

Automatic Appreciation of Aesthetics in Photography: Where are we going?

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Under the impulse of machine learning techniques, digital aesthetics assessment received a renewed interest in recent years. In the last 3 years, deep neural networks outclassed hand-crafted feature methods based on image processing and classification. Since then, a handful of studies claim their capacity to separate nice images from the run of the mill production and exhibit scores of almost 80 % agreement with human experts. But what do these methods measure? Implicitly they are based on the "objectivist" tradition of aesthetics dating back to the Greek philosophers, and highly influential on the artistic field up to the 18th century. However, the "subjectivist" point of view, as pioneered by Locke and Burke gained in popularity in the 19th and 20th centuries. Rested on the psychoanalytic school, then by experimental psychology and social studies, and at last in recent days by neuro-biology (and the so called "neuro-aesthetic" trend), the "subjectivist" school gained in support in the scientific community, ... but not in the image-processing and artificial intelligence body! We will show how the history of "scientific beauty evaluation" since the early works of C. Henry (1885) and G. Birkhoff (1933) until DNN is indeed following an identical slope where only few attention is paid to the viewer when most of the literature on aesthetics tells us that other tracks may be more valuable.