Chapter 12
An Evaluation of Measuring the Publicness Level of Interiors in Public Building Design:
Visual Graph Analysis (VGA) Approach

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ABSTRACT

This study examines the publicness level of the interior spaces of public buildings. As a method, VGA (visual graph analysis) is used for analyzing the early design phases of selected municipal service buildings. In this study, the authors utilized from VGA for quantifying the publicness level of the two selected architectural competitions of municipality buildings. The method allows us analyzing the floor plans of each project in obtaining an eventual assessment of permeability and accessibility which give an idea of the levels of publicness comparatively. Subsequently, representation parameters are compared under two main criteria: connectivity and integration. The aim of the study is to understand the level of publicness and efficiency of spatial settings for the users circulating in the public buildings, which have dissimilar plan schemes. This method would be used by the designers for early design stage and provide useful feedback for understanding the level of accessibility and permeability of the structures and adjust their schemes accordingly.

1. INTRODUCTION AND MOTIVATION

Municipal service buildings, which reflect public structure, identity and the society's periodic ideological stance, represent an important type in these public administration structures. Therefore, public administration buildings and within these, municipal service buildings, assume an important role of visual mediation between the public and the administration. Functional and formal maturity is simply not sufficient by itself for a representative aura of municipal service buildings. This is why municipal service building designs represent an important type in terms of examining the concept of publicness and publicness value. Additionally, public buildings are defined as a public domain, where everybody can use the space in an equal way, and which does not belong to a particular person, affinity group or foundation. In this context, public usage becomes crucial.

In the late 20th century, public realm discussions increased in the global architectural agenda after Hannah Arendt, Jürgen Habermas and Richard Sennett published their explorations on public space. In 1984, in Turkey, after the drastic social and political changes of 1980, one of the most significant liberal changes introduced was the sovereignty of local municipalities in the development of a master plan, instead of a central government and The Ministry of Public Works. The aim of this this study is to determine the changes in the design of public space use of service buildings. In order to do that, this research focuses on analyzing selected architectural competitions of municipality service buildings from 1984 to 2013. This study focus on the selected architectural competitions of municipality buildings for design experimentation and simulation that can be used at an early design stage. In pursuing this specific goal, the following questions constitute the core of this study:

- How can we interpret the publicness level in the spatial layout of municipality service building design of architectural competitions?
- How does the publicness in the spatial layout of the architectural design competition projects differentiate?
- How can we understand the forms of publicness through examining the physical structure of architectural designs?
- Can Visibility Graph Analysis (VGA) method be used as a quantitative tool to determine the differences in the publicness levels of the projects in terms of permeability and integration?

This study's content is based on selected municipality buildings with criteria to determine the publicness level through permeability. The criteria are consisted of being chosen from the national competitions, which concern the architectural programs of municipality service buildings. The selected projects were picked on the basis of the precondition that they are smaller than 20.000 m^2 and they do not serve for any other public utilities and neither contain any function that belongs to the buildings of other types. This filtration process provided a shortlist of two selected projects.

In this study, however, only plan schemes have been used, because this study does not only analyze public measures according to real structures and spaces, but also examines from the perspectives of the designers and their design reports. These levels of publicness belong to closed spaces of the selected municipality service building projects. The study focuses exclusively on the publicness levels of closed spaces, as opposed to open public spaces. In this regard, it provides a new frame of measuring levels of publicness for these locations, which can be measured by integration and connectivity measures of visibility graph analysis.

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