THE EFFECTS OF TYPICALITY AND NOVELTY ON AESTHETIC PREFERENCE: AN INVESTIGATION OF THE MAYA PRINCIPLE

Lina M. Ceballos, MBAa,b Nancy Hodges, PhD, and Kittichai Watchravesringkan, PhD

aThe University of North Carolina at Greensboro, USA; bUniversidad EAFIT, Colombia

When linking product design to marketing strategy and new product development, there are numerous design principles, consisting of laws, guidelines, and considerations, that can guide strategic decisions regarding product design (Lidwell, Holden, & Butler, 2010). One design principle that has received attention in studies on aesthetics is The Most Advanced Yet Acceptable (MAYA) principle. This principle has been posited as the logic that explains why humans prefer a balanced mix of typicality and novelty and tend to support this mix when it occurs within new products (Hekkert, Snelders, & van Wieringen, 2003). Both typicality and novelty (as aesthetic properties) are opposites on a continuum yet both are important for determining product design preference, and ultimately, product sales (Lidwell et al., 2010). However, limited research examines both typicality and novelty as they occur in apparel product design. To address this gap, the main objective of this study was to explore the MAYA principle specific to apparel products. By drawing from the preference-for-prototypes theory (Whitfield & Slatter, 1979) and the MAYA principle (Hekkert et al., 2003), the effects of specific aesthetic properties of apparel products on consumer responses are examined.

The preference-for-prototypes theory states that categorization and prototypicality (i.e., typicality) influence product choice (Whitfield & Slatter, 1979). Categorization involves the classification of stimuli as equivalent (i.e., similar) and among these stimuli, the best example of the category is called a “prototype.” Along with what is familiar, some consumers prefer the opposite (Hekkert et al., 2003). For example, children prefer what is novel and what is different as it helps them in the process of learning new things. Hence, the MAYA principle seeks to integrate the preference-for-prototypes with the need for novelty (Hekkert et al., 2003). Based on the literature, the theory of preference-for-prototypes (Whitfield & Slatter, 1979), and the MAYA principle (Hekkert et al., 2003), the following hypotheses were developed: (H1) Apparel products, such as (a) pants, (b) jackets, and (c) shirts, perceived as more typical will have a greater impact on consumers’ aesthetic preferences as compared to apparel products perceived as less typical; (H2) Apparel products, such as (a) pants, (b) jackets, and (c) shirts, perceived as more novel will have a greater impact on consumers’ aesthetic preferences as compared to apparel products perceived as less novel.

Following a similar research design used by Hekkert et al. (2003), an in-class experimental design was developed to test the hypotheses, with 21 stimuli in the form of photoshopped images of pants, shirts, and jackets selected through a series of preliminary studies. Existing scales were used (Hekkert et al., 2003) and after a pre-test of items and the selected stimuli, data for the main experiment were collected. Incomplete responses were removed, univariate normality was verified, and screening for significant outliers as well as manipulation checks of the experiment were performed. Usable responses were collected from 138 undergraduate students at a university in the southeastern US. The majority of the sample
was female (104; 75.4%) with a mean age of 21 years. After reliability tests were confirmed in the form of Intraclass Correlation Coefficients, correlation analyses were performed. Contrary to results indicated by Hekkert et al. (2003), the mean typicality and the mean novelty did not indicate negative correlations for any of the three apparel categories. As suggested by Hekkert et al. (2003), partial correlations were also calculated, as the logic of the MAYA principle states that both aesthetic properties (typicality and novelty) influence each other. However, it appears that neither typicality nor novelty functioned as suppressor variables.

Per Hekkert et al. (2003), multiple regressions were then conducted to test the MAYA principle. Both hypotheses were tested for (a) pants, (b) jackets, and (c) shirts. Independent variables of typicality and novelty were treated as continuous, as was the dependent variable of aesthetic preference. For H1a and H2a, the mean scores of pant pictures indicated that aesthetic preference was positively influenced by typicality ($\beta = .19, p < .05$), but not by novelty ($\beta = .12, p > .05$). Thus, H1a was supported and H2a was not supported. Similarly, for H1b and H2b, the mean scores of jacket pictures indicated that aesthetic preference was influenced by typicality ($\beta = .28, p < .01$), but not by novelty ($\beta = .13, p > .05$). Thus, H1b was supported and H2b was not supported. For H1c and H2c, the mean scores of shirt pictures indicated that aesthetic preference was influenced by typicality ($\beta = .26, p < .01$) and novelty ($\beta = .27, p < .05$). Thus, both H1c and H2c were supported. For all categories, the mean scores of pictures indicated that aesthetic preference was influenced by typicality ($\beta = .28, p < .01$) and novelty ($\beta = .17, p < .05$).

This study examined the MAYA principle relative to three types of apparel. That is, the relative importance of typicality and novelty in explaining aesthetic preference for pants, jackets and shirts was assessed. Findings indicate that typicality is the primary predictor of aesthetic preference in pants and jackets, while both typicality and novelty are significant predictors of aesthetic preference in shirts. Thus, it appears that the preference-for-prototypes theory holds for pants and jackets, while the MAYA principle better explains the relationships between typicality, novelty, and aesthetic preference for shirts. Conversely, results suggest that novelty is a property more influential in the preference of shirts than pants and jackets. This empirical study tested theory to further the overall understanding of a design principle relative to products that have yet to be examined. In addition to making contributions to theory, findings offer managers a better understanding of how product form influences consumer responses and particularly how the MAYA principle varies relative to different categories of apparel. Further research testing this principle with apparel product design and among different consumer groups is needed.

References