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Analysis of urban skyline status using SVF index calculation (The Case study: Valiasr and Rushdieh towns in Tabriz)

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Abstract

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The values of urban appearance street space are different from the values of other physical elements of the city. The street space has linear content and transit function to introduce its appearance in special circumstances. In other words, the main part of the street space is only visible from an angle. Is in a state of motion that is, a dynamic, and the physical elements of the wall are regularly combined with the skyline, various sequences are. But at the intersections, the pause of the observer and the different spatial conditions cause the content of the values of the urban landscape to change. According to the above, the main elements of the body of the street are the skyline and the wall, among which the skyline is more important. The boundary skyline means the separation of the upper wall and the sky from the observer's point of view. The purpose of this study is to evaluate and quantify the skyline using the SVF index and with the help of google sketch up pro software. This quantitative assessment can guide urban planning and designer in the policies of urban geometric and development plans. For this purpose, the necessary data for the study area are collected and the operational process of research in Four steps: Create longitudinal cross-sections of selected streets in the area, 3D simulation in google sketch up the environment, determine observer points, and finally the sky access index was calculated and reporting was done. The results of the research show that Roshdieh town with an average skyline index of 43/32 has a regular skyline and Valiasr town with an average index of 40/55 has an irregular skyline. Therefore, the analysis of the obtained results and the test of the research hypothesis show that in the studied areas, there are significant differences between Valiasr town as an old and relatively planned area with Roshdieh town as a new and constructed and fully planned area.

Keywords: Urban skyline, SVF index, Urban Planning, SVF, Tabriz.

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