

## Putting a Face to the Brand: How Wishful Seeing Enhances Brand Liking

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◦*Purpose:* This paper investigates how brands - through face visuals - can fill a void for consumers experiencing a lack of social connection (operationalized in terms of loneliness and tendency to anthropomorphize).

◦*Design/methodology/approach:* Employing fictitious brand names and mock advertisements, three experiments (including an eye tracking study) test how employing human faces rather than ambiguous figures as visuals influences processing fluency and brand liking.

◦*Findings:* Study 1 shows that seeing faces relates to greater brand liking with processing fluency mediating, and individual loneliness and tendency to anthropomorphize moderating the effect. Study 2 replicates findings with other-race faces indicating that processing fluency but not ethnic self-referencing underlies the effect. Study 3 complements the psychometric measures of Studies 1 and 2 with eye tracking data to demonstrate that fluency correlates with distinct patterns of attention.

◦*Practical implications:* Given the widespread use of ambiguous visuals on wine packages and other brand communications, wine marketers may be interested in benefitting from the findings that the mere process of easily and effortlessly resolving visual ambiguity endows brands with greater liking.

Keywords: package design, typicality, fluency, brand evaluation, memory

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## **1. INTRODUCTION**

Displaying a visual in combination with the brand name and, possibly, a claim is common practice not only in marketing wine. To attract viewer attention (Pieters and Wedel 2004), support positioning (Orth and Malkewitz 2012), and ultimately build strong brands (Park et al. 2010), wine packages, advertisements, and other means of brand communication bear a large variety of visuals ranging from the realistic to the abstract, and depicting objects as diverse as to include wholes or parts of plants, humans, animals, landscapes, buildings, or even obscure and hard-to name entities. Although a deep relationship with a brand hinges on extended interactions (Batra, Ahuvia, and Bagozzi 2012), initial liking must begin in the early stages of brand encounters, and this is where visuals play a key role.

Accompanying brand names with visuals of humans extends previous research that has regarded brands as persons (Delbaere, McQuarrie, and Phillips 2011), assigned human characteristics (Geuens, Weijters, and DeWulf 2009), or treated brands like partners in personal relationships (Fournier and Alvarez 2012). As such, extant studies view brands as resources for the construction of identity (Elliott and Wattanasuwan 1998) and the endowment of consumers with specific human attributes (Escalas and Bettman 2005). Different than these studies, our work sets out to demonstrate that the mere process of seeing human in a visual (rather than the resulting attributions) can increase viewer liking for the brand. We expect this effect because dealing with ambiguity is the hallmark of visual perception and the human visual system routinely resolves ambiguity, especially in faces (Wallis 2013), for the organism's effective adaptation to its environment (Long and Toppino 2004). Our work thus unites fluency research with the evolutionary tendency to categorize visual stimuli as human faces (Öhman and Mineka 2001) to show that "seeing" a face increases brand liking because processing is more fluent than for ambiguous visuals.

Development of consumer liking for a brand via the mechanism discussed above suggests that two individual characteristics may play a role as moderators. Both an individual's loneliness and tendency to anthropomorphize are rooted in the basic human need for social connection. People who feel lonely and lack social connectivity try to compensate by extracting a sense of human with any agent they encounter (Epley et al. 2008). Relating to an individual's greater need-to-belong, loneliness and the tendency to anthropomorphize should enhance the individual propensity to "see faces" and like the brand displayed alongside.

## **2. LITERATURE AND HYPOTHESES**

### **1.1. Seeing Faces**

A key perceptual experience is that of categorizing ambiguous visual information (Balcetis and Dunning 2006). Ambiguous visuals are those that can be interpreted in different ways but where people see only one interpretation at any given time (Long and Toppino 2004). Common examples include Rubin's (1958) vase/faces, Boring's (1930) wife/mother-in-law, Fisher's (1967) man/girl, and Bugelski and Alampay's (1961) rat/man. Humans possess a remarkable perceptual bias when seeing ambiguous visuals which is perhaps most apparent in the case of faces. Because correct classification of visual input as "face" is so central to the survival of the species (Wallis 2013), converging evidence from developmental, neuropsychological, behavioral, and physiological sources indicates that faces are processed differently than objects (Tsao and Livingstone 2008). In other words, human perception is biased in that categorizing visual input as a human face takes precedence over categorizing it as an object (Todorov, Baron, and Oosterhof 2008). It is only after consumers identify a brand

visual as a face that they can form impressions which then transfer to brands (Gorn, Jiang, and Johar 2008). Thus, categorizing a brand visual (i.e., as a face) assumes a key role in brand communication.

## **1.2. Processing Fluency**

Processing fluency, the subjective experience of ease and speed with which an incoming stimulus is handled (Reber, Schwarz, and Winkielman 2004), is an important source of information (Schwarz 2004). As such, the fluency signal is hedonically marked: high fluency elicits a positive affective reaction (Reber, Schwarz, and Winkielman 2004) because fluent stimuli (in our evolutionary past) signaled safety, an inherently preferred state (Winkielman and Cacioppo 2001). Consistent with the affect-as-information model (Schwarz and Clore 1983), positive affect, instantly induced by fluent processing of a stimulus, mediates the impact on attractiveness, hereby generating greater liking (Reber, Schwarz, and Winkielman 2004). This finding has been obtained with abstract stimuli (Cho and Schwarz 2010; Janiszewski and Meyvis 2001), but also with more realistic drawings (Cox and Cox 2002), and images of wine packages (Orth and Malkewitz 2012).

Integrating the superiority of the human visual system in “seeing” faces with the fluency hypothesis implies that displaying a brand with a face should relate to more fluent processing and consequently greater liking of the brand than accompanying the brand name with an ambiguous visual that requires greater processing effort. Taken together, theory and empirics advocate that faces (vs. ambiguous visuals) relate to higher processing fluency and subsequently to greater brand liking:

H1: Viewer liking of a brand will be higher when the visual is perceived as a face rather than an ambiguous visual.

H2: The positive effect of seeing a face on brand liking will be mediated by fluency.

## **1.3. Lack of Social Connection as a Motivational Driver**

What people see is not an exact replica of what is in the world since perception is selective (Drew, Vö, and Wolfe 2013) and often biased (Balcetis and Dunning 2010). Among the key motivational drivers of visual perception are individual needs and goals (Dunning and Balcetis 2013). For example, desired locations appear closer, terrain to be negotiated appears easier to traverse when motivation is strong, and soccer goals appear tighter to the player tasked with executing the penalty kick (Dunning and Balcetis 2013).

Social psychologists have suggested that perhaps the only critical motivational driver of human behavior is other people (Diener and Seligman 2002). Experiencing a lack of connection with other people is not only unpleasant and uncomfortable (Baumeister and Leary 1995), but also unhealthy (Cacioppo et al. 2002). An unsatisfied need for social connection makes people feel lonely (Donthu and Gilliland 2002) and they try to compensate for the perceived lack of social connection (Simenauer and Carroll 1982). Specifically, lack of social connection can change the way people view inanimate objects, such as technological devices, personal keepsakes, and pets, a tendency termed anthropomorphism (Epley et al. 2008). Given that people, chronically or dispositionally higher in their tendency to anthropomorphize, are more likely to “see human,” they should process faces more easily and thus with greater fluency than people low in anthropomorphism tendency:

H3a: An individual’s tendency to anthropomorphize will enhance the positive effect of seeing

face on fluency.

Loneliness describes a state when a discrepancy exists between the interpersonal relationships one wishes to have and those one perceives they currently have (Perlman and Peplau 1981). Because humans have a strong desire for social connection and a basic need-to-belong function, loneliness can trigger behavioral adjustment and cognitive responses (Rubinstein, Shaver, and Peplau 1979). Effects of loneliness also extend to visual perception (Gardner et al. 2005). Paralleling the tendency to anthropomorphize in its consequences, loneliness should increase the processing fluency of faces as brand visuals because individuals who feel lonelier exhibit a stronger propensity to see a face in a visual stimulus than less lonely individuals do:

H3b: An individual's state of loneliness will enhance the positive effect of seeing a face on fluency.

### 3. EMPIRICAL STUDIES

In line with research on advertising (McQuarrie and Phillips 2008), fluency (Reber, Schwarz, and Winkielman 2004), and visual processing of wine packages (Orth and Malkewitz 2012), we used fictitious brand names combined with a visual (face or ambiguous) and a slogan to represent mock advertisements for a new brand. Three pretests (N=90, N=27 and N=33) yielded two visuals, one seen as ambiguous and another seen as a face, two brand names (Fecci and Abington) low on familiarity, along with the slogan "I like it" for both names.

#### 2.1. Experiment 1

One hundred students (all Caucasian, 23.1 years of mean age, 66% females) participated in a 2 (face vs. ambiguous brand visual) x 2 (brand name: Fecci vs. Abington) between-subjects experimental design. Randomly assigned to one of the four conditions study participants completed questions about the brand, the drawing, and about themselves. Measures included established item batteries including the three-item fluency scale (Landwehr, McGill, and Herrmann 2011;  $\alpha=.89$ ;  $M=4.25$ ,  $SD=1.62$ ), three-item scales for brand liking (Fabrigar and Petty 1999;  $\alpha=.90$ ,  $M=4.33$ ,  $SD=1.23$ ) and purchase intention (MacKenzie, Lutz, and Belch 1986;  $\alpha=.90$ ,  $M=4.52$ ,  $SD=1.30$ ), and the brief versions of the IDAQ (Waytz, Cacioppo, and Epley 2010; non-human animals:  $\alpha=.83$ ,  $M=3.17$ ,  $SD=1.18$ ,  $Range=6.0$ ; natural entities:  $\alpha=.80$ ,  $M=4.42$ ,  $SD=1.38$ ,  $Range=6.0$ ), and the loneliness scale (Russell 1996;  $\alpha=.91$ ,  $M=4.90$ ,  $SD=1.14$ ,  $Range=5.0$ ). We also included a number of covariates to guard against alternative hypotheses. Specifically, we measured attractiveness of the visual (Hirschman 1986: attractive, beautiful, appealing,  $\alpha=.91$ ), and assessed four emotions of the PANAS scale (Watson, Clark, and Tellegen 1988).

Analysis of variance (ANOVA) results indicated a significant effect of the visual on brand liking ( $F(1,99)=3.94$ ,  $p=.049$ ) with the face relating to greater liking than the ambiguous visual ( $M=4.58$  vs.  $M=4.09$ ). When the brand name was included as a covariate, results of a two-factorial ANOVA indicated a significant main effect of the visual ( $F=3.95$ ,  $p=.049$ ), a non-significant main effect of brand name ( $F=.68$ ,  $p=.411$ ), and a non-significant visual x brand name interaction effect ( $F=.08$ ,  $p=.785$ ). These results support H1. The influence of liking on purchase intention was strong and positive ( $B=.79$ ,  $t=12.82$ ,  $p=.001$ ), hence underscoring the relevance of our focal dependent construct.

Testing simple mediation (Preacher and Hayes 2004) established that seeing a face was positively associated with fluency, as indicated by a significant unstandardized regression

coefficient ( $B=2.06$ ,  $t=8.21$ ,  $p=.001$ ). Also, the positive relationship between fluency and liking, controlling for the visual, was supported ( $B=.36$ ,  $t=3.94$ ,  $p=.002$ ). Finally, seeing a face was found to have an indirect effect on liking; this indirect effect was positive ( $B=.48$ ,  $t=1.99$ ,  $p=.048$ ), as hypothesized. The formal two-tailed significance test demonstrated that the indirect effect was significant (Sobel  $z=3.53$ ,  $p=.001$ ). Bootstrap results confirmed the Sobel test results, with a bootstrapped 95% CI around the indirect effect not containing zero ( $LL=.33$ ,  $UL=1.15$ ). Thus, Hypothesis 2 received support.

To test for moderation, we conducted stepwise regression analyses (Frazier, Tix, and Barron 2004). Results indicate that the influence of visual x anthropomorphism tendency interaction on fluency is significant ( $\beta=.15$ ,  $p<.05$ ) as is the visual x loneliness interaction effect ( $\beta=.23$ ,  $p<.05$ ). Together, the step 2 interaction effects explain an additional eleven percent of variance beyond a significant main effect of seeing a face and non-significant main effects of anthropomorphism and loneliness in step 1. Thus, Hypotheses 3a and 3b were supported.

Additional findings indicate that face attractiveness and emotional contagion effects can be ruled out as potential alternative explanations. The findings provide initial evidence for the influence of seeing a face in a brand visual on liking, indicating that presenting brand names in conjunction with a human face rather than an ambiguous visual increases liking. Further, this pattern of results trace back to processing fluency as a mediator of the visual – liking relationship. Seeing a face in a brand visual appears to enhance consumer liking of the brand, especially when viewers tend to anthropomorphize, or when they feel lonely.

## 2.2. Experiment 2

The use of Caucasian faces and Caucasian viewers in Study 1 could raise questions about the generalizability of findings regarding the social connectivity capacity of brands. To provide further evidence for our phenomenon across ethnic groups, we re-used the 2 (face vs. ambiguous visual) x 2 (Fecci vs. Abington brand) between-subjects experimental design employed in Study 1. The key difference was our using Asian rather than Caucasian faces. Replicating the approach used in the original Pilot study, one of the coauthors created a set of six drawings designed to represent human faces of Asian ethnicity that were then evaluated by thirty Caucasian respondents. The face selected for the main study was unambiguously seen as Asian, but was ambiguous regarding gender, and did not reflect any extreme emotion. The ambiguous visual was the same as the one employed in Study 1. 99 students (all Caucasian, 24.5 years of mean age, 63% females) viewed one randomly selected ad, and completed questions about the brand, the visual, and themselves. Measures were identical to study 1.

ANOVA results indicated a significant effect of the visual on brand liking ( $F(1,98)=8.26$ ,  $p=.005$ ) with the face relating to greater liking than the ambiguous visual ( $M=4.57$  vs.  $M=3.83$ ). When the brand name was included as a covariate, results of a two-factorial ANOVA indicated a significant main effect of seeing a face ( $F=8.35$ ,  $p=.005$ ), a non-significant main effect of brand name ( $F=.38$ ,  $p=.537$ ), and a non-significant visual x brand name interaction effect ( $F=2.73$ ,  $p=.102$ ). These results provide additional support for H1. The influence of liking on purchase intention was again strong and positive ( $B=.89$ ,  $t=14.90$ ,  $p=.001$ ).

Repeating the mediation test yielded a positive effect of seeing a face on fluency ( $B=1.63$ ,  $t=6.31$ ,  $p=.001$ ), a positive relationship between fluency and liking, when controlling for the visual ( $B=.46$ ,  $t=5.07$ ,  $p=.001$ ), and a positive indirect effect of seeing a face on liking ( $B=.75$ ,  $t=2.87$ ,  $p=.005$ ). The indirect effect was significant (Sobel  $z=3.92$ ,  $p=.001$ ) with a bootstrapped 95% CI around the indirect effect not containing zero ( $LL=.37$ ,  $UL=1.12$ ). Thus, Hypothesis 2

received support.

Re-employing stepwise regression analysis indicates that the influence of the cross-product term between seeing a face and anthropomorphism tendency on fluency is significant ( $\beta=.15$ ,  $p<.05$ ), explaining an additional four percent of variance above and beyond a significant main effect of seeing a face and non-significant main effects of moderators in step 1. Thus, Hypothesis 3a and the expectation that the positive effect of seeing a face on fluency increased with individuals' tendency to anthropomorphize was supported. Further results of the analyses indicate that the influence of the visual x loneliness interaction term was not significant ( $p>.05$ ). This finding stands in contrast to Study 1 and does not support Hypotheses 3b. Attractiveness and emotional contagion could be ruled out again as alternative explanations.

### 2.3. Experiment 3

Having demonstrated (through Studies 1 and 2) the positive influence of “seeing faces” on brand liking, the main goal of Study 3 was to explore what drives these effects through eye tracking. To test this proposition we re-employed the 2 (Caucasian face vs. ambiguous visual) x 2 (Fecci vs. Abington brand) between-subjects experimental design. One hundred and sixty students (all Caucasian), each viewed the advertisement displayed on a computer screen while a camera tracked their eye movement. After conclusion of the experiment they received a print-out of the advertisement and completed a paper-and-pencil survey containing questions about the brand, the drawing, and themselves.

We used two indicators of visual attention (Pieters 2008): AOI (area of interest) fixation frequency and AOI fixation duration. Fixation frequency is the total number of gazes a consumer spent on a specific AOI. It captures how well an area can retain attention. Fixation duration measures the time spent on each of the AOIs. Psychometric measures included the same ones as in Studies 1 and 2.

ANOVA results indicated a significant effect of the visual on brand liking ( $F(1,119)=8.28$ ,  $p=.004$ ) with the face relating to greater liking than the ambiguous visual ( $M=4.33$  vs.  $M=3.90$ ). When the brand name was included as a covariate, results of a two-factorial ANOVA indicated a significant main effect of the visual ( $F=8.51$ ,  $p=.004$ ), a non-significant main effect of brand name ( $F=3.36$ ,  $p=.069$ ), and a non-significant visual x brand name interaction effect ( $F=.77$ ,  $p=.383$ ). These results provide additional support for H1. As with previous two studies, the influence of brand liking on purchase intention was strong and positive ( $B=.68$ ,  $t=9.52$ ,  $p=.001$ ), further underscoring the relevance of liking.

To explore the mechanism underlying our findings, we examined effects of the visual on the attention given to specific ad elements. Analyses of variance revealed a significant effect of the brand visual on the frequency ( $F(1,118)=4.29$ ,  $p=.041$ ) and duration of the fixation ( $F(1,118)=9.23$ ,  $p=.003$ ) with ambiguous visuals receiving both more ( $M=12.98$  vs.  $M=10.77$ ) and longer ( $M=3.30$  sec vs.  $M=2.43$  sec) glances than the face. The effect of the visual on attention given to the claim was also significant with greater fixation frequency ( $F(1,118)=3.88$ ,  $p=.047$ ;  $M=1.44$  vs.  $M=2.13$ ) and longer fixation duration ( $F(1,118)=3.91$ ,  $p=.049$ ;  $M=0.28$  sec vs.  $M=0.43$  sec) given to the claim when viewers saw a face rather than an ambiguous visual. The effects of visual on attention to the brand name were non-significant ( $p>.160$ ).

Computing a measure for relative attention given to a specific AOI (as the percentage of total ad fixation duration given to either the brand name, the claim, or the visual) permitted further detailing attentional effects of seeing a face. ANOVA indicated a significant effect of visual on attention to the claim ( $F(1,117)=6.34$ ,  $p=.012$ ) with more attention under conditions of seeing a

face rather than ambiguous visual ( $M=5.68$  vs.  $M=3.98$ ). In addition, the effect of visual on attention given to the visual was significant ( $F(1,117)=8.50$ ,  $p=.004$ ) with more attention given to the ambiguous visual rather than the face ( $M=46.27$  vs.  $M=33.70$ ). The visual's effect on attention to the brand name was non-significant ( $F(1,117)=1.08$ ,  $p=.300$ ). However, the effect of relative attention given to the visual on fluency was significant and negative ( $B=-.23$ ,  $t=-2.60$ ,  $p=.005$ ).

As with previous studies, processing fluency mediated the effect, thus supporting Hypothesis 2. Different than the two previous studies, the final analyses test a moderating influence on attention to the visual as an indicator of fluency. While a variation on our hypotheses, this approach seems defensible given the nature of the experiment (eye tracking) and the significant correlation between attention to the brand visual and fluency ( $r=.37$ ,  $p<.05$ ). Results indicate significant effects of the visual x anthropomorphism tendency ( $\beta=-.16$ ,  $p<.05$ ) and the visual x loneliness cross-product terms on fluency ( $\beta=.16$ ,  $p<.05$ ). These findings support Hypothesis 3a (the positive effect of seeing a face on fluency increases with the tendency to anthropomorphize) and Hypothesis 3b (the positive effect of seeing a face on fluency increases with loneliness).

The findings provide another set of evidence for the influence of seeing a face on brand liking, the mediating role of processing fluency, and the moderating roles of individual differences. Analyzing eye tracking data suggests that the lower fluency of ambiguous visuals traces back to an attention consuming effect as individuals view them relatively more frequently and longer. In contrast, they need to dedicate less attention to a visual seen as a face, and exhibit higher fluency and greater brand liking.

#### **4. DISCUSSION**

The present work extends research on using visuals for communicating brands in at least three ways. First, traditional ways of promoting brands as resources for the construction of identity (Elliott and Wattanasuwan 1998) and the endowment of consumers with specific human attributes (Escalas and Bettman 2005) are extended by offering evidence for brands' potential to enhance social connectivity. According to our findings, displaying brand names in conjunction with visuals seen by consumers as human faces, can increase brand liking. This outcome complements previous studies that have treated brands as persons (Delbaere, McQuarrie, and Phillips 2011), with human-like characteristics (Geuens, Weijters, and DeWulf 2009), or even relationship partners (Batra, Ahuvia, and Bagozzi 2012; Fournier and Alvarez 2012) by demonstrating that the mere process of seeing human in a brand (rather than specific attributions or human-like characteristics) increases liking for the brand.

Second, our work integrates fluency research with people's evolutionary tendency to categorize visual stimuli as human faces rather than objects (Dunning and Balcetis 2013; Öhman and Mineka 2001) to show that "seeing" a face increases brand liking because processing is more fluent than for ambiguous visuals. While researchers have frequently focused on consumer evaluative or affective response to brand communications (e.g., Batra and Homer 2004; Orth, Malkewitz, and Bee 2010; Till and Busler 2000), more recent research highlights processing fluency as a possible driver of brand liking (Novemsky et al. 2007; Labroo, Dhar, and Schwarz 2008; Orth and Malkewitz 2012). Our finding that it is the greater fluency of consumers seeing a face that leads to more positive brand evaluation, adds a metacognitive perspective to established advertising frameworks (MacInnis and Jaworski 1989).

Third, the present work unites the literatures on need-to-belong (Baumeister and Leary 1995;

Cacioppo et al. 2002; Donthu and Gilliland 2002) and motivational influences on visual perception (e.g., Balcetis and Dunning 2006) to show that a lack of social connection relates to “wishful seeing”, an enhanced recognition of human faces with subsequent misattribution of fluency-evoked positive affect to the brand. Extending advertising studies on loneliness (Donthu and Gilliland 2002) and research on individuals’ tendency to anthropomorphize (Epley, Waytz, and Cacioppo 2007) indicates that people with a greater need for social connection excel in seeing faces and are more likely to exhibit greater liking for the brand.

Several managerial implications of the present research are worth mentioning. Given the widespread use of visuals in wine advertising, promotion, or packaging, perhaps the most important implication of our work is to alert professionals to the relevance and possible effects of ambiguity in brand visuals. As our findings show, easily and effortlessly resolving visual ambiguity can lead to initial brand liking, especially when viewers “see human”. While this effect is likely to be more pronounced with faces (rather than other human shapes) given the human bias in resolving ambiguous stimuli, managers may be interested in benefitting from the phenomenon, for example in parallel to employing attractive endorsers.

Managers may also be interested in the evidence pointing at the potential of social connectivity as a driver of brand liking. Singles have been identified as an expanding market (Donthu and Gilliland 2002), and our finding that “seeing human” increases brand liking with consumers who feel lonely or tend to anthropomorphize may provide advertising and brand managers with an understanding of how to connect with single consumers. However, an important advantage of such an indirect approach (compared with directly portraying single consumers as a target audience) lies in its additional appeal to non-single consumers.

The finding that the positive effect of “seeing a face” holds not only with one’s own race but additionally with other-race faces may attenuate concerns that the practical relevance of our work could be limited to situations where the ethnicity of viewers matches the one of endorsers. We hope the contribution of this study will stimulate further research in this field.

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