

## **Logo design: examining consumer response to figurativeness across cultures**

### **Abstract**

Literature concerned with logo strategy suggests that the aesthetic appeal of brand logo significantly influences consumer reactions. The main purpose of this research is to study the influence of the different categories of figurative logo designs on consumer response. Through two studies in three countries, this research sheds light on consumer logo preferences, by investigating the psychological properties of the figurativeness of logo design. Results showed that figurativeness is an essential design element that significantly influences affective responses. Moreover, results suggest that natural designs are clearly preferred, and that the appeal of the different categories of figurative designs seems to be universal.

**Keywords:** *brand, brand logo design, consumer response, national cultures*

**Track:** *Product and Brand Management*

## **1. Introduction**

Literature concerned with logo strategy suggests that the aesthetic appeal of brand logo significantly influences consumer reactions. Yet, despite the fact that companies invest significant amounts of time and money promoting, updating and changing their logos, empirical studies of logo design issues are rare. In particular, there is little systematic research on the effect of logo design across different cultures.

The main purpose of this research is to study the influence of logo design characteristics more thoroughly, in particular the influence of the different categories of figurative designs on consumer response across different cultures. Through two studies in three different countries, Portugal, Spain and The Netherlands, this research will shed light on consumer logo preferences, by analyzing the universal appeal of the figurativeness of logo design.

## **2. Theoretical Background**

As a brand identity sign, a logo can refer to a variety of graphic or typeface elements, ranging from word-driven through to image-driven (Wheeler, 2003). In this study, the word “logo” refers to the graphical element that a company uses to identify itself or its products.

Affective reactions to a logo are critical, because such reactions can be transferred from the identity signs to the product or company with little or no processing (Henderson & Cote, 1998; Schechter, 1993).

Previous research in logo strategy has underlined the advantages of using pictorial or figurative logos. Schechter (1993) demonstrated that logos suggestive of a recognizable object can add the most value to the brands they represent. Henderson and Cote (1998) also found that logos representative of objects that have familiar and widely recognized meanings are more effective at producing correct recognition and positive affect than more abstract logos. According to these authors, natural forms are defined by the degree to which the form depicts commonly experienced objects. They are comprised of representative and organic characteristics (Henderson & Cote, 1998), including inanimate objects (e.g. the Traveler’s umbrella) and natural objects (e.g. Apple’s apple).

According to semiotics, figurativeness and its opposite endpoint, abstractness, reflect the degree to which a sign depicts objects from the natural and sensitive world: a sign is abstract when there are no links to the sensitive world; in the opposite situation, we would say that a sign is figurative (Greimas & Courtés, 1993). Logos depicting characters, places, animals, fruits or any other objects from the sensitive world demand lower learning efforts and are more recognizable (Henderson & Cote, 1998; Lencastre, 1997). Recognition for abstract and meaningless logos may be poor, and abstract designs are more difficult to interpret (Koen, 1969; Nelson, 1971; Seifert, 1992).

These findings are supported by the recognized aesthetic primacy of natural forms in logo design. In fact, Veryzer’s theory of aesthetic response suggests that individuals surrounded by a common, natural environment form similar non-conscious rule systems that inform their design preferences. The responses that individuals produce towards design, experienced as affects, are the results of consistency or inconsistency with several rule systems that are internalized at the deepest level (Veryzer, 1999). To the extent that one can count on a common physical environment, one can also count on a broad range of commonly acquired likings (Veryzer, 1999).

Figurative logos depict natural or real phenomena, and therefore one should expect figurative logos to be the most preferred logo.

In this research we will use the term cultural logo design when referring to logos that depict manufactured objects (i.e., buildings, furniture, everyday objects, writing symbols, etc.), and natural logo design when referring to logos that depict objects from the natural world (i.e., flowers, fruits, animals, landscapes, etc.). Thus, we propose a distinct classification of logo design, which reflects more accurately the degree to which design depicts commonly experienced objects, from the natural or cultural environment.

Based on previous insights, we expected to find differences in affective responses for consumers confronted with figurative compared to abstract logos. We expected higher affect for logo designs that represent objects from the natural or real world versus logo designs that represent abstract objects (Henderson & Cote, 1998; Lencastre, 1997; Landry, 1998). For example, Henderson and Cote (1998) and Henderson, Cote, Leong and Schmidt (2003) acknowledge the importance of figurative designs (which these authors call natural designs), and suggest that figurativeness (or naturalness) evokes a more positive affective response, but to our knowledge no study has differentiated between the different type of figurative logo designs. Through our research, we intend to contribute to the existing literature by increasing the understanding of the influence of the different categories of figurative logo designs on affective response.

Another aim of this research was to analyse how culture influences affective response to the figurativeness of logo design. Although previous research suggests there is cultural homogeneity in response to logo design (Henderson, Cote, Leong & Schmidt, 2003), this view is not unanimous (Kohli, Suri, & Thakor, 2002). Schmitt and Simonson (1997) propose that some cultures have more pronounced preferences for certain types of visual representations. However, some design preferences appear to be innate, or at least, acquired early in life. For example, Pittard, Ewing and Jevons (2007) found that preference for a particular design characteristic, namely proportion, is universal.

The main cultural dimension in which we focused is the Uncertainty Cultural Index (Hofstede, 1980). The uncertainty avoidance dimension expresses the degree in which the members of a society feel uncomfortable with uncertainty and ambiguity. The fundamental issue here is how a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? Countries exhibiting strong Uncertainty Avoidance Index (UAI) maintain rigid codes of belief and behaviour and are intolerant to unorthodox behaviour and ideas. Weak UAI societies maintain a more relaxed attitude in which practice counts more than principles. For the UAI cultural variable, Netherlands has a value of 53, Spain has a value of 86, while Portugal has a value of 104.

We hypothesize that cultures characterized by high levels of UAI (Hofstede, 1980) display preference for known/recognized shapes (figurative ones). As natural representations are the most familiar ones, we expect to link it with cultures with higher levels of UAI.

Finally, we want to explore the effect of socio-demographic variables on affective response towards logo design. Regarding gender, previous research suggests that females tend to prefer designs linked to natural themes like flowers, butterflies or the sun while, males tend to prefer designs linked to technology and machines, and so, related to cultural designs (Moss, Hamilton, & Neave, 2007; Rogers, 1998).

### 3. Method

We used unknown logos in this research, but we also included a smaller set of well-known logos. Unfamiliar stimuli were chosen to eliminate the effect of brand awareness and brand attitude on consumer response to logo design. Though, a small sample of well-known logos was included to analyze the effect of logo recognition on consumer response. Logos were presented in their original colours, because colour is one of the major aspects of a logo's characteristics besides design (Hynes, 2009).

Logos were obtained by asking non-European researchers, to suggest national logos with a low probability of being recognized in Europe, and which are either abstract or figurative. They were given definitions of the word logo and also figurative versus abstract logo design. Additionally, the most important books and websites related to logo design were searched to identify logos representative of the different categories considered.

These two approaches resulted in the creation of a large database with over 400 logos. Each logo was classified by the researchers according to recognition and logo design (abstract, natural or cultural). We considered including in this study: logos whereby all of the researchers agreed with the classification in terms of logo recognition; logos whereby three out of the four researchers agreed with the classification in terms of logo design.

96 pre-selected logos were presented to the respondents in each of the three selected regions. Logos were divided into 2 blocks of 48 logos, to avoid any fatigue. Each block was evaluated in the three countries by at least 100 respondents, recruited through a convenience method. This experiment was conducted using an online task.

A within-subjects design was used, so all participants were presented with several abstract, natural and cultural logo designs. Each participant evaluated 36 unknown logos and 12 well-known logos, as described in table 1 below:

**Table 1.** Number of logos according to recognition and design for each block considered in this experiment

Logos	Abstract (A)	Cultural (FC)	Natural (FN)	Total
Known	4	4	4	12
Unknown	12	12	12	36
Total	16	16	16	48

Respondents were first asked if they knew which brand the logo represents (recognition). Then, they were asked to categorize the presented logo as abstract, cultural or natural. In order to answer this question, participants were given definitions of abstract (i.e. “a logo that has no connection with the real world, is artificially constructed and non-representative ( i.e., squares, rectangles, triangles, horizontal or vertical stripes, circles and dots, ovals, arcs and swooshes, and so on)), cultural (i.e., “a logo representing cultural objects (i.e., buildings, furniture, transport vehicles, everyday objects, writing symbols, and so on)) and natural logo designs (i.e., “logos representing objects from the natural world (i.e., flowers, fruits, vegetables, animals, faces, bodies, landscapes, and so on)). Following this, we evaluated affect by asking respondents if they liked/did not like the logo, using a 7 point semantic differential scale.

The internal reliability of the different constructs was measured with Cronbach's Alpha. The two datasets were compiled (Portugal and Spain) and a MANCOVA was performed, considering two within-subjects factors (logo figurativeness and recognition), two between-subjects factors (country and gender) and two covariates (study and age).

#### 4. Major Findings

In this paper, we present the preliminary analysis of the results obtained in Portugal and Spain, but we are currently replicating the study in The Netherlands.

Based on logo affect scores and the two factors considered (logo recognition and figurativeness), 11 dimensions were calculated in each country. Cronbach's Alpha for each dimension ranged from 0.592 (in Portugal, for the known abstract logos in study two) to 0.942 (for the unknown logo group in study one, in Portugal). Most of the observed values are higher than the generally recommended lower limit of 0.70 for Cronbach's Alpha (Hair, Anderson, Tatham & Black, 1998), indicating that all the items in each dimension form a single, strongly cohesive and conceptual construct.

One of the major purposes of this experiment is related with evaluating the influence of the figurativeness of logo design on affect, and this was accomplished by measuring the affect revealed by the participants vis-à-vis the different logo design categories. In order to analyze this relation, a MANOVA was performed and results show that there are significant differences between all three categories of logo designs in both studies and in the two countries (Portugal - study one -  $F(2,111)=63.3$ ;  $p<.001$ ;  $\eta^2p =0.53$ ;  $\pi>0.99$ ; study two -  $F(2,105)=44.8$ ;  $p<.001$ ;  $\eta^2p =0.46$ ;  $\pi>0.99$ ; Spain - study one -  $F(2,148)=60.6$ ;  $p<.001$ ;  $\eta^2p =0.45$ ;  $\pi>0.99$ ; study two -  $F(2,103)=72.2$ ;  $p<.001$ ;  $\eta^2p =0.58$ ;  $\pi>0.99$ ).

We did not observe significant interaction effects between country and figurativeness [ $F(2,468)<1$ ;  $p=.402$ ;  $\eta^2p =0.004$ ;  $\pi=0.20$ ]. Thus, we can conclude that the two cultures respond in a similar manner to figurativeness. Natural logos are always the ones better evaluated, both in Portugal and in Spain, followed by cultural logos, and abstract logos designs are always the ones worse evaluated. (Portugal - study one -  $M=3.18$ ,  $DP= 0.750$ ; all  $p <.001$ ; study two -  $M=3.39$ ,  $DP= 0.716$ ; all  $p <.05$ ; Spain - study one -  $M=3.89$ ,  $DP= 0.789$ ; all  $p <.001$ ; study two -  $M=4.07$ ,  $DP= 0.780$ ;  $p <.05$  only for FN and A; no significant differences were found for FN and FC;  $p=.273$ ) calculated with the Bonferroni's adjustment for multiple comparisons). These results are consistent with our expectations, and confirm the influence of the figurativeness of logo design on consumer's affective response.

We observed a triple interaction effect of logo recognition, figurativeness and gender on affect towards logos [ $F(2,468)=5.57$ ;  $p=.004$ ;  $\eta^2p =0.023$ ;  $\pi=0.86$ ]. In respect to abstract logos, well-known ones are better evaluated by men, but unknown logos are similarly evaluated by men and women. In regard to natural logo designs, we observe even clearer differences between men and women. Women show a higher affect towards unknown natural logos. This result is in line with previous literature on gender differences in design preferences, which pointed out that the preferred design themes for females are people, plants, animals and other natural elements (Rogers 1998; Iijima et al 2001).

#### 5. Implications and Further Research Avenues

The preliminary results confirm the advantages of using figurative logos (Henderson & Cote, 1998; Schechter, 1993). Our findings suggest that figurativeness is an essential logo design element, which influences affective response to the logo. Indeed, in both studies of this experiment, and in both cultures, figurativeness explains a high percentage of affect towards the logos.

Spain data validates the previous results obtained for Portugal: for countries with high levels of UAI, natural logo designs are always better evaluated in terms of affect, followed by cultural designs. Abstract logos always induce lower levels of affective response by the respondents. Additionally, affect towards unknown natural logos and towards well-known abstract logos is similar. Hence, by choosing a natural logo design, a new brand will begin with a level of affect identical to the one of an established brand with an abstract logo.

To summarize, despite the effect of the explored socio-demographic variables on the affect to logo design, the main result of this research is that in both cultures figurative logos are clearly preferred to abstract logos and, within figurative logos, natural designs are favored over cultural designs. Thus, for maximum positive affect it is suggested that managers of international brands choose logos with figurative designs. According to the previously stated hypothesis, we expect to find sources of heterogeneity once the Dutch data is included in the analysis.

There are some limitations of the research that should be noted. Firstly, the convenience sampling method may not be totally representative of the population. Secondly, affect was measured through one item only (like/do not like). However, in this research, we are measuring affect towards three different categories of logo designs and towards unknown and known logos, thus we are measuring affect towards a minimum of four different objects, although we are conscious that this could have implications on the internal consistency of the measured dimensions. Third, once we have the data for the three countries, we will make use of a recent methodological development by Van Rosemalen, Herk and Groenen (2010) in order to differentiate response style and content of the items in rating scale responses. This new methodology is particularly relevant in our study since we could have several non-desired sources of heterogeneity in responses, like style differences due to the use of two different samples for each country, or other style bias coming from segmentation variables like gender or age.

Additional research should include larger and more representative sample sizes that could allow us to explore the effects of gender and age, as well as the possible interaction effects between these variables.

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