Research Article

Japanese Perception of Arabic and English Corporate Logos

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ABSTRACT

Recently, Japanese are increasingly interacting with Arabic logotypes as a consequence of growing trade between Japan and Arab countries. This paper aims to examine Japanese consumer perception of Arabic alphabetic logos compared to English of the same corporate. With 20 logos as stimulus of 10 globally well-known companies (FedEx, Burger King, CNN, Subway, Tide, Baskin-Robbins, Vodaphone, Starbucks, Coca Cola, and Adidas), a questionnaire survey was curry out by fifty undergraduate students (35 males, 15 females) corresponding to our explanatory study design. In (SPSS) data entry, Factor Analyses of interval sampling extracted three main images for corporate logos, that is "Traditional and Consistent," "Familiar and Favorable," and "Creative and Innovative" and revealed that Arabic logos are creative but unfamiliar to Japanese in result. Moreover, another result was detected by Rough Sets analyses of (ROSE2) showing that Japanese are more familiar with English alphabetic logos than they are with Arabic alphabetic logos. Our conclusion suggests that to enhance the recognition of Arabic corporate logos in Japan, it is essential to familiarize Japanese with the Arabic alphabet.

Keywords: Arab corporate, Logo Design, Japan

1.Introduction

Building and enhancing a corporate brand is crucial in a competitive marketplace. Among the brand strategies used by companies is logo design, which is the most visually appealing means in commercial advertisements for consumer products. Logos appear in TV commercials, packaging and product designs, letterheads, business cards, print advertisements, and annual reports, among others. Logos are a critical in-store recognition aid, speeding selection of the preferred product. A large body of research exists on the psychological effects of corporate logos (e.g., Janiszewski et al. 2001, Melewar et al. 2005, Mori et al. 2004). Ohkata and Yamashita have aggregated these studies into three effects: 1) Recognition: Consumer awareness of corporate logo existence, 2) A common shared meaning: Commonality between consumer perception of corporate logo and corporate intended logo image, and 3) Positive effect: Corporate logo favorable impression on consumers. Since these three effects not only persuade consumers in their purchasing decisions but they also support companies with needed human resources employment as well as increasing corporation employees' motivation, in this way, it is arguable that the influence of corporate logos is significant (Okata & Toshiyuki, 2007).

2. Problem Statement

As Japan has embraced the English language in part to compulsory English education in public schools (Tatsuki, 2011), Japanese people are much more familiar with the English

alphabet than the alphabets of other languages. However, Arabic language is becoming more prevalent in Japan due to the improvement of diplomatic ties and growing trade between Japan and Arab countries, hence the need for Japanese to contact with Arabic corporate logos is compelling (Hiromi, 2012). Although evolutionary psychology suggests that the response of people from different cultures to visual stimuli is genetically programmed and relatively immune from cultural influence (Adams et al. 2003), a number of empirical studies indicate that emotional responses to logo designs differs by cultural attributes used in the design (e.g., Perfetti et al. 2005, Zhang et al. 2006). Therefore, in order to understanding how English and Arabic alphabetic corporate logo images impact one's perception, it requires to grasp the psychological effect of corporate logo images.

3. Aim

This study examines Japanese consumers' perceptions of Arabic and English alphabetic logos of the same company, and we hope that our findings will help to improve Arabic corporate logo designs for the Japanese market.

4. Stimulus and Question Items

A total of 20 logos representing 10 globally well-known companies in Arab and Japan were selected as a stimulus of 10 Arabic and English alphabetic logos: FedEx, Burger King, CNN, Subway, Tide, Baskin-Robbins, Vodaphone, Starbucks, Coca Cola, and Adidas, as shown in Figure 1.

Figure 1. Examples of corporate logos

In order to ensure that the questions are designed to address the needs of this research and questions asked are the right ones, the mechanics of the questionnaire were based on empirical Japanese research (e.g., Okata et al. 2007, Yamashita et al. 2010, 2014). A booklet of 10 pages where each contained two corporate logo versions, in Japanese and Arabic. The description of the 12 logo image questions are as follows: "1. Energetic: motion sense", "2. Innovative: inspiration sense, "3. Familiar: recognition sense", "4. Consistent: solid sense", "5. Reliable: professionalism sense", "6. Favorable: goodness sense", "7. Traditional: custom sense", "8. Promotable: progress sense", "9. Futuristic: vision sense", "10. Creative: skill sense", "11. Characteristic: feature sense", and "12. Luxurious: class sense." Here is the five-point rating scales used for this study: ("1.Yes", "2. Somewhat Yes", "3. Neither way", "4. Somewhat No", and "5. No").

Fifty subjects participated in the survey (35 males, 15 females) from among undergraduate students majoring in industrial art design at a university in Tokyo. Subjects were first shown three logos - Fedex, Burger King, and Coca Cola - to illustrate the task, and then were given the questionnaire booklets to simultaneously rate his or her answers.

5. Factor Analyses

The validity of cross-individual comparison scores are vital to many practices in applied psychological research. The premise of researching in individual personality or perception is to construct comparability; hence the use of an adequate analyses method is important for true representation of the collected data. Relative factorial invariance is widely tested with factor

analyses that allows one to empirically test obtained data and then translate it into factor analytic language, so that the main factors can be clarified. (e.g., Okata et al. 2007, Yamashita et al. 2010, Zumbo et al. 2005)

5. 1 Results and Discussion

In our survey, the correlation matrix in the evaluation data of the 20 corporate logotypes was examined by factor analyses method application (Yamashita et al. 2010). Analytic procedures revealed three groups of substantially correlated variables representing three main factors with given values equals or more than 1 ($\lambda \geq 1$) and cumulative contribution rate of 66.94%. The following three variables combinations of "4. Consistent" and "7. Traditional", "6. Favorable" and "3. Familiar ", and "10. Creative" and "2. Innovative" have high factor loadings scores, each pair was considered a main factor and represented the image level of "Traditional-Consistent", "Favorable-Familiar", and "Creative-Innovative ", respectively as it has been found in similar previous research (e.g., Yamashita et al. 2010, 2014). Moreover, Varimax rotation was selected for determining the dimensionality of each extracted factor as in Table 1 below.

Table 1 : Factor loadings

Item	Factor 1 (F1) Traditional-Consistent	Factor 2 (F2) Familiar-Favorable	Factor 3 (F3) Innovative-Creative
4. Consistent	0.79	0.19	-0.08
7. Traditional	0.75	0.11	0.15
9. Futuristic	0.71	0.35	0.23
12. Luxurious	0.67	-0.01	0.43
5. Reliable	0.67	0.55	0.05
8. Promotable	0.53	0.41	0.38
6. Favorable	0.39	0.75	0.17
1. Energetic	-0.08	0.75	0.37
3. Familiar	0.36	0.75	0.09
11. Characteristic	0.08	0.12	0.83
10. Creative	0.16	0.20	0.78
2. Innovative	0.12	0.44	0.62
Factor loadings sum of squares	3.20	2.56	2.28
Factor contribution ratio	26.64	21.34	18.97
Cumulative contribution ratio	26.64	47.98	66.94

The average scores of factor 1 (F1) and factor 2 (F2) in Figure 2 shows that the image of "Traditional-Consistent " and "Familiar-Favorable" scored low for Arabic logos and high for English alphabetic logos although logo marks are similar in shape and color, indicating presence of unfamiliar attributes towards Arabic characters.
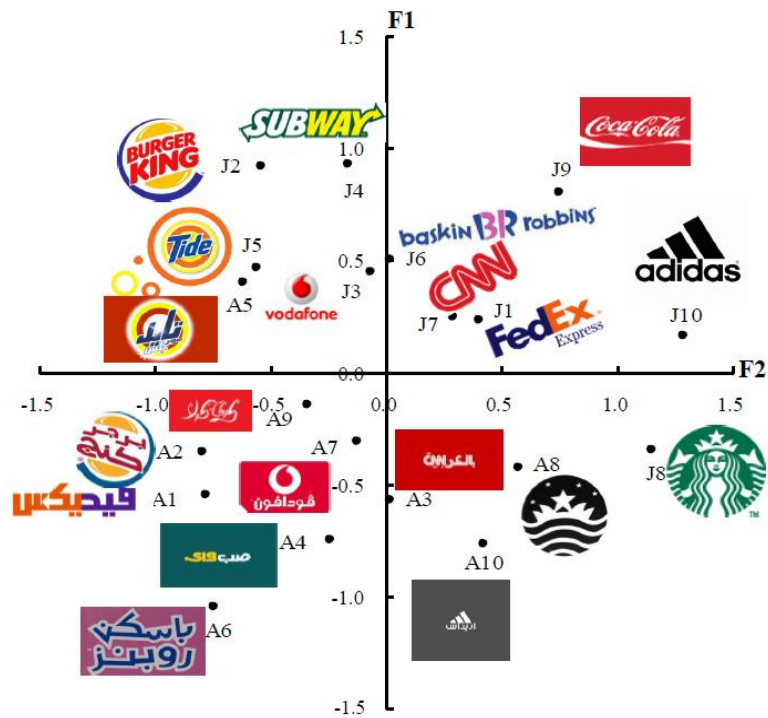
Figure 2 : Average scores of Factor 1 and Factor 2

In contrast to Figure 3, the average scores of factor 2 (F2) and factor 3 (F3) reveals that "Innovative-Creative" image scored higher among Arabic logos than English alphabetic logos. It clarifies a high level of creative attribute perception toward designs using Arabic characters.
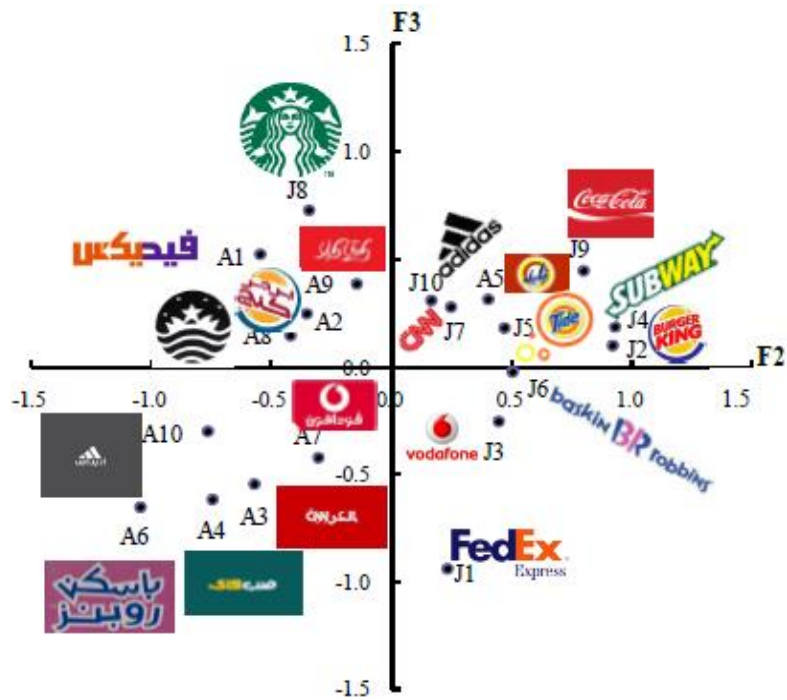

Figure 3 : Average scores for Factor 2 and Factor 3

6. Rough Sets Analyses

  Although factor analyses extracted three dimensions of the main corporate logo images "Tradition-Consistent", "Favorable-Familiar", and "Creative-Innovative," how logo attributes influence Japanese perception was still unclear. In order to obtain adequate contraction of minimum attributes combination as well as identifying the psychological relationship between logo samples and subjects perceptions, an additional mathematical analyses approach known as rough sets proposed by Zdzisław Pawlak (Pawlak, 1982) would be imperative. In psychology, it is been used widely for data explicit interpretation and accurate minimal sets by revealing the causal relationship between "If" and "Then" rule decisions (e.g., Skowron, et al. 2002, Polkowski et al, 2001, 2002, Yamashita et al, 2014).

6.1 Results and Discussion

  Rough set analyses require binary variables for a case or an event. Each variable takes the values 0 or 1, that is, each case or event is conceived as a configuration of conditions. Data have the form of a decision table in which the columns represent causal variables (logical variables) may take the values 0 or 1and the rows represent cases (Ragin, 1987). The composition of decision table between logo design structure (logo mark, logo entirety, and logotype) and main corporate logo images (Traditional-Consistent, Familiar-Favorable, and Innovative-Creative) is shown in Table 2) Target set U, 2) Attribute Set Condition C, and 3) Attribute Set Decision D. Target set U is made of corporate logo, Attribute Set Condition C consists of the following equations: C = {Logo Mark (1 for Present, 0 for Absent), Active-Inactive (1 for Active, 0 for inactive), Solid sense (1 for Present, 0 for Absent), Logotype thickness (1 for thin, 0 for thick), Logotype Italic sense (1 for Present, 0 for Absent), Logotype variation of base line (1 for Present, 0 for Absent), Logotype white color processing (1 for Present, 0 for Absent), Logotype language type (1 for Known, 0 for Unknown}, and finally Attribute Set Decision D of main corporate logo images D = {Traditional-Consistent, Familiar-Favorable, and Innovative-Creative (given 1 when image score is greater than Zero, 2 when image score is lower than zero) }.

The goal of rough set analyses is to specify the different configurations of the causal variables that produce the outcome variable. And the goal of logical minimization is to represent the data in a rationally constructed shorthand manner as the table below demonstrates. The sets shown in Table 3 were minimized by contraction technique and the following complementary rules were applied based on decision class weights (0.9), (0.6), and (0.444) respectively. : 1) If [known Language] exists in corporate logo Then ["Familiar- Favorable" Image] exists, 2) If [Solid Sense Present] and [known Language] exist in corporate logo Then ["Traditional-Consistent" Image] exists, and 3) If [Logo Entirety Active] And [Italic Sense Present] And [White Color Processing Present] exist in corporate logo Then ["Innovative-Creative" Image] exists.

It clarifies that in order to impart the image of "Familiar- Favorable" or "Traditional-Consistent" in a corporate logo it is important that the language character used in a logo design be known by Japanese. Moreover, since the image of "Innovative-Creative" correlates with [Logo Entirety] and [Logotype], and not necessarily with [Logo Mark], it reveals that the image of "Innovative-Creative" for a corporate logo can be imparted by the combination of logo attributes used in logo design not by concentrate on a specific attribute.

7. Conclusion

  Our findings reveal that the perception of Arabic and English logos by Japanese consumers for the same company differs because of the unfamiliarity with Arabic alphabets and familiarity with the English alphabet, however, a strong image of creativity was found in Arabic logo design attributes although Arabic characters are not well-known in Japan. Out findings suggest that to enhance the recognition of Arabic corporate logotypes in Japan, it is important to familiarize Japanese with Arabic alphabets.

Table 2: Decision Table

Target Set U	Attribute Set Condition C									Attribute Set Decision D		
	Logo Mark	Logo Entirety		Logo Type (Font)					Traditional Consistent	Familiar Favorable	Innovative Creative
Sample	Present Absent	Active Inactive	Solid Sense	Thickness	Italic Sense	Baseline Change	White Color Processing	Language			
J1	0	0	1	0	0	0	0	1	1	1	2
A1	0	0	0	0	0	0	0	0	2	2	1
J2	1	1	0	0	1	0	0	1	2	1	2
A2	1	1	0	0	1	0	0	0	2	2	1
J3	0	0	0	0	0	0	1	1	2	1	2
A3	0	0	1	0	0	0	1	0	2	2	2
J4	0	1	0	0	1	0	1	1	2	1	1
A4	0	1	1	0	0	0	1	0	2	2	2
J5	1	0	0	0	1	0	0	1	2	1	1
A5	1	0	1	0	1	0	1	0	2	1	1
J6	0	0	0	0	0	0	0	1	2	1	2
A6	0	0	1	0	1	0	0	0	2	2	2
J7	1	0	0	0	0	0	0	1	1	1	1
A7	1	1	1	0	0	0	1	0	2	2	2
J8	1	0	1						1	2	1
A8	1	0	1						1	2	1
J9	1	1	1	1	1	0	1	1	1	1	1
A9	0	1	1	1	1	0	1	0	2	2	1
J10	1	0	1	0	0	0	0	1	1	1	1
A10	1	0	1	1	0	0	1	0	1	2	2

Table 3 : Contraction

Decision Class	C	Logo Mark		Logo Entirety				Logotype (Font)									
		Present-Absent		Active-Inactive		Solid Sense		Thickness		Italic Sense		Baseline Change		White Color Processing		Language	
		Present	Absent	Active	Inactive	Present	Absent	Thin	Thick	Present	Absent	Present	Absent	Present	Absent	Known	Unknown
Traditional Consistent	2					0.6										0.6	
		0.6			0.6			0.6			0.6						
											0.6		0.6		0.6	0.6	
Familiar Favorable	1															0.9	
Innovative Creative	3			0.444						0.444				0.444			
		0.444			0.444			0.444									

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