

Creating a Framework for Holistic Assessment of Aesthetics: A Response to Nilsson and Axelsson (2015) on Attributes of Aesthetic Quality of Textile Quality¹

Perceptual and Motor Skills

2016, Vol. 122(1) 96–100

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DOI: 10.1177/0031512516628366

pms.sagepub.com



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Abstract

Nilsson and Axelsson (2015) made an important contribution by linking recent scientific approaches from the field of empirical aesthetics with everyday demands of museum conservators of deciding which items to be preserved or not. The authors made an important effort in identifying the valuable candidates of variables — but focused on visual properties only and on quite high-expertise aspects of aesthetic quality based on very sophisticated evaluations. The present article responds to the target paper by developing the outline of a more holistic approach for future research as a kind of framework that should assist a multi-modal approach, mainly including tactile sense.

Keywords

aesthetics, holistic processing, multi-sensory

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Introduction

Nilsson and Axelsson (2015) made an important contribution by linking recent scientific approaches from the field of empirical aesthetics with everyday demands of museum conservators to decide which items to be preserved or not. It is a major challenge to assess aesthetic dimensions on a scientific level, as objective measurement is hardly achievable. The authors made a great effort to identify valuable candidates for possible variables, specifically for museum conservators on textiles, for instance execution, integration, and adaptation of conservatory work and visibility of the restoration. Importantly, these criteria are psychological ones, not, as typically used, physical ones. In a series of previously employed empirical approaches, the authors have identified a series of relevant aesthetic dimensions (e.g., for photographs see Axelsson, 2011; e.g., for costumes see Nilsson, 2005)—for instance, Axelsson (2011) revealed that *familiarity*, *hedonic tone*, *expressiveness*, and *uncertainty*, with a higher-order latent factor called *information load*, underlies aesthetic appreciation. Nilsson and Axelsson searched for predictors of aesthetic quality — specifically of historic textile fabrics after a conservation intervention (e.g., by stitching support fabric on underneath the damage or partial loss of original material to prevent it from further deterioration). They found two major latent variables based on their used variables: *Coherence* and *Completeness*, with coherence being the most important latent predictor.

Nilsson and Axelsson (2015) provided a very good example of establishing a tight relationship between museum work and perceptual sciences. Nonetheless, the aesthetic perspective of an object, especially on textiles, should clearly be enriched by a multi-modal approach and by a wider range of participants' expertise levels. The authors based the assessments of conservatory experts only on photographic depictions of the fabrics. Although the authors went to great effort to present color-calibrated photographs at scale 1:1 in a large format, even for experts, a direct inspection of the original material would seem to be necessary—actually, any 2D depiction of 3D material will yield systematic perceptual distortions and resultant bias in evaluations. More than this, occasionally, even with museum items, experts have to rely on the richness and breadth of all their available senses— for instance, in the case of textile items, conservators must rely on vision *and* haptics! A related issue is the simulation of the perceptual conditions of the past when the items were produced. Of course, we cannot fully recreate the original perceptual conditions of the past, but we can at least try to partially simulate such an inspection setting, e.g., by simulating the original light conditions. In our own research, we did find out, for instance, that certain colors such as gold induce fully different experiences, and even create different interpretations of the perceived entities, if inspected under modern artificial light conditions as compared with typical illumination used in older times such as that created by the formerly wide-spread used beeswax-candles (Carbon & Deininger, 2013). For historic materials in museums, assessments of aesthetic quality are affected by such factors.

The combination of the variation and simulation of certain contextual factors, employment of a variety of experts from different professional disciplines and the integration of different modalities seems to be a prerequisite for retrieving a more complete view on aesthetics—a more “holistic” view on aesthetics. Moreover, we can understand aesthetic processing more holistically by viewing it as a microgenetic process (see Bachmann, 2000). In this respect, the functional model for haptic aesthetic processing (Carbon & Jakesch, 2013) is a valuable framework to systematically investigate and understand such a microgenetic process. This model proposes a continuous increase of elaborative processing through three subsequent processing stages (Figure 1).

Starting with low-level perceptual analyses (termed *exploration*) the model encompasses initial, non-specific explorations of the stimulus item, mainly the local properties of the materials are addressed. In a further and refining processing step of mid-level analyses (termed *assessment*), these local properties are integrated into more global aspects, by checking variables such as *coherence* – a variable which was also identified to be essential for aesthetic quality by Nilsson and Axelsson (2015). In a final step, high-level perceptual analyses (termed *evaluation*) are processed—now the entire process enters on deeper cognitive and emotional evaluations involving individual knowledge of related items. As the model also provides feedback loops besides the otherwise strict feed-forward logic of processing from low to high-level analyses, further refinement of the process is possible. These feedback loops allow specific knowledge on the context of the item, expectation for specific local aspects of the item, integration of coherence aspects of the item, and semantic knowledge of related items

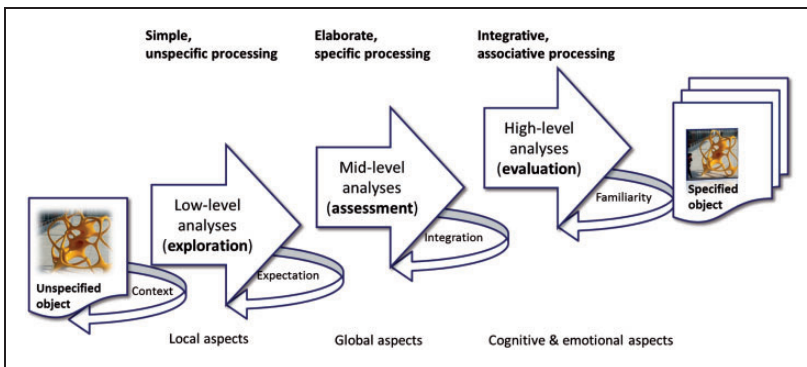


Figure 1. Delineated depiction of the functional model for haptic aesthetic processing illustrating the three main processing stages sequentially following each other (straight thick arrows); additionally feedback loops are indicated by curved arrows allowing the correction and fine-tuning of the respective ongoing main process. The graph is adapted from the original model developed by Carbon and Jakesch (2013).

(e.g., specific knowledge on historic material or on the employed manufacturing processes) to assist optimization of the final aesthetic evaluation of the item. I hope that such a functional model can create a framework for the systematic and holistic aesthetic assessment of objects, particularly of museum items asking for scientific analysis.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Note

1. The author would like to thank the editors of *Perceptual and Motor Skills* for the invitation to prepare this reply.

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Claus-Christian Carbon studied Psychology (Dipl.-Psych.), followed by Philosophy (M.A.), both at University of Trier, Germany. After receiving his PhD from the Freie Universität Berlin and his “Habilitation” at the University of Vienna, Austria, he worked at the University of Technology Delft,

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