Affective Non-Photorealistic Rendering

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Different rendering styles can affect viewers in different ways. The field of affective non-

photorealistic rendering seeks to better understand what effects are produced by what

styles. There is great potential to use that knowledge to improve the efficacy of virtual

reality exposure therapy, a type of therapy used to treat anxiety, phobias and PTSD. This

dissertation describes an investigation to find the impact of three aspects of rendering style

on emotional response. The three style aspects chosen were colour saturation, outline

style, and brightness quantisation; they were chosen for their potential to create positive

and calm feelings in the viewer. In the experiment which was carried out, the emotional

response of participants was measured in terms of valence and activation. Each of the three

style aspects were found to have an effect on valence, indicating that they an influence

how positive people feel in response to images.

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