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QUALITATIVE ANALYSIS OF DIGITAL FABRICS PERCEPTION IN VARIOUS SCENARIOS OF REPRESENTATION

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Abstract

Aiming to obtain the most accurate result possible in the context of perceiving the appearance of a material translated into a digital image, it must be noted that this process is considered a multivariate one, requiring the evaluation of multiple probabilities. To establish and comprehend the evolution of the perceptual interpretation of textile materials' appearance in digital images, an analysis technique that involved direct interviews with subjects was employed. The interview experiment consisted of a set of visual tasks, using four evaluation probabilities (scenarios representing the protective textile material) asking the observers to answer a set of questions related to the visual tasks transposed on the screen, including in the latest stage the physical samples of the textile materials were also presented to confirm or disagree with the initial hypotheses analyzed from the perceptual point of view at the digital level. In order to gather concrete observations through data collection we have been using open discussions with observers. In this paper, a qualitative model of six protective material representation in digital format has been developed, such as the material compensation method which involves analysis of information and technical factors of representation, then as a last step compared with the appearance of the actual material. Following the data collection, a set of research conclusions describing the perception of the protective materials in digital format was derived.

Key words: digitization, protective textile materials, rendering, subjective perception

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