# Research on the Method to Create a Public Space that Revitalizes Urban Public Life Period of research: FY 2014–2017

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### 1. Introduction

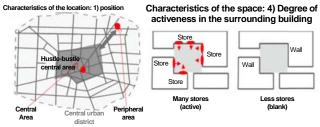
NILIM carries out research designed to improve the quality of urban public spaces to promote the use of such places as the core of further interactions and revitalization among people.

The characteristics of a public space and how it is used depend on not only the internal spatial configuration but also the characteristics of the space, such as its location and surrounding environment (Figure 1). In order to evaluate the quality of the space and the ripple effect on the surrounding areas and devise an effective method of forming that space, we researched several public spaces. By changing the layout of a typical public space, we observed user behavior and analyzed the relationship between the spatial configuration and user behavior.

Figure 1: Relationship between the Characteristics of the Location/Space and a Public Space

### 2. Outline of the Experiment and Observation

First experiment: 6 hours x 5 weekdays at Toyama Grand Plaza (semi-outdoor). Five different arrangements



are tried (one arrangement per day) (Figure 2): (1) Trace (walking), (2) static log (retention), and (3) gate count (traffic of pedestrian at an entrance/exit) are observed and recorded.

Second experiment: 6 hours x 2 weekdays/holidays at Poppo Plaza (outdoor) in Machida City. The same observation as the first experiment was conducted in the space, and the visitors dropping in on other nearby stores were tracked and recorded.

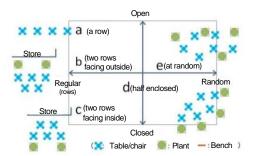


Figure 2: Arrangements for the First Experiment/Observation

# 3. Result of Analysis

1) Visitors stayed more often in a layout surrounded by plants and restaurants. 2) Fewer visitors walked through the space where they felt they were surrounded. 3) Visitors stayed in the space near the entrance more often but for a shorter time. They stayed longer in a more distant space (Figure 3). Thus, it was revealed that the space configuration and surrounding environment had a significant influence on how the space was used. It was observed that the behavioral pattern of visitors in the surrounding areas depended on their attributes. The relationship between the characteristics of the space and the ripple effect was also suggested.

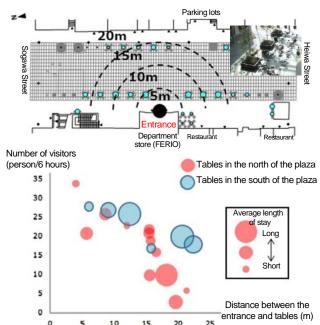


Figure 3: Difference in the Behavior by the Distance between the Entrance and the Table

## 4. Future Development

We continue to develop tools for evaluating the quality of public spaces through observational analysis of the relationship between the spatial configuration of the public space and people's behavior, as well as measures to build a public space in an appropriate position of a city center that satisfies the requirements for a high-quality public space.

1) "Analysis of the Pedestrians' Behavior in terms of Space Configuration of a Plaza in a City -- For the Evaluation of the Quality of the Space of a Plaza," the 28th Technology and Research Presentation Meeting by the Urban Infrastructure & Technology Promotion Council. Vol. 28, UIT, November 2016