

ABSTRACT

In the field of architectural graphic expression, virtual reality is currently an essential tool for communicating architectural projects. Renders or digital perspectives are the most commonly used channels for expressing virtual reality in competitions, publications and media for disseminating architecture. In these formats, rendered images allow expert and non expert observers to quickly understand the proposal.

Rapid progress in digital modelling computer software has enabled architects to produce sophisticated images as a valuable tool for seducing observers. The emotional impressions these images evoke in observers generate a more or less favourable opinion on the space they represent.

This research work attempts to discover the emotional factors behind the process of evaluating a project through digital images; the emotions these images awaken and how they influence the global evaluation of the architectural proposal.

Analysis of this emotional structure in the observer requires techniques that can measure observers' perceptions and the appropriate expressions for communicating those perceptions. For the experimental work, a methodology for analysing perceptions has been chosen which, due to its extensive use in new product design and development, is considered one of the most valid: Kansei Engineering. In addition to measuring the subjective response, the intuitive response has been measured objectively with eye-tracing. This technology has been used to analyse eye-movement behaviour during observation of a render at the moment when the project is being evaluated.

The originality of this research work consists in applying this methodology to the field of digital images, using an architectural competition jury as the evaluation context. The conclusions of this study provide an understanding of how different image design parameters affect the observer's emotional response and how that response differs between architects and non architects.