

HOW MANY HUMANITY ELEMENTS ARE NEEDED FOR DESIGN OF CHARACTER?

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Abstract: In the unique culture of Japanese characterization, personification is a prominent technique. This technique has become increasingly popular in Japan over the past few decades. It involves attributing human-like characteristics to inanimate objects. There are two categories to this technique – personification via verbal language, and personification via modeled characters. In this research, the two categories of personification are defined as linguistic personification and model personification respectively. In Japan, model personification has seen extensive development due to influences from pop culture, namely from Japanese comics and animation. Model personification can further be subdivided into two categories: models created by adding human characteristics such as limbs and mouths to inanimate objects, and models created to fully resemble a human being. The objective of this research is to study, “the levels of personification” in Japanese advertising. Specifically, I aim to explore the effects of this, both positive and negative, on consumers. The paper focuses on the basic element of model personification, i.e., personification of illustrated figures but not modeled characters used in animations.

Keywords: *levels of personification, character culture, advertising effectiveness*

1. Introduction

The style known as anthropomorphism has been used since ancient times in Japan, even before there was a societal awareness of such creations as "characters." Japan allowed idolatry, so, unlike monotheistic religions such as Christianity or Judaism, Shinto deities, Buddha, and nature were personified in Japanese culture. Animistic ideology can be defined as attaching a personality to everything in the natural world. Epley, Waytz and Cacioppo (2007) argue that animism is the belief that a non-living thing has life. Anthropomorphism is the additional application of human character and psychology to that thing

Aside from its cultural trappings, anthropomorphism is also an example of an effective marketing style in advertising and publicity. According to Sekizawa (2012), anthropomorphism had already appeared in advertising by the 1970s. It continues to be used today. Softbank's Shirato Family commercial series is an example of highly successful personification advertising. This commercial series shows the everyday life of a husband, wife, son, and daughter, but what sets the series apart from others is that the father is a dog. Like character culture, Japan has a developed anime, manga, and video game pop culture, which is exported overseas as "Cool Japan." The modern pop cultures called Moe and Otaku, which are the root of the “Cool” culture, have had a significant effect on figurative

anthropomorphism. With figurative anthropomorphism, inanimate objects are given human characteristics such as limbs and faces. However, in Japan, animators go further by creating characters that have the distinction of actually becoming human themselves. This is a unique characteristic of Japanese culture and it an aspect of Japanese characterization. In addition, there are different stages to the figurative anthropomorphism. In other words, between the time when the character is in the state in which a face and limbs have simply been added and the state when the object has become completely human, it might be in another, intermediary state. There are many figurative anthropomorphic characters, which, in this state, may resemble a character costume, or be in an extremely deformed shape made up of two or five main parts.

Stages of anthropomorphism are often used in robotics. In robotics, roboticist Masahiro Mori coined the term the "uncanny valley" in 1970 to identify the phenomenon of humans feeling a sense of discomfort or aversion toward humanoid robots when the robots get too close to resembling real humans. The stages of anthropomorphism, thus, are the degree to which a robot resembles a human.

2. Prior research

2.1. Prior work on mascots

Aaker (1991; 1996) acknowledges that the use of mascots for branding can contribute to the creation of images with emotional value or self-expression, or the creation of brand personality, in a fashion decoupled from the core attributes (functional value) of the product itself. By possessing anthropomorphic qualities, the mascot adds an image to the brand that goes beyond the individual product. Rikukawa and Nishioka (2002) note five key indices of whether mascot-based strategy is effective in marketing: 1) brand recognition; 2) effect on sales; 3) effect on sales promotion; 4) enhanced image; and 5) communication with the target consumer. A highly successful mascot can mean obtaining these five benefits at once.

Kojima (1993) also analyzes the potential benefits of using mascots. He aligns the use of a successful mascot with a that of a popular celebrity and finds six potential benefits: 1) increasing interest or awareness of the advertising in question; 2) differentiating a brand; 3) using interest in the mascot to enhance interest in the advertising or product therein; 4) using affinity or affection towards the mascot to enhance affinity and affection for the product, brand, or company; 5) making the product's benefits or explanation more persuasive; and 6) securing or strengthening a brand image.

Moreover, Yamamoto (1993) categorizes mascot roles and types into three groups: 1) matter-of-fact; 2) abstracted-meaning; and 3) imbued-meaning. Matter-of-fact mascots are defined as those that duplicate the product's core attributes comparatively as-is by anthropomorphizing them or turning them into a character. Abstracted-meaning mascots are those that utilize the core attributes of the product, consider emotional value, and present a further designed or refined character. Finally, imbued-meaning mascots differ from the previous category in that they are separately devised as a means of contributing new value or meaning to the existing product. Matter-of-fact mascots most closely coincide with the scope of this paper's research on anthropomorphism. Aoki (2000) remarks that matter-of-fact mascots tend to be such that consumers can easily understand their meaning. This improves the communicative strength of the brand. Because most matter-of-fact mascots are unique, original characters, the first necessity is that they become recognized by the public. When using these mascots, it is believed that the points of view and methods by which the anthropomorphism is deployed, and the ways in which the mascot is connected to the campaign's message, are vital to its success.

2.2. Prior research on why anthropomorphism began

According to Epley et al. (2007; 2008), there are two major reasons anthropomorphism began. The first is that in order to satisfy the basic human need to have a social connection with others, objects are likened to humans. This is known as the "social motive." The second is that when one wants to predict actions, objects are viewed as human. This is known as the "effect motive." The Bandai Character Research Institute (1999) suggests Japanese people currently like characters because they find them "comforting". Its researchers argue that people who feel stress in today's fast-paced society seek

comfort in and love characters. In other words, when Japanese individuals cannot build successful intimate or social relationships or when they feel anxious or stressed, they seek a stable social connection and anthropomorphism provides this, thereby following the "social motive" as defined by Epley et al. Furthermore, Matsumi and Mori (1995) argue that "the Japanese language has more euphemisms than any other language in the world," and that it includes "a way of thinking that in everyday life, when one makes a request or demand of another, they avoid using direct phrases as much as possible and indicate their intentions through indirect expressions." Anthropomorphism occurs as a result of this.

2.3 Prior research on the effect anthropomorphism has on humans

Reeves and Nass (1997) argue that in situations in which people act under the illusion that machines are human, they unconsciously see an artificial personality in the machine. Moreover, people sense human-like motives, personalities, a conscious will, and feelings in objects that have been anthropomorphized (Epley & Waytz 2009; Kim & McGill 2011). In other words, through the process of anthropomorphization, consumers perceive brands as living entities with their own intentions. Additionally, Waytz et al. (2010) argue that it is clear that when people view an object as having intentions or a will, it also causes a feeling that the object should take responsibility regarding its own actions. Therefore, when a company or brand uses anthropomorphic expression, consumers have an awareness of the brand as a living entity possessing its own will and they feel that it should take responsibility for its actions. Puzakova et al. (2013) evaluated businesses that have both used anthropomorphic advertising and engaged in illegal business practices and their research provides an enlightening example of this phenomenon. They found that after businesses committed illegal acts, consumers rated the behavior of brands that use anthropomorphism as more serious than those that do not, and feel that the brand should be strongly punished.

2.4 Line of investigation

Precedence research shows that a character and personification generally have positive influence to consumers. However, it does not necessarily have good influence. Moreover, although there is no precedence research which paid its attention to the stage of personification in the viewpoint of marketing, the influences which it has on consumers according to the stage of personification in robotics differ. So, this research examines how the difference in the stage of personification affects consumers. According to the stage of personification, we think that a positive or negative effect is caused. Especially the personification technique to deal with is the plastic personification which is developed in Japan. It is not a pictorial thing like animation also in it but an illustration which is elementary personification most.

3. Preliminary investigation

3.1 Objective

Using a survey, I carried out a preliminary investigation to select illustrations with high and low levels of anthropomorphization in order to compare them. Specifically, the survey asked participants to provide answers on a six-point scale to the question, "Does it look like it has a will of its own?" for each illustration. This survey item is the same as the one that Puzakova et al. (2013) used to determine whether anthropomorphization can be carried out. The survey also asked participants to provide

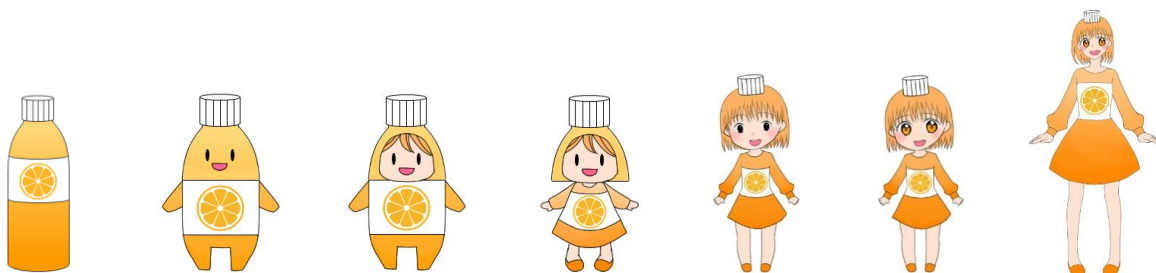


Fig.1 The illustration used by main enumeration

answers on the same six-point scale to the question, “Do you like this illustration?” This meant that illustrations with extremely divided preferences would not be selected.

3.2 Creation of illustrations to be used

In this study, in order to measure purely the influence of anthropomorphization levels, I decided to create fictional anthropomorphic characters for use in the survey rather than existing anthropomorphic characters that are actually in use. In creating the fictional anthropomorphic characters, I performed adjustments increasing the level of anthropomorphization in stages, with reference to categories created based on the appearance of existing anthropomorphic characters. Furthermore, I used the same orange juice beverage as Puzakova et al. (2013) as the product to undergo anthropomorphization. I created 14 characters in total

3.3 Selection of illustrations

We selected the illustrations for use in this survey based on the results of the above preliminary investigation. First, I grouped together the illustrations for which no significant difference was observed based on the answers to the question “Does it look like it has a will of its own?” Next, I chose one illustration from each group as a representative with a small relative standard deviation and a mean value of “Do you like this illustration?” that was close to the other groups. I thereby selected seven illustrations for use in this survey.

4. Main survey

According to McQuarrie and Phillips (2011), the advertisement which uses the personified illustration gives consumers a positive effect compared with what uses the illustration which does not personify at all. We built up the following hypotheses I using the personification level of a pilot survey.

(a) Advertising positive effect, The illustration of the personification levels 1 and 2 is larger than the illustration of the personification level 0.

(b) The personification level 1 is larger than the personification level 2.

And we conducted search investigation about the reliance for an advertisement based on research of Puzakova, Kwak, and Rocereto (2013).

4.1 Questionnaire design

On this advertisement image, only the words "a new orange juice debuts" and the brand name "Orange Vie" were printed. I determined that in using this brand name, consumers would envision a new image and would not attach their own image to the brand. I compared the positive effect advertisements that use anthropomorphic illustrations have on consumers at different levels of anthropomorphism. I measured the positive effect on consumers through the following three survey items: 1. I am interested in this advertisement; 2. I feel attached to this advertisement; and 3. This brand is attractive. In order to do this, I carried out multiple comparison analyses regarding whether or not there was a difference in averages between groups with each survey item.

Additionally, in order to compare these items before and after a brand had engaged in illegal activities, I created images conveying the message that the brand had committed fraud. Because the headlines of media articles generally have a big influence on readers, I decided that a one-line newspaper-like headline was enough to convey this information. A headline reading "Is Orange Vie lying about their production location?" was added to the top of the aforementioned advertising image.

Next, the survey items were set as follows:

<Prior to illegal activities>

1. I am interested in this advertisement
2. I feel attached to this advertisement
3. This brand is attractive
4. I like the way this character looks

<After illegal activities>

- 5. This brand is attractive
- 6. I like the way this character looks
- 7. This brand should be punished

4.2 Summary

Survey subjects: university students

Survey period: January 23-31 2014

Breakdown of respondents by gender:

- a) 129 people (124 valid responses, 45 male and 79 female)
- b) 135 people (133 valid responses, 45 male and 88 female)

Total number of respondents: 257 people

We conducted an analysis to make sure that the evaluation obtained from this survey was not influenced by appearance preferences. The average values of answers given to question 4, "I like the way this character looks" were used for a multiple comparison conducted in order to confirm whether or not preferences for the appearance of each of the seven characters were even. As can be seen in Figure 2, illustration 2 had prominently high results, and illustration 6 had prominently low results. For this reason, illustrations 2 and 6 were removed and the remaining five illustrations were used in the analysis. Because of this, the images were once again separated into groups according to anthropomorphism level. I now had three groups.

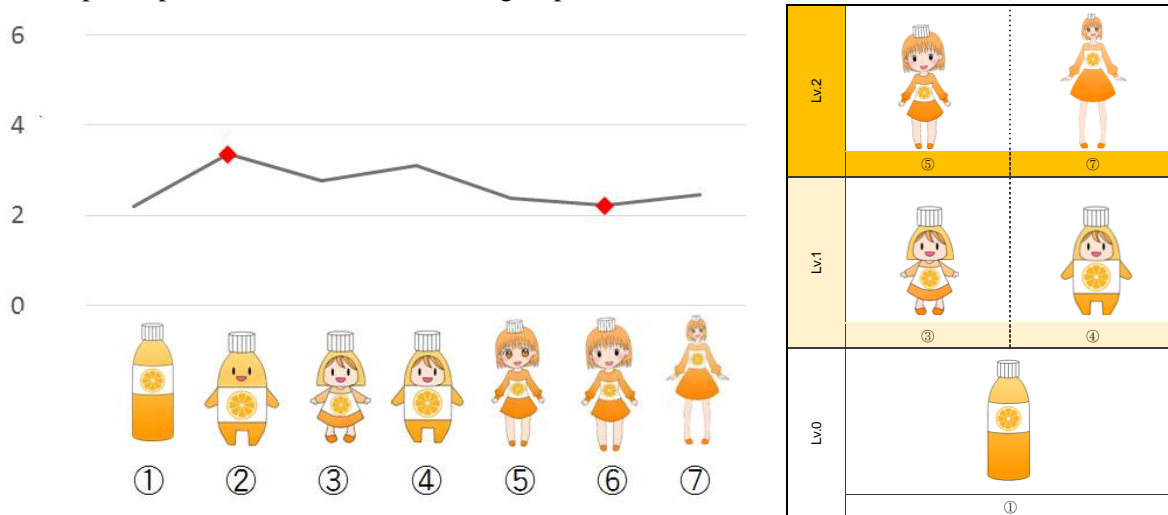


Fig. 2 Average of appearance and personification level

4.3 Evaluations of the advertisements' image

"1. I am interested in this advertisement"

The average values and results of the multiple comparisons of the three groups are as follows. In the "interest" evaluation, the Lv. 1 group had the highest average value among the groups. In addition, the results of the multiple comparisons recognized a significant difference between the Lv.0 and Lv.1 groups and the Lv.1 and Lv.2 groups. In comparing Lv.0 and Lv.2, the average value of Lv.2 was slightly higher, but no significant difference was recognized. In other words, in the "interest" evaluation, the Lv.1 anthropomorphism group received high evaluations in comparison to the Lv.0 and Lv.2 anthropomorphism groups.

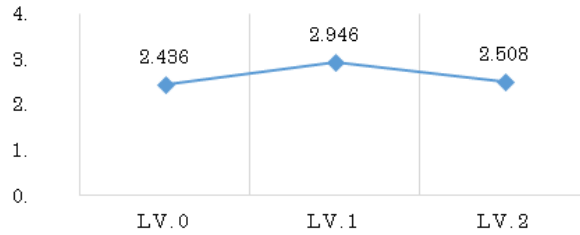


Fig. 3 Average value of interest

"2. I feel attached to this advertisement"

The average values and results of the multiple comparisons of the three groups are as follows. The Lv.1 group had the highest average in the "attachment" evaluation as well. The results of the multiple comparison recognized that there was a significant difference between the Lv.0 and Lv.1 groups, and the Lv.1 and Lv.2 groups. However, a significant difference was not recognized between the Lv.0 and Lv.2 groups. In the "attachment" evaluation, the Lv.0 group received the lowest evaluation amongst the three groups, the same as with the goodwill evaluation.

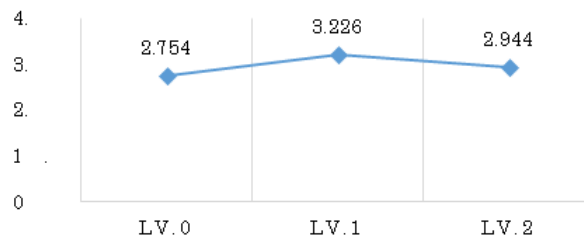


Fig. 4 Average value of familiarity

"3. This brand is attractive"

The average values and results of the multiple comparisons of the three groups are as follows. In the "attractiveness" evaluation, the results of the multiple comparisons recognized a significant difference between the Lv.0 and Lv.1 groups, the Lv.1 and Lv.2 groups, and the Lv.0 and Lv.2 groups. According to these results, the order of the "attractiveness" evaluations from high to low was Lv.1 > Lv.2 > Lv.0.

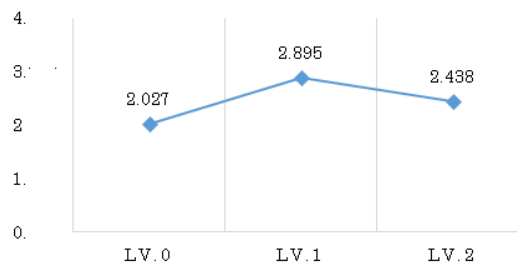


Fig. 5 Average value of charm

4.4 Relation to fraudulent acts

Additionally, I analyzed both how much risk anthropomorphic advertising adds when a company has committed fraudulent acts and whether or not the anthropomorphism level of the illustration has an effect on the following criteria: 1. The strength of criticism from consumers leveled at brands that have committed fraudulent acts; and 2. The difference in evaluations of brands that use anthropomorphic illustrations before and after they have committed fraudulent acts.

1. The strength of criticism from consumers leveled at brands that have committed fraudulent acts

The strength of consumer criticism was calculated in this study using the average value of responses to question 7, "This brand should be punished." In order to investigate whether anthropomorphic level had an influence, I conducted multiple comparisons to see if there was a difference in each of the three groups' average values. The results only revealed a significant difference between the Lv.1 and Lv.2 groups (Lv.1 : Lv.2, $p=0.00 < 0.05$). No significant difference was recognized between any of the other groups.

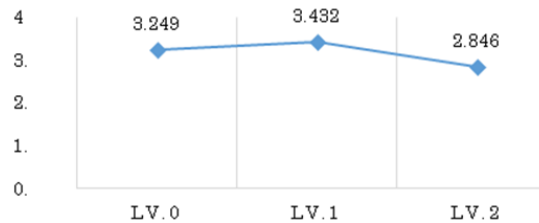


Fig. 6 Average value of "It should be punished."

2. The difference in evaluations of brands that use anthropomorphic illustrations before and after they have committed fraudulent acts

How much the post-fraudulent act evaluations of question 5 "This brand is attractive" and 6, "I like the way this character looks" had fallen in comparison to each of these evaluations before fraudulent acts were committed was defined as the margin of decline due to fraudulent actions. I compared the average value of the margin of decline between the three groups, and I investigated whether or not an influence appeared due to anthropomorphism level.

The average of the margin of decline from before the fraudulent act to after the fraudulent act is as follows. When looked at as an average value, the Lv. 2 group lowers the value, but the Lv.0 and Lv.1 groups add to it. Next, a Wilcoxon signed-rank test was conducted to see whether there was a difference in the average values in each group before and after the fraudulent act. From the results, I found that a difference in evaluations before and after the fraudulent act was seen only in the Lv.0 group

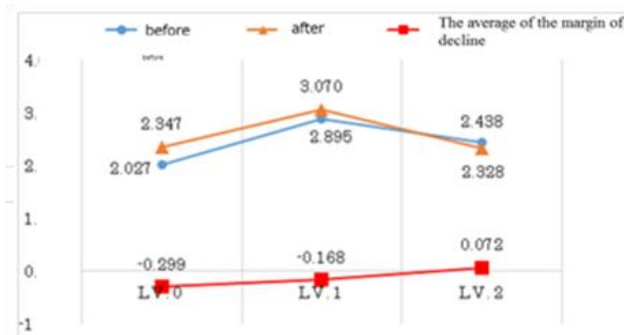


Fig. 7 Evaluation of the charm

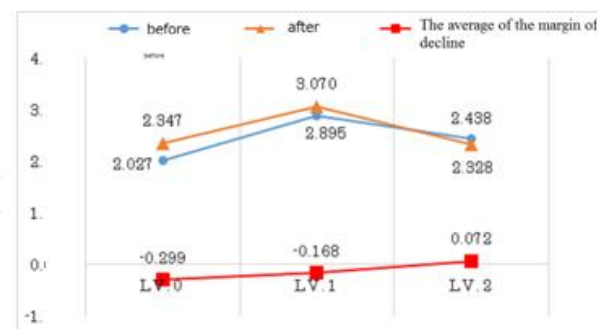


Fig. 8 Evaluation of appearance

5. Discussion

This research demonstrates that when personifying products and services in advertising, the effect on consumers differs depending on the extent of anthropomorphism. Some extent of personification is highly rated by consumers, especially in terms of interest and feelings of familiarity, but consumer ratings go down for advertisements with no personification or those with extreme extents of personification. Therefore, when introducing new products or when using anthropomorphic advertisements for products used in daily life, it may be better to limit the level of anthropomorphization to the addition of a simple face and limbs.

In addition, the research shows that anthropomorphized characters can lead to better ratings after events of fraud and problematic activities, and therefore, when a corporation has caused some sort of problem that would be criticized by consumers, it may be effective to rebuild the corporate image by using anthropomorphic characters. The finding that the evaluation of the anthropomorphic character and the evaluation of the corporation do not match is in contrast to the results of Puzakova et al. (2013), and this highlights the differences between Japanese character culture and other countries' cultures.

This paper focused on different consumer reactions to various levels of anthropomorphism. I found no previous studies on the extent of anthropomorphism, and therefore, I believe that this study is unique. However, adjustments of the illustrations used in this study are the first challenge that can be raised. Furthermore, differences in the "extent of anthropomorphism" in this study may have been taken to mean simple differences in character morphology, and this leads to questions regarding the hypothesis. Furthermore, drinks were chosen as the product class to be anthropomorphized, but performing the same research in other industries may have led to different results.

Communicative anthropomorphism may now be the most important aspect of advertising. Revealing how morphological anthropomorphism, behavioral anthropomorphism, and communicative anthropomorphism influence consumers is a big challenge for the future, and conducting further research on the various forms of anthropomorphism and personification may lead to very meaningful future studies.

References

- Goto,J. (2010).Review of identity among modern Japanese young people – Dynamism of self-concept shown in character-like communication
- Ichikawa,K. (2013) .A prospect about advertising characters
- Kayama,R. (2001). The Reason 87% of Japanese love characters. Tokyo: Gakken
- Kojima,S.(1993) .Images and symbols in advertisement, Psychology of Advertisement, Nikkei Advertising Research Institute
- Okada,M. (2003) .Challenges in global development of Manga business
- Onishi,Y.(1997).The actual condition of formation of international marketing composite, The collection of management theories,1997,44(3-4),157-198
- Otoizumi ,K.(2011) .Impact of anime-characters on advertisement communication
Research Bulletin, Joetsu University of Education, 17 (1), 177-194
- Saito,M.(1992).International comparison research of the color taste in Asia, The Color Science Association of Japan, 16(1),1-10
- Sekizawa,H. (2010) . Picture books and advertisement - why is information design similar?
Communication Science, Vol. 33, 161-191
- Takamoto,J. (1997) .Cloud' s sorrow, my sorrow - Pragmatic analysis of Mokichi Yagi' sClouds,
- Yamamoto,N. (1998).Symbols in brand communication
- Waytz, A., Gray,K., Epley,N., & Wegner,D.(2010). Causes and Consequences of Mind Perception, Trends in Cognitive Sciences, 14 (8), 383-388.
- Bandai Character Research Institute Co., Ltd. (1999) "Modern people seek healing through characters".