relationship between the Characteristic and the Sequence Elements on the street

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In recent years, Japanese urban design has been demanded quality. Not only the convenience of transport but also the improvement of living environment is required. Japanese government has constituted the landscape laws in fifteen years. The roles of street are as connecting places in the city and other cities each other, and as public space. Various activities are carried out in a narrow linear space between buildings. The purpose of the research is to propose a sequence design on the street where we feel in walking. The streets in sightseeing places make people as to go to enter and to have interest. The aim of this study is to clarify the characteristic of the streets. In this research, we analyze the relationship between attraction and the special elements on street characteristics. It will describe to quantify the sightseeing potential.

This research attempted to explore the street characteristics according to two main phases:

The first phase consists psychological analysis of sightseeing street. It covered: (A) questionnaire survey using SD method. (B) cognitive appraisal using factor analysis. (C) psychological analysis of the whole route using GIS. In the second phase, how the street scenery can influence pleasure to pedestrians was explored. This phase covered: (D) relationship analysis of first-stage analysis results and color analysis by image analysis. (E) color analysis and paired comparison method analysis were performed.

Shinbashi street in Kyoto which passes between a modern district and a traditional district. The street passes through the conservation area Gion Shimbashi. There is a section where old wooden buildings are aligned. Outside the Gion Shimbashi area, modern buildings are scattered.

The dataset used in this research was composed of 72 streetscape images that Shot at Shinbashi street. The 140 students from Osaka Institute of Technology were asked to evaluate of each streetscape image. Each participant was asked: (1) 17 pairs of adjectives on the basis of a five-point scale, (2)changing paints and elements in each landscape.

By the factor analysis, the scores were calculated at each spot. The final cumulative contribution rate of the obtained factor axis was 72.8%. Factor analysis gave three factor axes. The factor scores of each point were entered into GIS and displayed on the color scale. As a result, the factor axis suggesting enjoyment showed high values at places where other factor axes changed.

As a result of the color analysis of the image of the street, in the place where fun is felt, there was a distinctive color different from the surrounding color in the scenery. The colors of the streets where traditional buildings are aligned are unified. The streets where traditional buildings are aligned make people that not the "fun".

We investigated the influence the streets of other sightseeing spots have on people. Two images were randomly selected from among the sample images of 14 kinds of tourist spots and one kind of images in which the color was changed. By the color analysis of each image, the subjects felt that they wanted to proceed to a street having a more distinctive color than a street with a uniform color.

In this research, it becomes clear that the colors people feel the "fun" and the "to want to go" as streets. Furthermore, the possibility that the change in color improves the charm of the street was also obtained.

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