



Gender Difference in the Free Association for “Cute” and “Kawaii”

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Abstract. In Japan, “Kawaii” is frequently used in various situations mainly by young female. Corresponding English word “Cute” that is pronounced as “Kyuuto” is also used in daily conversation. Our study compared the denotation of both words by applying the free association method, thus clarified the semantic commonality and the difference. The result of survey using 60 informants revealed that the stimulus word Kawaii produced more number of associations than Cute. And our further analysis revealed that Japanese people don’t have opportunities to use the English word Cute in their everyday life, thus they use it as a foreign origin word, and the word Cute contained the image of something of Western/foreign culture. In other words, the pragmatic (cultural) context might have influenced the semantics of the word through the free association that listed up the denotation.

Keywords: Cute · Kawaii · Free association · Semantics

1 Kansei Engineering and the Concept of Kawaii

As is well-known, Kansei is a Japanese word meaning the sensibility and Kansei engineering is now becoming popular in the whole world owing to the activity of Japan Society for Kansei Engineering (JSKE) and Kansei Engineering and Emotion Research (KEER) conference [1, 2].

The word Kawaii is one of the focus of Kansei Engineering [3–7]. A list of more relevant information can be found in Reference [5] (p. 60–61) although most of them were written in Japanese.

In our previous study [7], we asked to make a comparison among Kawaii, beauty and preference by showing 225 photographs to 89 informants (34 female, 54 male). As the result, Kawaii and preference showed no difference between female ($r = 0.73$) and male ($r = 0.73$). But Kawaii and beautiful for female ($r = 0.60$) and male ($r = 0.69$) and beautiful and preference for female ($r = 0.60$) and male ($r = 0.72$) were respectively showed significant difference between female and male. This suggested that females may have clearer differential criteria for each of Kawaii, beautiful and preference than male. Thus, the difference of evaluation structure among female and male is one of the focus of our study.

Another focus is on the cultural aspect. The Japanese word Kawaii is now widely accepted as a part of (female) culture in Europe, Asia and the US. But, of course, there

are words that has the same meaning to Kawaii in each language. For example, the English word Cute is considered to be the most adequate translation of Kawaii. Our question is how Kawaii and the corresponding word Cute are used differently in the same cultural context.

As a first step, we started the collaboration with Prof. Hiroko Chiba and Prof. David Berque of DePauw University in Greencastle, Indiana, USA. They conducted a survey by adopting the same procedure with us for US students. In this context, the focus is on the difference between Cute and Kawaii.

Even in Japan, the word Cute is used as a foreign-origin word and is written as “キョー” and is pronounced “Kyuuto”. The meaning of “Cute” found in Japanese dictionary is “lively Kawaii, especially, of young female” [8, 9], or “considerately Kawaii, especially, of lively female” [10]. But these definitions should be confirmed based on the empirical study. We decided to make the comparative analysis on the use of Cute and Kawaii in Japan.

2 Method

2.1 Procedure

In order to clarify the semantic features of both words, we adopted the free association method.

We conducted the survey twice. The first survey was conducted using the pen and paper. We gave a blank paper to each informant and asked to write down their student-ID, sex, age, then draw a separating line at the center of the paper. On the upper side, they were asked to write “cute” and on the lower side to write “Kawaii”. Then they were requested to remind and write down the words that are associated with Cute or Kawaii. As shown in Table 1, total of 25 informants participated in the first day survey.

Table 1. Informants

Survey	Department	Female	Male	Total
1st survey	Engineering	2	4	6
	Design	9	4	13
	Science	1	5	6
2nd survey	Engineering	3	32	35
Total		15	45	60

The second survey was conducted using the PC and the informants typed the word associated with Cute or Kawaii. Total of 35 informants participated in this survey. Two data were merged and used in the following analysis. Thus, the total number of informants was 60 including 15 females and 45 males. It is unfortunate that we could not obtain sufficient number of female informants because Kawaii is typically a female culture.

Total of 20 min were given for the informants to write down the associated words. All the informants finished writing/typing their answers before the end of given time.

2.2 Basic Statistics

Total numbers of associations of each informant are summarized in Table 2. By applying ANOVA, it was found that the total number of associations by female is significantly larger than that by male at the 1% level and the total number of associations for Kawaii is significantly larger than that for Cute among female at the 1% level and among male at the 5% level.

Table 2. Total number of associations for Cute and Kawaii by female and male

Basic statistics	Female		Male	
	Cute	Kawaii	Cute	Kawaii
N	15	15	45	45
Mean	14.2	20.3	5.4	9.0
S. D.	7.0	11.0	3.2	5.8
Minimum	5	7	0	1
Maximum	27	41	13	27
Median	15	18	4	8

2.3 Categories for Data Analysis

All the original data was typed in Excel and was classified into 17 categories as shown below (in alphabetical order),

1. Adjective: e.g. small, lovely
2. Animal: e.g. cat, dog
3. Character: e.g. Hello-Kitty, Disney Princess
4. Clothes and Fashion: e.g. gothic Lolita, China dress
5. Color: e.g. pink, pale color
6. Foreign Items: e.g. European things, overseas items
7. Human: e.g. girl, idols
8. Letter: e.g. Hiragana
9. Onomatopoe: e.g. fuwa-fuwa, hira-hira
10. Ornaments and Accessory: e.g. accessory, eyeglass
11. Person’s Name: e.g. Avril Lavigne, Ayame Goriki
12. Place: e.g. Harajuku, Tokyo
13. Plant: e.g. flower, tulip
14. Shape and Pattern: e.g. stripe, star
15. Sweets and Fruits: e.g. short cake, cinnamon roll
16. Toy and Equipment: e.g. doll, stuffed animal
17. Others: e.g. car, painting

These categories were generated by examining the adequacy of each category and by checking the duplicability.

3 Result and Analysis

3.1 Typical Associations of Each Category

To clarify the image of each category more clearly, Table 3 shows the list of associated words that have the commonality among 20% or more of informants. Numbers in parenthesis show the number of informants who answered that word as an associated word.

Table 3. List of associated words that have the commonality among 20% or more of informants.

Category		Female		Male	
		Cute	Kawaii	Cute	Kawaii
1	Adjective	infant(3)	small(6), round(4)	small(9)	small(9)
2	Animal	cat(3)	cat(6), dog(5), small animals(4), rabbit(3)	cat(10)	dog(15), cat(14)
3	Character	Hello Kitty(5), character(5), My Melody(3), Disney characters(3)	-	-	-
4	Clothes and Fashion	clothes(3), dress(3)	clothes(3)	-	clothes(10)
5	Color	pink(7), colorful(4), vivid pink(3)	pink(6), pastel color(5)	-	-
6	Foreign Items	-	-	-	-
7	Human	girl(5), baby(3)	baby(8), smiling face(5), girl(4), idols(3)	-	child(16)
8	Letter	-	-	-	-
9	Onomatope	kira-kira(6)	fuwa-fuwa(3), kira-kira(3)	-	-
10	Ornaments and Accessory	ribbon(3)	cosmetics(6), ribbon(4), lace(3)	-	-
11	Person's Name	-	Yui Aragaki(3)	-	-
12	Place	-	cafe(3)	-	-
13	Plant	flower(3)	flower(3)	-	-
14	Shape and Pattern	heart(4), polka-dot(3)	plaid(4)	-	-
15	Sweets and Fruits	-	sweets(4)	-	-
16	Toy and Equipment	-	stuffed animal(5)	-	stuffed animal(9)

3.2 Total Associations of Each Category

Total of 1168 associations were generated by 60 informants where female (N = 15) generated 518 associations (213 words for Cute and 305 words for Kawaii) and male (N = 45) generated 650 associations (244 words for Cute and 406 words for Kawaii). Female answered more associations (average of 14.2 words for Cute and 20.3 words for Kawaii) than male (average of 5.4 words for Cute and 9.0 words for Kawaii). Table 4 shows the percentage of total associations for each category. Shaded cells show 0%, underlined cells show more than or equal to 10% and bold letter cells show more than or equal to 20% of total association.

Table 4 shows that female informants mostly associated both of Cute and Kawaii to Adjective (15.5% and 20.7%), then to Character (13.1% and 4.9%), and Human (12.7% and 13.4%) while male informants mostly associated both of Cute and Kawaii to Animal (21.7% and 25.1%), then to Human (17.2% and 16.7%) and Character (15.6% and 12.8%). In addition, Onomatopoeia appeared more frequently in female informants (5.6% and 4.9%) than male informants (0.8% and 1.2%).

Regarding the difference between Cute and Kawaii, Character was more frequent for Cute (13.1%) than Kawaii (4.9%) among female informants. But Cute Character included Hello Kitty for 5 times among female and 7 times among male, even though Hello Kitty was born in Japan. Hello Kitty appeared for Kawaii only for once. Another typical difference can be found for Foreign Items for which Cute generated more associations (4.2% for female and 4.1% for male) than Kawaii (0.7% for female and 0.0% for male).

3.3 First Associated Word

Assuming that the word that has the strongest association with the stimulus word or the shortest path to the stimulus word in the memory network might be recalled first (or faster), analyzing the first associated word for each informant will be meaningful. Based on this idea, all 60 first associated words for Cute and Kawaii were picked up and shown in Tables 5, 6 and 7. Shaded cells show 0%, underlined cells show more than or equal to 10% and bold letter cells show more than or equal to 20% of total association.

The most frequent association for Cute was Character (14), and Animal (11), then Adjective (9) and Human (9). On the other hand, the most frequent association for Kawaii was Animal (26), then Human (12).

Among Characters, Hello Kitty was the most popular (2 for female and 5 for male).

In Animal category, Cute was associated with cats (including kitten) (5) and dogs (2), and Kawaii was associated with cats (including kitten) (10) and dogs (7).

Table 4. Percentage of total associations for each category.

Category		Total			
		Female		Male	
		Cute	Kawaii	Cute	Kawaii
1	Adjective	<u>15.5</u>	<u>20.7</u>	<u>10.7</u>	6.2
2	Animal	6.6	<u>10.8</u>	<u>21.7</u>	<u>25.1</u>
3	Character	<u>13.1</u>	4.9	<u>15.6</u>	<u>12.8</u>
4	Clothes and Fashion	6.1	4.3	1.6	6.2
5	Color	9.4	4.6	6.6	4.2
6	Foreign Items	4.2	0.7	4.1	0.0
7	Human	<u>12.7</u>	<u>13.4</u>	<u>17.2</u>	<u>16.7</u>
8	Letter	1.9	0.3	0.8	0.5
9	Onomatope	5.6	4.9	0.8	1.2
10	Ornaments and Accessory	8.0	8.5	4.1	4.2
11	Person's Name	5.2	8.2	1.2	5.4
12	Place	0.0	1.6	0.4	0.7
13	Plant	1.9	2.3	1.2	2.5
14	Shape and Pattern	3.3	2.6	3.3	1.0
15	Sweets and Fruits	2.3	4.3	4.5	1.0
16	Toy and Equipment	2.8	2.0	1.6	3.2
17	Others	1.4	5.9	4.5	9.1

Table 5. Percentage of first associations for each category.

Category		1st words			
		Female		Male	
		Cute	Kawaii	Cute	Kawaii
1	Adjective	13.3	6.7	15.9	13.3
2	Animal	6.7	<u>46.7</u>	<u>22.7</u>	<u>42.2</u>
3	Character	<u>26.7</u>	0.0	<u>22.7</u>	8.9
4	Clothes and Fashion	0.0	0.0	2.3	2.2
5	Color	<u>20.0</u>	0.0	0.0	2.2
6	Foreign Items	0.0	0.0	9.1	0.0
7	Human	<u>20.0</u>	<u>26.7</u>	<u>13.6</u>	<u>17.8</u>
8	Letter	0.0	0.0	0.0	0.0
9	Onomatope	0.0	6.7	0.0	0.0
10	Ornaments and Accessory	6.7	0.0	4.5	0.0
11	Person's Name	6.7	<u>13.3</u>	4.5	4.4
12	Place	0.0	0.0	0.0	2.2
13	Plant	0.0	0.0	0.0	0.0
14	Shape and Pattern	0.0	0.0	0.0	0.0
15	Sweets and Fruits	0.0	0.0	0.0	0.0
16	Toy and Equipment	0.0	0.0	4.5	0.0
17	Others	0.0	0.0	0.0	6.7

Table 6. First associated words for Cute

Category		SUM	Female	Mare	Cute
1	Adjective	9	0	3	small
			0	1	sexy
			1	0	infant
			0	1	Kawaii in coolness
			1	1	pop
			0	1	beautiful
2	Animal	11	0	4	cat
			1	1	animal
			0	2	dog
			0	1	small animal
			0	1	kitten
			0	1	caterpillar on apple
			2	5	Hello Kitty
			1	0	character
3	Character	14	0	1	Kirby
			1	0	My Melody
			0	1	angel
			0	1	stitch
			0	1	cupid
4	Clothes and Fashion	1	0	1	clothes
5	Color	3	2	0	pink
			1	0	vivid color
6	Foreign items	4	0	1	foreigner
			0	1	European things
			0	1	overseas items
			0	1	foreign child
7	Human	9	2	0	girl
			1	1	baby
			0	1	idols
			0	1	child
			0	1	person
			0	1	smiling face
			0	1	girl hunted by womanizer
10	Ornaments and accessory	3	1	2	ribbon
11	Person's Name	3	1	0	Ami Makino
			0	1	Ayako Hashizume
			0	1	Tokiwa Ringo
16	Toy and Equipment	2	0	1	stuffed animal
			0	1	doll
Total	59	15	44	(non-respondent: 1male)	

Table 7. First associated words for Kawaii

Category	SUM		Female	Mare	Kawaii
1	Adjective	7	1	3	small
			0	1	charm
			0	1	push
			0	1	clumsy
2	Animal	26	3	5	cat
			1	5	dog
			0	3	animal
			2	1	small animal
			0	2	kitten
			0	1	rabbit
			1	0	red panda
			0	1	dog sleeping
3	Character	4	0	2	Yuru-Chara
			0	1	stitch
			0	1	ANIME character
4	Clothes and Fashion	1	0	1	clothes
5	Color	1	0	1	pastel color
7	Human	12	0	2	child
			4	2	baby
			0	2	girl
			0	1	person
			0	0	my girlfriend
			0	1	idols
9	Onomatope	1	1	0	fuwa-fuwa
			0	1	Ayako Hashizume
11	Person's Name	4	0	1	Kasumi Arimura
			1	0	Tsubasa Honda
			1	0	Yui Aragaki
12	Place	1	0	1	Harajuku
17	Others	3	0	2	Japanese itmes
			0	1	something tightening the chest
Total		60	15	45	

4 Free Description on Both Concepts

Informants in the second survey (N = 35) were requested to write their own definition of Cute and Kawaii or any free comments on both concepts. The result is shown in Table 8. A common tendency among female informants and male informants was that Cute is a mixture of Kawaii and cool, and is something of foreign origin, while Kawaii is a wider concept than Cute and includes it within. Kawaii is mainly used for animals

Table 8. Free descriptions (2nd survey)

ID	Sex	Definition
26	M	Cute relates to the design while Kawaii is related to the size, shape and behavior of things
27	M	Cute is something small and makes us get excited. Kawaii heals our mind by just watching
28	M	Because Cute is English, it has an image of Kawaii items originated in foreign countries. Because Kawaii is Japanese, Kawaii items originated in Japan
29	M	Girls are Cute at around 10 years old and become Kawaii at around 20
30	M	Cute is an expression for small items. Kawaii is used for describing living things such as human. Cute is a bit maniac while Kawaii is lovable
31	M	Cute is something that various people feel adorable for humans, animals, and things. What is Kawaii may change according to age and sex. I don't think that something Kawaii for Japanese women may also be Cute for foreign women. Recent use of Kawaii is different from what it was some years ago and has been widened its applicable range
32	M	Cute is small and Kawaii is large
33	M	Cute is what things were made to have the appearance of Kawaii, on the other hand, Kawaii is the natural feeling
34	M	Both are the same
35	F	Cute: American ANIME characters, cool+Kawaii, intuition. Kawaii: soft animals and human beings. Even though something that is not Kawaii at first sight will become Kawaii after the long gaze
36	M	Cute is for living things that are small. Kawaii is for everything including animals, plants and minerals
37	F	Kawaii includes Cute. Kawaii is justice and Cute is strong. Cute is a bit maniac
38	F	Cute has a firm image while Kawaii has a soft image. Cute can be made while Kawaii cannot be made
39	M	Cute may not be used for things. Cute is a mixture of cool and Kawaii. Kawaii can be used for everything. It is easier to use than Cute
40	M	Kawaii has an image of something soft, while Cute has an image of something crisp
41	M	Cute doesn't have the deep meaning. Something of which the heart feels directly is Kawaii. There is some special reason to exist for Kawaii For Cute, it is difficult to find the reason
42	M	Cute is Kawaii that contains the adult attractiveness such as sexiness or sex appeal. Because it is an English word, cute reminds me of foreign Kawaii Kawaii is a simple attractiveness that doesn't have the sexy feeling but will relax people by just watching. Kawaii with something additional is cute
43	M	Cute is cool and sexy. It is an adult attractiveness. Kawaii will give the relaxed feeling
44	M	Cute is seldomly used. It is for describing animals and is similar to childish. It is also used to describe the shape and size of objects. Something small is Cute. Kawaii is used for describing a person including the hair style and atmosphere. Kawaii is sometimes used as a greeting word or praising word

(continued)

Table 8. (continued)

ID	Sex	Definition
45	M	Kawaii is something fluffy. Cute is the solid pink. Cute has a clear image but Kawaii is vast and can be used to describe many things. Kawaii can be used as an derivation such as Busa-kawaii
46	M	Cute is based on intuition while Kawaii has a reason
47	M	Regarding the size, large things are Cute and small things are Kawaii
48	M	Cute is used for overseas items, colorful ones and of strong color. Kawaii is for Japanese and single pale colored
49	M	Cute is for describing the gesture and Kawaii is for describing the object itself
50	M	Cute is strongly pink and tough with overseas fanciness. Kawaii is calm and charming. Japanese something and is not related to pink. Attractiveness that is specific to Japanese (Japanese woman)
51	M	Kawaii can be used for various things, but Cute can be used only for pink items
52	M	Cute is small and something that I feel like protecting. Kawaii is something that I'm gonna love. Cute is a child for a parent. Kawaii is a girl whom I like
53	M	Cute is a feeling on the spot and does not stick to one's heart. It is a beauty that I need. Kawaii is existing in the heart for ever and does not change. Sometimes, Kawaii is like a big mountain and sometimes it is like a Japanese paper. Kawaii is included in Cute and Cute is included in Kawaii
54	M	Cute is for describing a person, especially foreigner or unfamiliar people whose color and character are strong. Kawaii is for describing small and round things that may not harm me. It is associative for small animals and reminds me of something pale color and character
55	M	Cute has an image of a small girl and reminds me of ribbon. Kawaii can be used not only for people but animals or imaginry one such as Pokemon. Kawaii includes Cute. Cute is lovable and Kawaii is smiley
56	M	Cute is something attractive and is limited to use than Kawaii. Kawaii gives the healing and can be used broadly
57	M	Cute and Kawaii is artificial vs. natural (concrete vs. abstract), attractive vs. healing (stimulus vs. calmness), development vs. growth (evolution vs. growing)
58	M	Because Cute is English, it refers to something big. On the other hand, Kawaii refers to children and small animals. Comparing English and Japanese, English word has a stronger image and Japanese word has a gentle image
59	M	I use Kawaii frequently while Cute not so much
60	M	Though having the same meaning, Cute is superior to Kawaii Kawaii is generic that can be used in various situations. For the question "what is Kawaii?" there are many answers, but for "what is Cute?" nothing comes out instantly. What I reminded for the word Cute is something that I like. In other words, Kawaii in general is Kawaii and Cute is used for preference

and human beings. Furthermore, female has a steady and clear image to Cute and a soft and light image to Kawaii. In general, male tend to describe the difference by concrete things and situations while female tend to describe by adjectives and Onomatope.

5 Discussion

Results found from this survey could be interpreted that Cute as a “Japanese word” is not a simple translation of Kawaii, and it is not necessarily be “lively” as dictionaries have shown. Kawaii is a Japanese word that has an everyday life as a background context, while Cute is a quasi-Japanese word that has some distance from the everyday life. This tendency can also be found in definitions that the informants gave. In other words, the meaning or the semantics of the word may sometimes be influenced by the context of use or the pragmatics.

6 Conclusion

Free association method was used to clarify the difference of meaning between Cute and Kawaii. Total of 60 informants were requested to write down the recalled words for Cute and Kawaii at the same time during 20 min. The analysis of data showed a difference between the two words and between the female and male. Further analysis of the first associated words showed that Cute means somewhat longing feeling that is not the same with Kawaii, nor the same with the dictionary definitions. On the other hand, the result for Kawaii suggested the everyday situation where familiar things and objects are regarded to be Kawaii. This result suggested that the meaning of the word (semantics) is influenced by the context of use or the cultural context (pragmatics).

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