

## Arabs Perception of Japanese and English Products Logos

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**Abstract:** As a result of increased globalization, the Japanese public and corporations alike are beginning to interact more openly with Arab marketplace. This paper primary focus is to compare products logo images of Japanese characters logotypes to those of English alphabetic logotypes design in the Arab world. By Factor analysis we were able to extract three main images-- “Reliable and Luxurious,” “Creative and Innovative,” and “Familiar and Favorable-- and to reveal by cluster analysis that Japanese characters logotypes products seem to possess the image of highly reliability and creativity than English alphabetic logotypes products. Conceptually, it suggests that although Japanese language is not familiar in the Arab world, products with Japanese character logos design seem to be highly reliable to Arab consumers, and therefore, the familiarization of Japanese language to Arab consumers is not significant for marketing Japanese logotypes products in Arab marketplace, however such as marketing promotion work can be significant to familiarize Arab people with Japanese language..

**Keywords:** Arab Consumer, Japan, US, Logo design, Cluster analyses

### 1. Introduction

Graphic images have been used throughout human history to communicate messages, ideas and express various elements of emotion. Graphic image design has the profound ability to instantly attract individuals towards targeted idea. While graphic design in an aesthetic capacity has been a human pursuit throughout recorded history, graphic design as a communicative logo tool is newer strategy of recent corporations in commercial sector (Eibo et al. 2017). Logo design can be defined as the process by which certain graphic and text are combined for the purpose of advertisement, branding and accentuating meaning. The features of graphic logo impart images that can be used to evoke emotion and influence one’s personality (Edell & Staelin, 1984). Unconsciously, individuals are inundated with purposeful logos by graphic designers in daily life. Logos appear in web design, advertising layout, TV commercial, corporate signs, and products packaging creation in marketplace. Understanding how logo design can make meaning and psychological influence has been a theme of interest in system design study arena. Designers should be cognizant of their respective field of logos intended meaning and focus on how logo designs can be influential in that particular discipline. Since logo topics should be specific to own intended objectives than theory, logo design works is to be interdisciplinary (Okata, et al. 2007).

## 2. Problem Statement

Rapid advances in the 20 century's technology and communication have made it easier to overcome world boundaries. An evaluation of globalization revolution effects on mankind cultures is likely possible, but hard to be fully examined especially in the Arab world. The frame of orientalism has constantly guided the way Arab people are represented, in fact, misrepresented in Japan. The deformation of the Arab culture residing in Japanese education system remains unfavorable reality in Japanese society although globalization has been one key word in Japan future development plan recently. In Japan, the Ministry of Foreign Affairs (MOFA) has undertaken tremendous efforts to diversify the Japanese food products as a new trading potential in Arab Halal market by the cooperation between Japan External Trade Organization (JETRO) and Malaysia External Trade Development (MATRADE) since December 2005. As a result, the interest in interacting with the Arab marketplace have increased in Japan private sector where in a number of Japanese corporations, large & SMEs- sized, are beginning motivated to increase exportation of "Made in Japan" products to the Arab countries but unfortunately with poor knowledge of Arab people cultures and consumer needs.

## 3. Objective

For the Arab World's marketplace, Arab people are used to alphabetic logos design than pictorial logotypes. Truly logos designed by Japanese characters reflect meaningful and positively influential image of Japanese products for own people. But would that image be the same in Arab market where Arabs are used to products with alphabetic logos design than pictorial ones? In this paper we intend to define the Arab people perception of different products with Japanese character logotypes in an attempt to providing vital outlines for Japanese logo design industry.

## 4. Methodology

In psychological research although cluster analysis as an indiscriminant method does not identify a particular statistical model as discriminant analysis such as heretical regression method or factor analysis, we decided to apply both of them to classify membership variables and cases into categories. To ensure that the questionnaire items are specifically designed to address this paper objective and provide good empirical data, the questionnaire content was extracted from previous survey (e.g., Mori et al 2004, Okata & Yamashita 2007, Yamashita et al 2016). A booklet of 12 pages where each contained pair of product Logos from USA and Japan. Each pair of logos appeared on separate page with five-point rating scales: ("1. Yes", "2. Somewhat Yes", "3. Neither way", "4. Somewhat No", and "5. No") to be evaluated by respondents corresponding to logo image of: 1) Energetic 2) Innovative, 3) Familiar, 4) Consistent, 5) Reliable, 8) Promotable, 9) Futuristic, 10) Creative 11) Characteristic, and 12) Luxurious. Subjects participated in this study were 88 Arab consumers were chosen randomly at Gulfood international food exhibition in UAE (68

males and 20 females). Each participant rate his/her answers for each logo of the following 12 products: Washing detergent, Laundry Detergent, Glass detergent, Dishwasher detergent, Soft drink, Perfume, Soap, Beer, Biscuits, Fruit can, Toilet Paper, and Tobacco in sold in local Japan and US market as shown in Figure 1.



Figure 1. Example of product logos

## 5. Factor Analysis

In reality, difference in obtained scores may be clouded with many confounding variables such as familiarity with item response, and many other socio-cultural factors relevant to Arab personality. Unless proof evidence is demonstrated, construct comparability should never be naively assumed. The premise of researching in individual personality or perception is to construct comparability; hence the utilization of an adequate analyses method is important for true representation of the collected data. Relative factorial invariance is widely tested with Factor Analysis that allows one to empirically test obtained data and then translate it into factor analytic language, so that the main factors can be clarified (Mori et al 2004). To our knowledge in the Arab world, not much psychological researchers on logo design have investigated the appropriate fit indices of correlation matrix for categorical data using alternative behavioral methods such as factorial invariance. A confirmatory statistical methodology, factor analysis, we applied for true representation of our collected data (Zhang at el 2006) In our study, the correlation matrix in the evaluation data samples was tested by factor analysis measurement (Yamashita at el 2016) Analytic revealed three categories of substantially correlated variables of three main factors with given values equals or more than 1 score ( $\lambda \geq 1$ ) and cumulative contribution rate of 62.915%. The following three variables combinations "5. Reliable" and "12. Luxurious", "10. Creative" and "2. Innovative ", and "3. Familiar" and "6. Favorable" have high factor loadings scores respectively, hence the definition of main factors represents the level of the following images: 1) "Reliable- Luxurious", 2) "Creative-Innovative", and 3) "Familiar-Favorable", being

featured in logos design of examined products. In order to make the interpretation of the factors that are considered relevant, it is important to stress that because the rotations always take place in the subspace of the retained factors space, the choice of this subspace strongly influences the result of the rotation. Hence, we employed Varimax rotation technique to determine the dimensionality of extracted factors and their relationships to assess the robustness of the interpretation in which original factors variance of the loadings is maximized as in Table 1 below (Eibo et al 2017).

**Table 1. Factor loadings**

Item	Factor 1 (F1)	Factor 2 (F2)	Factor 3 (F3)
	Reliable-Luxurious	Creative- Innovative	Familiar -Favorable
<b>5. Reliable</b>	0.859	-0.047	-0.022
<b>12. Luxurious</b>	0.858	0.136	0.116
<b>11. Characteristic</b>	0.846	-0.091	0.299
<b>1. Energetic</b>	0.580	-0.271	0.351
<b>8. Promotable</b>	0.427	0.275	0.414
<b>10. Creative</b>	-0.082	0.814	0.141
<b>2. Innovative</b>	-0.032	0.798	-0.056
<b>7. Traditional</b>	-0.040	0.731	0.201
<b>4. Consistent</b>	0.332	0.586	-0.329
<b>3. Familiar</b>	0.055	0.150	0.719
<b>6. Favorable</b>	0.337	-0.152	0.699
<b>9. Futuristic</b>	0.191	0.443	0.618
<b>Eigenvalue</b>	3.238	2.594	1.987
<b>Factor contribution ratio</b>	24.961	21.395	16.489
<b>Cumulative contribution ratio</b>	24.961	46.870	62.915

## 6. Cluster Analysis

Clustering analyzation method has been used in a number of different ways in human sensory evaluation for the recognition of variables patterns. Although our segmentation of logo images was clearly recognized by factor analysis, still variables variation in the possible input are wide. In such instances, the use of the appropriate clustering technique can find very effectively a preliminary assignment for variables classes then refined them into group of cases. Therefore, in order to determine which variables are the most similar or different using the results of the derived loading factors of Varimax technique, we used cluster analysis approach to clarify patterns of similarities and differences among obtained variables more accurately by determining the multi-dimensional distances between various groups of variables and then

selecting those groups of variables within which the distances are relatively small (Yamashita et al 2010). Although the result of factor analysis extracted three main images for Japanese and English logotypes products, it is required to know the classification rules used to derive group membership for certain case in our study. Hence we applied cluster analysis to identify those actual groups among Japanese (J) and English (E) logotypes which are only relevant to main images of "Reliable-Luxurious", "Creative-Innovative", and "Familiar-Favorable". Conceptually it classified two subdivided homogeneous groups (J) and (E) of {22 (J), 3 (J), 11 (J), 13 (J), 7 (J), 18 (J), 10 (J), 19 (J), 15 (J), 14 (J)} and {17(E), 23 (E), 10 (E), 8 (E), 2 (E), 9 (J), 11(J)}, respectively. Low homogeneity clusters of remaining group {1 (E), 5 (E), 21 (E), 2 (J), 13 (E), 6 (J), 16 (E)} were omitted as shown in Table 2.

**Table 2. Cluster**

Number of clusters	Factor 1 (F1)				Factor 2 (F2)				Factor 3 (F3)			
	Stimuli	Reliable-Luxurious	Creative- Innovative	Familiar -Favorable								
1	1 (E)	0.534	-0.026	-0.388								
2	5 (E)	0.447	-0.031	-0.422								
3	21 (E)	0.661	-0.010	0.013								
4	2 (J)	0.644	-0.407	-0.472								
5	22 (J)	1.061	0.491	-0.953								
6	3 (J)	1.042	0.591	-0.706								
7	11 (J)	1.033	0.073	-0.581								
8	13 (J)	0.982	0.127	-0.453								
9	7 (J)	1.901	0.417	0.126								
10	18 (J)	0.842	0.682	-0.305								
11	10 (J)	0.719	0.410	0.491								
12	19 (J)	0.676	0.212	-0.500								
13	15 (J)	0.597	0.462	0.100								
14	14 (J)	0.501	0.621	-0.789								
15	13 (E)	-0.881	-0.200	-0.346								
16	6 (J)	-0.705	-0.058	-0.329								
17	16 (E)	-0.892	0.289	0.016								
18	17 (E)	-0.539	-0.511	1.229								
19	23 (E)	-0.591	-0.421	0.990								
20	10 (E)	-0.723	0.328	-0.031								
21	8 (E)	-0.552	-0.993	0.848								
22	2 (E)	-0.281	-0.192	1.111								
23	9 (E)	-1.174	-1.654	0.999								

24	11 (E)	-0.401	-0.431	0.597
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The examination number of cases in the final cluster solution in Table 3 shows that average scores of main factors F1 "Reliable-Luxurious" and F2 "Creative-Innovative" is significantly higher for Japan group (J) than is in English group (E) but it is the opposite for F3 "Familiar-Favorable". A fair comparison between average scores of two groups (J) and (E) appoints that although "Familiar-Favorable" image level for Japanese logotypes is relatively lower than is for English logotypes (-0.357 < 0.821), the image level of "Reliable-Luxurious" and "Creative-Innovative" is, on the contrary, greatly higher for Japanese than is in English products logotypes {( 0.933 > -0.457), (0.408 > - 0.553)}.

**Table 3. Distribution of cases in cluster**

	Case	N	% of Combined cases	% of Total cases	% of F1	% of F2	% of F3
<b>Cluster</b>	Japan (J)	10	58.823%	41.666%	0.933	0.408	-0.357
	English (E)	7	41.176%	29.166%	-0.457	- 0.553	0.821
	Combined	17	100.0%	70.833%			
<b>Excluded Cases</b>		7		29.166			
<b>Total</b>		24		100.0%			

## 7. Discussion

The examination of the factor loadings in our study prioritized three influential images significantly and substantially different from zero value "Reliable-Luxurious", "Creative-Innovative", and "Familiar-Favorable". Relatively it clarifies that logo design characteristics are captured by the same factorial structures and also directly outperforms simultaneous basics for Japanese logotypes design industry in commercial sectors with three dimensions: 1) Reliability, 2) Creativity, and 3) Familiarity. Moreover our findings in cluster analysis reveal that although the Arabs perception of Japanese and English logotypes towards the same kind of products differs because of the unfamiliarity with Japanese language characters and familiarity with the English alphabets, Japanese character logotypes designs are likely to impart high image of reliability and creativity by Arab people perception.

## 8. Conclusion

Conceptually, it suggests that although Japanese language is not familiar in the Arab world, products with Japanese character logos design seem to be highly reliable to Arab consumers, and therefore, the familiarization of Japanese language to Arab consumers is not significant for marketing Japanese logotypes

products in Arab marketplace, but such as promotion work can be significant to familiarize Arab people with Japanese language.

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### الملخص:

نتيجة لزيادة العولمة، بدأ الجمهور الياباني والشركات على حد سواء في التفاعل بشكل أكثر انفتاحاً على السوق العربية. هذه الورقة التركيز الأساسي هو مقارنة المنتجات شعار صور من الحروف اليابانية لوغوتيبس لتلك الإنجليزية الأبجدية تصميم الشعارات في العالم العربي. من خلال تحليل عامل كنا قادرين على استخراج ثلاث صور رئيسية - "موثوقة وفاخرة"، "الإبداعية والابتكارية" و "مألوفة ومفيدة - وكشف عن طريق تحليل العنقودية أن الأحرف اليابانية لوغوتيبس المنتجات يبدو أن تمتلك صورة عالية والموثوقية والإبداع من المنتجات الإنجليزية لوغوتيبس الأبجدية. ومن الناحية النظرية، فإنه يشير إلى أنه على الرغم من أن اللغة اليابانية ليست مألوفة في العالم العربي، فإن المنتجات ذات تصميم الشعارات اليابانية الطابع تبدو موثوقة للغاية للمستهلكين العرب، وبالتالي، فإن تعريف اللغة اليابانية للمستهلكين العرب ليست كبيرة لتسويق المنتجات لوغوتيبس اليابانية في السوق العربية، ولكن مثل العمل الترويج التسويق يمكن أن تكون كبيرة لتعريف الشعب العربي باللغة اليابانية ..

الكلمات المفتاحية: المستهلك العربي، اليابان، الولايات المتحدة، تصميم الشعار، تحليلات الكتلة.