公共空間における空間形状と行動の関係
Relationship between the Elements of spatial shape and Movement in public space

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The purpose of this research is to design pavement taking pedestrians into consideration, especially the elderly, which is the fastest growing age group. In recent years, the awareness of street landscape has increased, and the development of roads taking pedestrians into consideration has become more common. It is considered that the walking path of people is changing due to the design of sidewalks and the walking environment. By analyzing the elements of the spatial shape, The authors believe that authors can utilize this for urban planning, by clarifying the route according to individual’ s age. In previous studies, walkability tests and analysis were performed for each type of pavement. There are few studies on public spaces. If it is possible to grasp the respective walking route by attributes such as age group, then this can lead to improve functional design universally.
Designers are trying to create space that various people can use easily. However, there are actually various aspects to consider for design.

In this research, the authors focus on human behavior and space shape for busy places that many people use, and to understand human behavior and grasp the influence of space shape by classifying attributes such as age and sex. Therefore, from the point-of-view it becomes possible to visualize, by discovering the influence range and influence of people and space shapes. It would be one of the effective means for making new town planning.

The authors find the relationship between the characteristics of space shape and pedestrian features, grasp the relationship with the place of each action and the shape of the surrounding space. It is ultimately best to propose a design taking into consideration human behavior.
In this research, the authors will quantitatively find the influence of invisible design, utilizing physical and pedestrian behavior data obtained from a field survey.
Ultimately, the authors will refine it to detailed analysis that finds how space design affects pedestrian influence, while acquiring a large amount of pedestrian behavior data. In order to grasp and express the influence of the spatial shape and the influence range. The authors extract external factors that are appear to be affecting people. Furthermore, the authors will calculate specific figures and analyze them, Analysis is made on the relationship between the elements of the spatial shape extracted by the survey and human attributes.

For the target area, the authors wanted to use a space that had various features common in public places such as; pillars, walls, stairs, monuments etc.
In this research, the authors will cover a space used mainly by pedestrians. A preliminary survey was conducted in the open space around Osaka station, and a place considered to be similar was set as the target site.
According to the previous analysis, it is assumed that when a small group of people are standing together

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they can feel "relief" similar to standing near a wall.
Therefore, when two or more people were stationary, the authors analyzed them with the same layer as a wall. As a result, it was possible to obtain a graph showing the same tendency as in the case of standing alone by one person. From these results, it was possible for residents to feel that they feel "secure" where they are unconsciously standing.

In this research, the authors focused attention on pedestrians in public spaces in the city and observed and analyzed them.
In the analysis, the authors clarified the tendency of the number of people in stationary positions and found the selection by conditioning of being stationary. The floor surface may have a psychological influence on route selection at the time of walking and selection of stationary position. When creating space for pedestrians, it is necessary to consider the characteristics of the floor surface for designing.

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