Emotional Anthropomorphism: What Kind of Face Sits Well on a Car's Frontal Appearance?

Jan R. Landwehr, University of St. Gallen, Switzerland
Bernd Weber, University of Bonn, Germany
Andreas Herrmann, University of St. Gallen, Switzerland

The present research is aimed at providing insights into the complex nature of product anthropomorphism with respect to gender and emotional expressions of employed faces and shows on the basis of a fMRI study that cars resemble female faces and are best liked when they simultaneously look aggressive and friendly.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/16327/volumes/v38/NA-38

[copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/
Emotional Anthropomorphism: What Kind of Face Sits Well on a Car’s Frontal Appearance?
Jan R. Landwehr, University of St. Gallen, Switzerland
Bernd Weber, University of Bonn, Germany
Andreas Hermann, University of St. Gallen, Switzerland

EXTENDED ABSTRACT
While there is an increasing body of research on the effects product design and its aesthetics unfold on consumers’ behavior (e.g., Bloch 1995; Chitturi et al. 2007, 2008) the specific aspect of anthropomorphism as a guideline for designers has only attracted scattered attention in the scientific study of product design (Aggarwal and McGill 2007). This is astonishing since it is well known that the human face posses an evolutionary highly relevant stimulus configuration that is processed faster and with more attention than most other stimuli in the environment (Mondloch et al. 1999). Both these characteristics constitute basic marketing aims (Pieters and Wedel 2004).

Although scientific insights into the specific mechanisms underlying anthropomorphism are only scattered, this concept seems nevertheless to enjoy at least in the domain of car design a high popularity among practitioners. In a detailed exploration of several car designs and based on interviews with car designers Welsh (2006) for example reaches the conclusion that in practice the analogy between human faces and car fronts is a widespread source for inspiration and used by almost all car makers as an orientation for their designs. While it is appealing to rely on this simplified heuristic and go ahead with designing anthropomorphized cars, it nevertheless leaves open some questions that are both from a theoretical as well as from a practical point of view critical. The present research is aimed at providing insights into detailed aspects of anthropomorphizing on a process level and employs the neuroscientific method of fMRI to shed light on the involved mental processes. Answers to three major questions regarding the specifics of anthropomorphism are intended to be answered by the present research endeavor.

First, whether the reference to human faces is suited to guide a company’s design strategy or whether it is just a scientific construct that is pulled on the shapes that actually unfolds its effect independently of any emotional interpretation. We found evidence in the neuronal activation pattern that the perception of car and human faces leads to a considerable correspondence in neuronal activity which suggests more of an effect for anthropomorphism than a simple descriptive metaphor that conveys placement and shape of the car’s features. Our findings suggest that people do indeed see cars as having facial expressions in a way that goes beyond simple descriptive metaphor.

Second, the question whether different kinds of faces (male vs. female) are equally suited to serve as an inspiration to design a product with the aim of increasing its liking. We found that liking of car faces and female faces can be traced back to similar patterns of activation in the reward circuit while male faces are (at least by male participants) judged on a different basis. In addition to the insight that there are many different kinds of faces and one is well advised to think about anthropomorphism in a more detailed way, this finding also offers some initial hints for the clarification of the underlying motives for a peoples’ preference for certain car designs. In particular, one can clarify whether people are searching for a design that allows them to express themselves in a desired way; thus, literally using the car front as a kind of mask for themselves or whether they simply strive for the most attractive or aesthetically appealing design, respectively. Because car fronts activate the reward circuit in a similar way as female faces do, it is unlikely that our exclusively male participants are willed to use a car as a way to express themselves. In contrast, as men like female faces better than male faces, are longer looking to them and appreciate them according to their attractiveness (Levy et al. 2008), the similarity in processing indicates that car fronts cause a feeling of reward directly due to attractiveness and not mediated by semantic associations.

Finally, the third question asks for the best liked combination of friendliness and aggressiveness in a car’s front. Our findings allow the recommendation to give the grille a friendly expression whereas the headlights should rather look aggressive. From a theoretical perspective it is very interesting to notice that this preference pattern was found both in the reward circuit as well as in the observed behavioral pattern. This points to the conclusion that this specific combination of emotions unfold a rather direct impact on preference without complex or sophisticated mental processes mediating this relationship. That is, people seem to have an initial preference for this combination of emotions rather than having to think intensively about the potential meaning of these emotions. Further research is however needed to clarify the exact nature of the underlying mental mechanism to better understand this result.

Cars do have a face—this is the answer to the central question posed at the outset of this research project. The remarkable similarity in processing human faces and car fronts indicates that the anecdotic evidence gathered by Welsh (2006) has a substantial basis and is suited to serve as a valuable source for inspiration when it comes to design a new car front. This result enables a more intense application of insights gathered in the domain of human facial attractiveness and, thus, to tap so far unused potentials. Especially proportions that constitute an attractive female face seem to be suited to optimize a car’s front to please the eyes of the beholder.