



Investigation of the Landscape Design of 80 Binde Devr-i Alem Park Using the Eye-Tracking Technique

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Abstract

Landscape design is a combination of natural and cultural components that directly affect people's spatial perception and aesthetic experiences. The eye-tracking technique, on the other hand, is an innovative method that reveals perception toward the urban and visual environment with qualitative and quantitative data by tracking pupil movements. The purpose of this study is to investigate the landscape design of Konya 80 Binde Devr-i Alem Park through user perception via the eye-tracking technique. Within the scope of the research, landscape images obtained from the site were shown to 30 volunteer participants. In the study, areas of interest (AOIs) were defined in three main categories as vegetative elements, structural elements, and water elements. Based on these defined areas of interest, heat maps, along with total fixation duration and fixation count metrics, were obtained. The quantitative data obtained from eye-tracking metrics were analyzed using the Repeated Measures ANOVA test. The analysis results revealed that there were statistically significant differences between landscape elements (vegetative, structural, water) in terms of both eye-tracking metrics ($p < 0.05$). It was determined that the participants fixated more frequently and for a longer duration on the vegetative elements located within the park compared to structural and water elements. The findings obtained provide important data for designers in terms of the management of visual focal points and the balanced distribution of landscape components in thematic park designs.

Keywords: 80 Binde Devr-i Alem Park, visual perception, landscape design, eye-tracking technique, Konya

