

Semantic Differential Technique as a Kansei Engineering Tool to Enquire Public Space Design Requirements: The Case of Parks in Tehran

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Abstract : The complexity of public space design makes it difficult for designers to simultaneously consider all issues for thorough decision-making. Among public spaces, the public space around people's house is the most prominent space that affects and impacts people's daily life. Considering recreational public spaces in cities, their main purpose would be to design for experiences that enable a deep feeling of peace and a moment of being away from the hectic daily life. Respecting human emotions and restoring natural environments, although difficult and to some extent out of reach, are key issues for designing such spaces. In this paper we propose to analyse the structure of recreational public spaces and the related emotional impressions. Furthermore, we suggest investigating how these structures influence people's choice for public spaces by using differential semantics. According to Kansei methodology, in order to evaluate a situation appropriately, the assessment variables must be adapted to the user's mental scheme. This means that the first step would have to be the identification of a space's conceptual scheme. In our case study, 32 Kansei words and 4 different locations, each with a different sensual experience, were selected. The 4 locations were all parks in the city of Tehran (Iran), each with a unique structure and artifacts such as a fountain, lighting, sculptures, and music. It should be noted that each of these parks has different combination and structure of environmental and artificial elements like: fountain, lightning, sculpture, music (sound) and so forth. The first one was park No.1, a park with natural environment, the selected space was a fountain with motion light and sculpture. The second park was park No.2, in which there are different styles of park construction: ways from different countries, the selected space was traditional Iranian architecture with a fountain and trees. The third one was park No.3, the park with modern environment and spaces, and included a fountain that moved according to music and lighting. The fourth park was park No.4, the park with combination of four elements: water, fire, earth, wind, the selected space was fountains squirting water from the ground up. 80 participant (55 males and 25 females) aged from 20-60 years participated in this experiment. Each person filled the questionnaire in the park he/she was in. Five-point semantic differential scale was considered to determine the relation between space details and adjectives (kansei words). Received data were analyzed by multivariate statistical technique (factor analysis using SPSS statics). Finally the results of this analysis are criteria as inspiration which can be used in future space designing for creating pleasant feeling in users.

Keywords : environmental design, differential semantics, Kansei engineering, subjective preferences, space

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