

An ecological valence theory of human color preference

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Abstract

Color preference is an important aspect of visual experience, but little is known about why people in general like some colors more than others. Previous research suggested explanations based on biological adaptations [Hurlbert AC, Ling YL (2007) *Curr Biol* 17:623–625] and color-emotions [Ou L-C, Luo MR, Woodcock A, Wright A (2004) *Color Res Appl* 29:381–389]. In this article we articulate an ecological valence theory in which color preferences arise from people's average affective responses to color-associated objects. An empirical test provides strong support for this theory: People like colors strongly associated with objects they like (e.g., blues with clear skies and clean water) and dislike colors strongly associated with objects they dislike (e.g., browns with feces and rotten food). Relative to alternative theories, the ecological valence theory both fits the data better (even with fewer free parameters) and provides a more plausible, comprehensive causal explanation of color preferences.