

Promising methods and techniques: An evaluation of three quantitative methods

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Introduction

In environmental psychology and landscape architecture there is a tradition of studying peoples preferences for landscapes/environments. However, the methodological approaches in the two disciplines often differ. In landscape architecture research there is a tradition of using qualitative methods such as case studies, interviews or participatory planning. The detailed information about the environment gained from such studies is directly transferable to the case under study, but results are usually not generalizable to other projects. In environmental psychology quantitative methods are more common. In these kinds of studies the aim is usually to explore what type of environments that are preferred rather than detailed information about the content or quality of the environment. Quantitative studies are based on large sample of subjects or stimuli and results are therefore generalizable. However, due to the broad environmental categories and lack of detailed information about the environments under study, these type of studies give little guidance to professionals in landscape architecture or planning. This article presents and evaluates three relatively unused methods in landscape architecture research, hence, it sets out to contribute to the methodological discussion and development. The paper is based on three separate data collections in which the general aim was to evaluate the environmental components of importance for restoration likelihood. Results from the separate studies are presented in published papers (Nordh et al. 2009, Nordh et al. 2010, Nordh et al. 2011). In this paper the aim is to discuss the respective strengths and limitations with the different methods based on experiences from the three studies.

Methods

The methods under study are; ratings of environments based on quantified photos, eye tracking and choice based conjoint. Ratings of environments based on quantified photos allow regression analysis in which one can assess the environmental components that individually predict the outcome (in my case restoration likelihood). Eye tracking presents what environmental components people look at when assessing the environment, it gives a direct link between the participants and the stimuli. Conjoint analysis presents those components and levels of components that are most important to people in a choice situation. The method is based on text instead of visual stimuli.

Results/discussion

Results from the methodological assessment in this paper demonstrate that quantitative methods contribute with valuable information to both researchers and professionals in landscape architecture. The methods under study in this paper have been used to assess restorative qualities of small urban parks, however, the methods have great potential in other studies assessing people's environmental preferences in relation to different outcomes. The three methods respective strengths and limitations, as well as transferability to practice, will be presented at the conference.

References

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