

Experiential Product Attributes and Preferences for New Products: The Role of Processing Fluency

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ABSTRACT

This study shows how experiential product attributes that are part of the design of new products can create compelling consumer experiences. Following processing-fluency theory, when consumers attend to experiential attributes (sensory or affective), they should process them fluently (i.e., spontaneously and with little effort); however, consumers should process functional attributes always deliberately, irrespective of whether or not they attend to them. An experiment testing the fluency hypothesis confirms that the processing of experiential attributes, but not functional attributes, depends on attention focus. When consumers focus their attention on specific experiential features, products with experiential attributes are evaluated more positively. In contrast, the processing of functional attributes does not depend on attention focus. Further confirming the fluency hypothesis, the experiment also shows that presentation duration does not affect the processing of experiential attributes but does affect the processing of functional attributes. The authors discuss how marketers can use experiential product design in market segmentation and innovation.

Keywords: consumer experiences; experiential marketing; new product design; experiential product attributes; processing fluency.

1. Introduction

Traditionally, marketing research has focused on functional product attributes that engage consumers in a deliberate reasoning process. Consumers use such functional attributes to justify their product judgments and choices (Shafir, Simonson & Tversky, 1993; Simonson; 1989). However, at comparable price points, products in many categories are functionally highly similar. Therefore, consumers may have difficulties differentiating products based on evaluations of functional attributes alone.

Thus, marketers have developed an alternative way of differentiating their products. They have started to create compelling experiences for consumers through design that emphasizes experiential, non-functional product characteristics (Brakus, Schmitt & Zarantonello, 2009).

2. Design and Experience

Some of the most intriguing and successful new products and brands of the past couple of decades have focused on providing compelling experiences to customers through design that includes experiential attributes. The New Beetle car brand, in its design and marketing communications, featured novel color schemes and shapes. Apple, early on, used a “smiley” face that appeared on the screen of the computer after powering up. In the late 1990s, the company began using translucent colors and “soft” shapes to differentiate its iMac computers and then the iPod and iPad. Also, on its web-sites, in its Apple Stores and in communications, the company has prominently displayed the color schemes and shapes of its products. Similar design approaches that emphasize colors, shapes or affective cues such as a “smiley,” on products, packaging, ads or web sites have been used in diverse industries, from consumer electronics, cars, and telecommunications

to consumer commodities such as salt and bottled water. Innovative functional design certainly may be a part of the success of some of these products, too. However, to explain their performance in the marketplace by focusing only on functional attributes would be misleading. At least part of their success seems to be due to the innovative usage of non-functional, experiential design attributes.

Consumer research has shown that aesthetically appealing product design leads to positive emotional reactions and has a positive effect on attitudes (Bloch, 1995; Page & Herr, 2002; Veryzer & Hutchinson, 1998). Also, product design influences how consumers categorize brands and products, and thus shapes consumers' beliefs about them (Berkowitz, 1987; Bloch, 1995; Kreuzbauer & Malter, 2005).

Why can experiential features have such far-reaching positive effects? This article aims to explain the positive results of experiential attributes based on how consumers are able to process them relative to functional attributes. Drawing on processing-fluency theory (Schwarz & Clore, 1996; Winkielman, Schwarz, Fazendeiro & Reber, 2003), the authors propose that under certain conditions consumers can process experiential attributes fluently, but they will not be able to process functional attributes in that way. Furthermore, when consumers process experiential attributes fluently, they evaluate the products with such features more positively than when they do not engage in fluent processing. Again, such effects will not occur for functional attributes.

Conceptually and empirically, this paper focuses on two types of experiential product attributes: sensory and affective. To be sure, other experiential attribute types and dimensions could exist; for example, Brakus et al. (2009) distinguish sensory, affective, intellectual and behavioral attributes. However, in the context of experiential product

design, sensory and affective attributes seem to be the most relevant.

3. What are Experiential Attributes?

While the term “experiential” may refer to any attribute that people experience, to make the concept more amenable to empirical testing in the context of experiential design, this research uses a narrower definition. Specifically, the term “experiential attributes” here refers to sensory and affective attributes presented in a nonverbal way. Various marketing communications frequently use such an approach, for example, by presenting a color or shape rather than naming that color; or by presenting an emoticon of a “smiley face” rather than the word “smile;” or by presenting imagery-invoking words (e.g., “Hello Sunshine,” as a VW Beetle ad has done) rather than purely descriptive words. Note that *experiential* attributes are not the same as *experience* attributes, a term that marketing scholars have used as well. In contrast to experiential attributes, experience attributes must be literally experienced (“tried out”), usually over an extended period of time, before consumers can judge them (e.g., handling of a car) (Nelson, 1974).

In sum, whereas functional attributes are utilitarian, experiential attributes are not. Whereas marketing research reports present functional attributes in a feature-based, informative verbal format (cf. *Consumer Reports*-style “alternative-by-attribute” tables, e.g., “gas mileage: 22 miles per gallon”), experiential attributes do not provide “means to an end” (Zeithaml, 1988). Experiential attributes can appear on products, on packages, in logos, as part of ads, in shopping environments, or as backgrounds on web sites (Mandel & Johnson, 2002; Schmitt & Simonson, 1997; Henderson, Cote, Leong & Schmitt, 2003; Spies, Hesse & Loesch, 1997).

4. Research on Consumer Experiences

Consumer research has studied how experiences arise and what role experience play when consumers examine products, when they shop for them, and when they consume them (Arnould, Price & Zinkhan, 2002). For example, research on product experience has studied consumers' interaction with a product and how seeing an ad for a product and then interacting with the same product affects product judgments and recall of product-related information (Hoch & Ha, 1986; Hoch & Deighton, 1989; Huffman & Houston, 1993; Osselaer & Janiszewski, 2001). Research on shopping experience has investigated the relationship between atmospheric variables (e.g., lighting, background scent, music) as well as salespersons' behavior and the resulting experience (Arnould, Reynolds, Ponder & Lueg, 2005; Ibrahim & Ng, 2000; Jones 1999; Turley & Milliman, 2000). Finally, the interpretive research on consumption experience has looked at hedonic goal pursuit and emotional states during the consumption of, for example, games, museums, river rafting, baseball, and skydiving (Arnould & Price, 1993; Celsi, Rose & Leigh 1993; Holbrook, Chestnut, Oliva & Greenleaf, 1984; Holt, 1995; Joy & Sherry, 2003).

In addition, prior consumer research has studied consumers' experiences with brands and brand evaluations. Chang and Chieng (2006) show that individual and shared customer experiences affect brand attitudes. Brakus et al. (2009) show that brand experiences are positively related to customer satisfaction and loyalty.

However, prior research on consumer experiences has not studied how the processing of experiential product attributes leads to consumer judgments. For example, in the research on product experiences (Hoch & Ha, 1986; Hoch & Deighton, 1989; Huffman & Houston, 1993; Osselaer & Janiszewski, 2001), consumers first learn about

the functional product attributes from an ad and then they interact with the product to verify the advertised claims (or the other way around) but they do not make a judgment. The experiences, in this context, merely provide means of testing the advertised claims about the product performance and functionality. Similarly, in the studies on shopping experiences, consumers physically interact with the aspects of environment, for example, scents, background music, lightning, shop assistants (Turley & Milliman, 2000), but they do not make a judgment. Finally, the cited interpretive research focuses on analyzing the process of going through an activity (or a set of activities), but again not on judgment.

The only study that addresses judgments resulting from experiential attributes is a study by Brakus, Schmitt and Zhang (2008) where the evoked experience seems to affect consumer preferences when contextual cues prime experiential attributes. To explain the effect, the authors speculate that the stimulus-cuing process—between the experiential contextual cues and experiential product attributes—may be spontaneous, resulting in more positive consumers' evaluations of the alternative which is differentiated with a “matching” experiential attribute. However, they did not offer any process-based data or an experiment to support their *post hoc* explanation. In this paper, we provide a theoretical account of the results obtained by Brakus et al. by using processing fluency theory (Schwarz & Clore, 1996; Winkielman et al., 2003). Brakus and colleagues' key claim is that consumers “spontaneously” respond to an experiential product attribute in the presence of a relevant (i.e., “matching”) contextual cue. In fact, Alter and Oppenheimer (2009) suggest that any facilitating elements conducive to information processing can serve as the underlying process, yielding a quick and effortless evaluation that enhances a positive judgment.

In sum, previous research has shown several positive effects of consumer experiences but this research has mostly examined experiences as a set of physical activities encountered during product or service interactions. The research has not clearly linked the specific experiential product attributes to consumers' responses and judgments and the process that is responsible for this link. Here we examine the link between experiential attributes and judgments, and, most importantly, present processing-fluency theory as an explanation for the positive effects of experiential attributes.

5. Processing-Fluency Theory

In general, the theory distinguishes two modes of information processing: fluent processing, which is largely holistic and occurs without much deliberate reasoning, and less-fluent processing, which is rather step-by-step and deliberate. Processing fluency refers to varying degrees of effort and speed in information processing (Schwarz & Clore, 1996; Winkielman et al., 2003). Fluency is about the subjective ease with which one processes externally presented stimuli. It leads individuals to adopt the quick, effortless and spontaneous judgment rendering process. In contrast, lack of fluency, due to the experienced difficulty during the processing, leads to systematic processing and elaboration (Alter & Oppenheimer, 2009).

Fluent processes are involved in spontaneous visual categorization and discrimination (Grunert, 1996; Tulving & Schacter, 1990). Such processes occur when people engage in simple congruency matching tasks (Kelley & Jacoby, 1998; Roediger, 1990), for example, when they discriminate one stimulus type from another (e.g., color from shape) or when they distinguish one stimulus category from another (e.g., visually presented experiential stimuli from textually presented functional information) (Edell &

Staelin, 1983; Houston, Childers & Heckler, 1987; Shepard, 1967). One critical effect of processing fluency is a more positive evaluation of a fluently processed stimulus due to the subjective ease of such processing (Kelley & Jacoby, 1998; Lee & Labroo, 2004; Roediger, 1990; Schwarz, 2004; Whittlesea, 1993; Winkielman et al., 2003).

Applying the processing fluency theory, recent consumer research also demonstrates a variety of fluency effects. For example, fluency affects consumers' deal perceptions, the generation of category-exemplars, the formation of consideration sets as well as brand choice and judgments (Kramer & Kim, 2007; Labroo, Dhar & Schwarz, 2008; Lee, 2002; Lee & Labroo, 2004; Novemsky, Dhar, Schwarz & Simonson, 2007; Shapiro, 1999).

Reber, Schwarz and Winkielman (2004) have proposed that processing fluency also affects individuals' aesthetic response to objects. They claim that aesthetic pleasure is not only a consequence of objective stimulus features per se, but it is also a result of the processing experiences of the perceiver, which are in part a function of stimulus properties that may stimulate fluent processing. In the context of the present paper and its empirical study, sensory and affective product attributes are visual. Following Reber et al. (2004), it is therefore expected that consumers process such attributes fluently, especially when they respond to an experiential product attribute in the presence of a relevant sensory or affective contextual cue (Brakus et al., 2008).

Recent findings in processing fluency has shown that although processing fluency can take many different forms (such as perceptual fluency, conceptual fluency, and linguistic fluency), it exerts the same influence on judgments independently of its form (Alter & Oppenheimer, 2009). That is, fluency intensifies the predicted judgment effect

whereas a lack of fluency weakens it. These findings will serve as a basis for the development of the predictions regarding the role of the processing fluency in the effectiveness of experiential product attributes.

6. Hypotheses

One source of processing fluency arises from the ease with which individuals process external stimuli. Processing effort (i.e., the relative lack of it) reflects processing ease (Novemsky et al., 2007). That is, compared to non-fluent processing, fluent processing is more immediate and less cognitively elaborate (Reber, Schwarz & Winkielman, 2004).

Fluent processing of an experiential attribute is likely to occur when a consumer spontaneously receives an impression of the stimulus and responds in an immediate “gut-level” way without elaborating and reasoning about such a stimulus as a specific attribute. Non-fluent processing for experiential attributes, however, will occur when consumers cognitively elaborate on such attributes and deliberately judge, for example, whether the color “red” is the right color for the new product or when they elaborate why a company may have put an affective symbol (such as a “smiley” face) on the new product. Whether consumers process experiential attributes fluently or non-fluently thus depends on the judgment context (the environment in which the products appear). Specifically, if the judgment context makes experiential new product attributes more salient perceptually or semantically, then the expectation is that consumers will process experiential attributes fluently and their evaluation of the new product will improve because of the ease of fluent processing (Schwarz, 2004; Winkielman et al., 2003). Therefore, the authors hypothesize the following interaction:

H1: When the judgment context makes a specific positive experiential attribute—sensory or affective—salient, consumers will evaluate the alternative differentiated with the congruent experiential attribute—sensory or affective—more positively than the alternative differentiated with the non-congruent experiential attribute or with the functional attributes only.

Processing speed also reflects the ease of fluent processing (Novemsky et al., 2007). That is, compared to less-fluent processing, fluent processing is faster (Reber et al., 2004). This premise allows for the further testing of processing fluency by including in an experiment a performance-based contextual variable: speed of presentation of product-related information. According to Winkielman et al. (2003), presentation time (i.e., speed of information presentation) is a key variable for studying processing fluency, and, accordingly, previous studies have used it to limit information processing (e.g., Dhar & Nowlis, 1999; Reber & Schwarz, 2001; Write, 1974).

One way of demonstrating that experiential attributes can be processed, under certain conditions, more fluently than can functional attributes is to vary the speed of information presentation. Because non-fluent processing occurs step-by-step, and requires more elaboration and takes more time than fluent processing, the expectation is that positive functional-attribute information results in more positive judgments when the information is presented slowly. However, the shorter the presentation time (i.e., the greater the speed of information presentation), the less time consumers have to judge the presented information. This increase in the speed of information presentation should limit consumers' reasoning about functional attributes. They will therefore not be able to assess all the positive attributes of the new product.

In contrast, changes in speed of presentation should affect experiential attributes much less than they do functional attributes because consumer can instantly comprehend experiential attributes such as colors, shapes or emoticons based on their surface characteristics without paying close attention to certain features of sensory and affective stimuli (Ekman, 1993; Rosch, 1972). Therefore, the authors predict the following interaction:

H2: Different speeds of attribute presentation significantly affect consumer evaluations of new product displays described by functional features (i.e., they will be less positive for fast rather than for slow speed of attribute-information presentation), while different speeds of attribute presentation affect less consumer evaluations of new product displays described by experiential features (sensory or affective).

7. Experiment

7.1 Overview

The experiment presents animated web ads for a new product to participants. Marketers and designers have created similar visual displays for conveying new product-related information to consumers (Feiereisen, Wong & Broderick, 2008). Consumers observe a new product, a multi-media plug-in module (for a mobile phone), in the form of a Flash animation on a computer screen. The Flash animation provides a demonstration as well as information about the product (e.g., that the multi-media module comes preloaded with a number of applications and can be used as a plug-in device for a basic mobile phone and extend its entertainment and gaming capabilities).

7.2 Stimuli

To create sensory, affective, and functional stimuli, the experimental procedure

systematically manipulates three elements: advertising claims, visual product cues, and the degree of animation. The presented claims are: “plays all audio and video digital formats;” “no batteries needed;” “USB 2.0 port transfer rate: up to 240 Mbits/sec;” and “16GB onboard memory (expandable)” (for functional display); “variety of cool colors;” “modern transparent styling;” “vivid picture;” and “clear, natural sound” (for sensory display); “the most fun experience in mobile entertainment;” “liven up your day;” “joy in-a-box;” and “your mood and feel boost for the day” (for affective display).

Also, the functional display uses a black-and-grey color combination for the product; the sensory display uses a blue-yellow-green color combination; and the product in the affective display uses a “smiley” on the product. Finally, the displays differ in their degree of animation. In the functional display, the module plugs into a mobile phone that is standing still in the middle of the screen with a written inscription indicating “music playing.” No actual music plays in either display. In the sensory display, the module is moving and rotating on the screen (again with the “music playing” inscription). In the affective display, the module plugs into the still mobile phone with the expression of an attached “smiley” face (which appears on the phone screen) changing from “happy” to “sad” and then back to “happy” (again with the “music playing” inscription). The stimuli are summarized in Table 1.

Table 1 here.

To manipulate the speed of the presentation of information, the researchers have created two versions of each of the three displays. After a pre-test (see below), they have decided that the display that progresses at a slow tempo will have duration of 45 seconds

and the one that progresses at a fast tempo will have duration of 30 seconds.

Finally, to manipulate attribute salience in the judgment context, the written instructions direct participants' attention to specific cues of the product display. The instructions tell the participants to pay attention either to sensory aspects of the display (i.e., look, shape, color, design), affective aspects (i.e., moods, emotions, feelings), or functional aspects (i.e., performance characteristics of the product, its specifications and functions).

Drawing respondents' attention to specific attributes is consistent with the idea that predictive context facilitates fluent processing (Reber et al., 2004). However, the prediction is that this effect is stronger for experiential attributes than for functional attributes.

7.3 Participants and Design

First, the researchers instruct the participants (381 students, paid US\$7 to participate, from a private university in the northeast US) that they will evaluate a new product shown in an animated display. The experimental design is a 3 (display: functional, affective, sensory) x 3 (attention focus: functional, affective, sensory) x 2 (speed of information presentation: slow, fast) between-subjects design. The procedure assigns the participants randomly to the 18 experimental conditions.

7.4 Pretests

For testing Hypothesis 2, it is necessary that consumers perceive the selected functional attributes positively. In a pre-test, 26 university students rated the attractiveness of functional attributes on a seven-point scale (1-“not attractive at all,” 7-“extremely attractive”). The respective mean attractiveness ratings for the four functional

attributes (see the functional claims described above) are: 6.77, 6.73, 5.46, and 5.50. Each of these means significantly differs from the scale mid-point of 4; corresponding t 's (25) are 27.45, 26.10, 6.98, and 7.43; each $p < .0001$.

For the sensory display, the intention is to select a color scheme for the plug-in module that the respondents will perceive positively as well. To do that, in a second pre-test, 68 university students, randomly assigned to one of four groups, looked at a schematic picture of the plug-in module in one color combination and rated on a seven-point scale how appropriate that particular color combination would be for the plug-in module (1-“not at all appropriate,” 7-“extremely appropriate”). For the combination pale blue/yellow/green, the mean rating is 5.53; for the combination blue/orange/green, 5.41; for grey/black, 4.94; and for pink/red/brown, 4.35; ($F(3, 64) = 2.45$; $p < .1$). Duncan multiple range test at $p = .05$ reveals that the only color combination that the participants perceived to be inappropriate, compared to the other three combinations, is the combination pink/red/brown. The pre-test does not revealed significant differences among the other color combinations. The researchers have decided to use the combination pale blue/yellow/green because of its highest mean rating and because its rating is most significantly greater than the mid-point of the “appropriateness” scale, $t(16) = 5.12$, $p < .0001$.

Finally, following the recommendations by Ordóñez and Benson (1997), the researchers have also conducted a pre-test with 16 individuals from the experimental population (note that these individuals do not participate in the main experiment) to determine the duration of the fast version of the functional display to make sure that the presented attribute information does not overload the respondents. In the pre-test, each

respondent observes three versions of the functional display. The first has duration of 20 seconds, the second 25 seconds, and the third 30 seconds. The procedure counterbalances the order of presentation. To examine respondents' perceptions of subjective time pressure, the authors have adopted Suri and Monroe's procedure (2003). After seeing a display, each participant responds to two seven-point items (too much time pressure–no time pressure, not adequate time available–more than adequate time available; $r = .89$). The researchers have aggregated the data over two presentation orders because of the absence of the order-of-presentation effect.

The results show that the respondents perceive too much time pressure when they see the display that has duration of 20 seconds compared to the displays lasting 25 and 30 seconds. Respective means are (lower means indicate more time pressure): 2.06, 3.88, and 4.94 ($(F(2, 30) = 70.57, p < .0001)$). Since the difference in the perceived time pressure between the functional display lasting 30 seconds and the mid-point of the scale is significant ($t(15) = 4.86, p < .001$), the researchers have decided that the experimental display that progresses at a fast tempo will have duration of 30 seconds.

They have also decided that the display that progresses at a slow tempo will have duration of 45 seconds. They made this decision after a few ad hoc pre-tests with individuals from the experimental population (again, these individuals will not participate in the main experiment). The researchers wanted to make sure that the respondents would not find the slow product presentation boring.

7.5 Procedure

After viewing the animated ad, participants evaluate the new product on six seven-point scales: "like/dislike this product," "this product is valuable/worthless," "this

product is interesting/boring,” “this product is good/bad,” “I have a positive/negative opinion about this product” and “I would be satisfied/unsatisfied with this product” (alpha = .91).

Next, after responding to the dependent variable, participants rate their knowledge of the mobile phone/personal digital assistant (PDA) category.

Finally, to assess whether the display has resulted in a specific experience by successfully emphasizing the intended attributes, participants complete the manipulation-check measures on seven-point semantic differential scales. For functional display, the scales are “this animated clip does not present/presents the features of the product,” “this animated clip does not show/shows how the product works” and “this animated clip does not present/presents the functions the product has.” For sensory and for affective displays and the corresponding experiences, the researchers have adopted the relevant items from the brand experience scale (Brakus et al., 2009). The scales measuring sensory impact are: “this animated clip does not have/has sensory appeal,” “this animated clip does not engage/engages my senses” and “this animated clip is/is not focused on sensory appeal.” The affective scales are: “this animated clip does not appeal/appeals to feelings,” “this animated clip is /is not affective” and “this animated clip is not/is emotional.” After reversely coding the appropriate items, the researchers have computed composite functional (alpha = .79), sensory (alpha = .78), and affective (alpha = .78) overall ratings.

8. Results and Discussion

8.1 Manipulation Checks

First, a factor analysis (with varimax rotation on the sensory- and affective-manipulation-check scale items) reveals that the sensory and affective items have loaded

on two distinct factors, each with eigenvalues greater than one. The two factors explain 66.4% of the variance on those six items. The three sensory items have non-standardized loadings greater than .71 on the “sensory” factor and the three affective items have loadings greater than .46 on the “affective” factor. This result confirms that sensory and affective attributes are of two distinct experiential types.

In the following, a capital letter denotes display type (functional (F), sensory (S), and affective (A)) and index denotes the specific scale items. One-way ANOVAs and Duncan multiple range tests further confirm that different displays provide the intended experiences. Results using the functional manipulation-check scales indicate that the means of the functional display were significantly greater than the means of sensory and affective displays: $F_{\text{functional}} = 6.08$, $S_{\text{functional}} = 4.98$, $A_{\text{functional}} = 4.44$ ($F(1, 377) = 46.64$, $p < .0001$; Duncan multiple range test, $p < .05$). Also, the mean of the sensory display is significantly greater on the sensory scales than the means of affective and functional displays on the same scales: $S_{\text{sense}} = 4.99$, $A_{\text{sense}} = 3.79$, $F_{\text{sense}} = 3.06$ ($F(1, 377) = 65.73$, $p < .0001$; Duncan multiple range test, $p = .05$). Finally, the mean of the affective display is significantly greater than the means of sensory and functional displays on the affective scales: $A_{\text{affect}} = 5.04$, $S_{\text{affect}} = 3.34$, $F_{\text{affect}} = 2.64$ ($F(1, 377) = 96.40$, $p < .0001$; Duncan multiple range test, $p < .05$).

8.2 New Product Evaluations

A 3 x 3 x 2 ANOVA reveals a main effect of speed of information presentation, $F(1, 361) = 18.20$, $p < .0001$, indicating that participants evaluate the new product more favorably in the slow tempo ($E_{\text{slow}} = 4.81$) than in the fast tempo ($E_{\text{fast}} = 4.28$). Also, a main effect of display, $F(2, 361) = 3.22$, $p < .05$, indicates that participants provide more

favorable evaluations of the new product when they see the functional display than when they see the affective display ($E_{\text{functional}} = 4.73$, $E_{\text{sense}} = 4.57$, $E_{\text{affect}} = 4.35$; for $E_{\text{functional}} = 4.73$ versus $E_{\text{affect}} = 4.35$, $F(1, 361) = 6.26$, $p < .05$). Disregarding the attention focus, respondents still find the functional attribute information the most informative when they have to judge a new technological product.

Regarding H1, the ANOVA reveals an interaction of attention focus by type of display, $F(4, 361) = 18.20$, $p < .05$ (see Figure 1). For the sensory attention focus, sensory product evaluations are significantly higher than affective product evaluations, 4.96 versus 4.06, $F(1, 361) = 11.92$, $p < .01$ (see Figure 1). For the affective attention focus, affective product evaluations (4.71) are higher than those of the sensory product (4.46), but the difference was not significant ($F < 1$). One possible reason for this non-significant effect may be that participants may consider their feelings toward the affective product—the one differentiated with a smiley face—and pragmatically attribute those feelings to the smiley face. Hence, they may discount the hedonic informational value of the fluency signal—an effect previously observed (Schwarz, 1990; Schwarz & Clore, 1996). Finally, for functional attention focus, functional product evaluations are significantly higher than sensory and affective product evaluations, (4.79 vs. 4.27, $F(1, 361) = 3.89$, $p < .05$; 4.79 vs. 4.29, $F(1, 361) = 3.60$, $p < .06$). Considering all these results, H1 is mostly supported.

Figure 1 here.

One can also look at the data differently, comparing functional and experiential attributes by type of display (“row-wise” rather than “column-wise” in Figure 1). Please

note the consistency of new product evaluations across attention focus conditions when the product is presented with the functional display (see the flat dotted line for functional display in Figure 1). In other words, the impact of functional features does not change depending on the attention focus; that is, functional attributes, as expected, are not subject to fluency effects. This may be the case because consumers may derive utility from functional attributes, and the attention, irrespective of attention focus, may first go to functional features because utility can be derived from them. This probably is the case in this study because the respondents (students) directly judge a technologically novel product that is relevant to them (a plug-in entertainment module for a PDA). For sensory attributes and affective attributes, in contrast, evaluations vary depending on attention focus, resulting in matching contexts in evaluations that are as positive or even slightly more positive than those resulting from functional ones (4.68 vs. 4.96, $F(1, 361) = 1.14$, NS, and 4.72 vs. 4.71, $F(1, 361) < .01$, NS, for the respective cases). In sum, and consistent with the processing-fluency hypothesis, evaluations based on experiential attributes change when attention is drawn to them.

The ANOVA also reveals the interaction of type of display with speed of presentation of information, $F(2, 361) = 6.22$, $p < .01$, which H2 predicts. As Figure 2 shows, new product evaluations of functional displays are significantly more favorable in the slow tempo ($E_{\text{slowfunc}} = 5.30$) than in the fast tempo ($E_{\text{fastfunc}} = 4.15$), $F(1, 361) = 28.55$, $p < .001$). In contrast, new product evaluations are similar for sensory displays (4.65 vs. 4.48, $F(1, 361) < 1$, NS) and affective displays (4.47 vs. 4.21, $F(1, 361) < 1.50$, NS). These results provide support for the less fluent processing of functional attributes and more fluent processing of experiential attributes.

Figure 2 here.

The question arises, however, whether this effect may be due to a lack of understanding of the displayed product by the participants who have seen the fast version of the functional display. However, the fast version of the functional display possibly confuses the respondents. To rule out this possibility, the researchers have administered a post-hoc quiz to test objective knowledge of the facts about the displayed product (Brucks 1985). Thirty-four participants, randomly assigned to two test conditions, observe the functional display. Half of the participants see the slow-tempo version of the display and the other half see the fast-tempo version. Next, the participants respond to five questions that test their knowledge about the displayed product. The researchers have based the questions on the claims presented in the display. The results show that the participants who have seen the fast-tempo version of the functional display manage to correctly answer 4.12 questions on average compared to 4.24 for the participants who have seen the slow-tempo version. The difference is not significant ($F(1, 33) < .5$, NS).

Additionally, the researchers have also randomly selected, for a debriefing session, 9 (out of 17) respondents who saw the fast version of the animated display. A discussion with these individuals reveals that they have had a very good understanding of the product.

Finally, category knowledge does not significantly affect the dependent variable nor does interact with other independent variables.

9. Final Discussion

The results of the experiment indicate the operation of different processes for

different types of attributes. As hypothesized, consumers can process experiential attributes—sensory and affective—fluently (when they focus their attention to such attributes), and, as a consequence, product evaluations are more positive. Evaluation of functional attributes, however, does not vary with the attention focus. Also, the fluent processing of experiential attributes seems quite spontaneous, and, unlike the processing of functional attributes, it is not subject to product-presentation duration effects. In contrast, consumers need time to extract value from functional attributes.

In other words, consumers' evaluations of the new product differentiated with experiential attributes are context-dependent. Only when consumers encounter contextually expected experiential attributes do they seem to engage in a spontaneous categorization task of matching the contextual cue with the experiential attributes of the same type. In such a case, consumers evaluate the new product more positively. Such positive judgments indicate fluent processing (Schwarz, 2004; Winkielman et al., 2003). Note that in the case of the affective attributes and the affective attention focus, the result is directionally supported: product evaluations are higher than those of the sensory product; the difference, however, is not significant. The manipulation of directing respondents' focus to the specific affective cues may be too strong. Instructing consumers to direct their attention, for example, to a "smiley," makes consumers assess such an affective visual symbol pragmatically, rather than spontaneously, thus diminishing the hedonic informational value of the fluency signal (Schwarz, 1990; Schwarz & Clore, 1996).

The results further indicate that, in the processing of experiential attributes, judgment contexts and product attributes are intertwined. The judgment context may be

used strategically to draw consumers' attention to specific experiential attributes so that consumers process such attributes fluently in order to evaluate experientially differentiated new products more positively. In contrast, for functional attributes, the new product choice context is irrelevant for judgment. In the experiment, the attention focus does not affect evaluations of functionally presented new product.

As noted earlier, consumers may also process experiential attributes non-fluently. Non-fluent processing of experiential attributes occurs when the decision-making context leads consumers to expect a specific type of experiential attributes, sensory or affective, but they do not get such attributes. In that case, consumers seem to engage in a more deliberate, inferential process in which they judge experiential attributes pragmatically to see if such attributes might provide value to them.

This inferential process that leads to a pragmatic assessment of experiential attributes is conceptually similar to that investigated for functionally irrelevant (or trivial) attributes presented verbally where consumers infer value from the presence of such attributes (Carpenter, Glazer & Nakamoto, 1994). If consumers engage in this inferential process, however, then experiential attributes are disadvantaged compared to irrelevant attributes. Consumers still infer value from irrelevant attributes because such attributes imply a functional benefit even if they do not deliver it. For example, "alpine class" down fill (Carpenter et al., 1994) implies greater thermal protection than "regular" down fill. In reality, no functional difference between the two fills exists. Consumers could infer functional value from experiential attributes, and this possibility is something that needs to be investigated further, but such a process is not straightforward and probably depends on consumers' knowledge of the product category and the related category-based

schemas (Meyers-Levy & Tybout, 1989).

Even though the experiment mostly confirms the predicted fluency effect for experiential attributes, affective attribute (a “smiley” face) is not as effective as sensory attribute (color) in getting consumers to evaluate the new product more positively. This result may hold more generally. The mere presence of an affect-laden mascot or a similar affective cue in the new product could make consumers aware of the corporation’s persuasion effort. If that happens, then consumers may deliberately “reject” the affective cue.

10. Managerial Implications

As this study shows, experiential attributes are relevant because they provide the basis for experiential product differentiations. When consumers are able to process experiential product attributes fluently, they like products better. Managers can therefore use shopping environment strategically to make certain experiential product attributes salient in order to stimulate consumers’ fluent processing of such cues. Consumers can use this additional experiential value as a tie-breaker when they have to choose between new products that are functionally equivalent. This additional experiential value is the key aspect of compelling consumer experiences. From a competitive point of view, compelling consumer experiences are important because they may be more difficult to copy than are functional innovations, which, when they are not patent-protected, capable competitors can reverse-engineer and copy.

Aiming to drive consumers’ preferences, many manufacturers and brands increasingly emphasize sensory features over functional product features in the design of new products. Their emphasis on sensory features (and the resulting experiences) has

become a central communication theme in new product launches. Returning to Apple, although iPhone 5 launched in 2012 is functionally just another version of the previous iPhones, iPhone 5 has been advertised for its design and described as a thinner, slander, lighter, and brighter version of iPhone. Thus, Apple is marketing the sensory as well as affective features. Apple also uses a similar strategic approach, dubbed Jobs' Legacy Design (Merchant, 2011), for its mini iPad launch. As a part of their strategy, Apple has also prominently featured the color schemes and shapes of its products in its Apple Stores and on its web-sites. These sensory and affective cues, an integral part of the commercial environment, are likely to induce customers to process the relevant experiential product attributes fluently, which facilitates product decision making.

Other managerial uses of experiential attributes and related brand experiences include market segmentation and innovation management. Instead of considering the customer's point of view, managers have frequently segmented the market considering the product's perspective first (e.g., segmenting by features, price or distribution channel). As this research suggests, adequate segmentation decisions should be based on customer insight—by understanding the experiential world of customers and segmenting based on customers' current or desired experience with a brand or a new product (Schmitt 1999, 2003).

Similarly, innovation often resides only in the R&D department where the focus is on technical innovation. Based on this research, another viable approach is to get consumers to experience the brand and the product in new ways. Customers value innovation, not just features-and-benefits-oriented technical innovation (Noble & Kumar, 2010). Relatively minor changes in new product design and in the corresponding

marketing communications can be major brand-experience and customer-focused innovations. Managers focused on technical innovation alone overlook and miss such innovation opportunities.

11. Future Research

The results of this study present opportunities for future research. First, the present study uses evaluations as the key dependent variable. Future research should include memory for product features because memory may determine future purchase behavior and word of mouth. Also, future research should examine whether the effects observed in the experiment are short-term or whether they would last, for example, for a few hours or even days. The congruence of display effects, observed for experiential attributes, may even strengthen over time.

Second, in the experiment presented here the antecedent of consumer processing is attention focus—one of the key manipulated independent variables in the study. To further explore consumer processes, future research should explore which constructs and situational variables are closely related to attention focus and drive or trigger it. For example, what is the role and how important are motivation, expertise or presence of others in affecting attention focus? How do individual differences affect the process, especially differences in sensitivity to design? Such variables, as possible moderators, may heighten or weaken the attention focus, thus increasing or decreasing the observed differential effects between experiential and functional product attributes.

The role of other types of experiential attributes—bodily and intellectual—in differentiating new products and building compelling customer experiences also needs to be investigated empirically (Brakus et al., 2009). For example, considering the theory of

embodied cognition (Lakoff & Johnson, 1999), consumers may process specific product features more fluently if they result in specific “embodied” motor actions and corresponding bodily experiences. Similarly, product features that engage consumers in divergent thinking may also be processed fluently.

This research has also identified one potential problem with experiential attributes: The mismatch between the decision-making context and the specific experiential product cues might drive the product evaluation down. A holistic decision-making context (i.e., the one that simultaneously makes the different types of experiential product cues salient) could positively affect the evaluations of the experientially differentiated new product. On the other hand, negative contexts (e.g., an unappealing shopping environment or web site) might negatively affect evaluations of an otherwise experientially attractive new product.

Finally, a study should investigate how consumers’ personal values relate to the meaning and value that consumers derive from the presence of experiential attributes. For example, a consumer who infers in a certain context that a color or a “smiley” face is valuable for the product may hold certain personal values such as a propensity for aesthetics or human relations. If this is the case, then a priming procedure that triggers specific personal values should affect the size of effects observed in this study.

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Table 1 Summary of the Experimental Stimuli

	Animated Product Display		
	Sensory	Affective	Functional
Visual Product Cues	blue-yellow-green color combination	black and grey color combination with a Smiley face on the product	black and grey color combination
Degree of Animation	product moves and rotates	product is static, but the expression of the Smiley is animated	product is static
Advertising Claims	<ul style="list-style-type: none"> ▪ variety of cool colors ▪ modern transparent styling ▪ vivid picture ▪ clear, natural sound 	<ul style="list-style-type: none"> ▪ the most fun experience in mobile entertainment ▪ livens up your day ▪ joy in-a-box ▪ your mood and feel boost for the day 	<ul style="list-style-type: none"> ▪ plays all audio and video digital formats ▪ no batteries needed ▪ USB 2.0 port transfer rate: up to 240 ▪ Mbits/sec 16GB onboard memory (expandable)

Figure 1 ATTENTION FOCUS by TYPE OF DISPLAY interaction

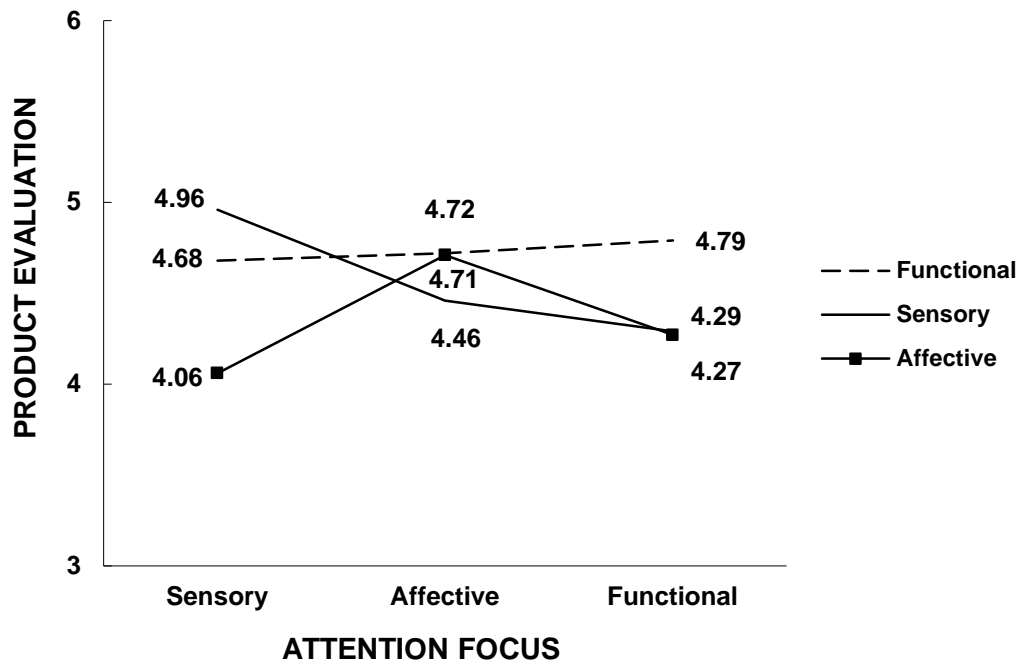


Figure 2 SPEED OF PRESENTATION by TYPE OF DISPLAY interaction

