

Streetscape Simulation Framework for Aesthetic Assessment of Visual Change in the Urban Environment

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Abstract

Coping with change is essential for a successful urban environment whether in the context of his-torical preservation, regeneration or sustainable development. Effective management of changes to existing built environments allows opportunity for positive enhancement to generate viable development strategies in response to both the existing building assets and the need of urban growth. In order to effectively manage changes, it is necessary to determine and evaluate the impact of changes to ensure positive enhancement and added value to the existing environments and society. This paper presents an urban streetscape simulation framework which allows different aspects of urban changes to an existing built environment to be visually il-lustrated and assembled using Adobe Photoshop and photomontage technique. Visual simulations (streetscape collages) generated from the framework were incorporated effectively with different public responsive tools, such as preference scale or semantic differential scale to construct qualitative surveys to ascertain public opinions regarding proposals for various future changes to the existing urban environment.

Keyword : aesthetic impact / public appreciation / urban change /
photomontage / visual simulation