KEER2014, LINKÖPING | JUNE 11-13 2014
INTERNATIONAL CONFERENCE ON KANSEI ENGINEERING AND EMOTION RESEARCH

Differences between Kansei evaluations caused by the awareness of differences in background information

Through the study about titles, Wa-Gashi and illustrations

Misa Ikeda[1], Toshimasa Yamanaka[2], Shigeru Ozaki[3], Toshiaki Uchiyama[4]

[1] *Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ikeda33@kansei.tsukuba.ac.jp*
[2] *Faculty of Art and Design, University of Tsukuba, Japan, tyam@kansei.tsukuba.ac.jp*
[3] *Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ozakis@kansei.tsukuba.ac.jp*
[4] *Faculty of Art and Design, University of Tsukuba, Japan, uchi@kansei.tsukuba.ac.jp*

Abstract: This research is based on the outcome of a previous study on Wa-Gashi (a traditional Japanese sweet), its title explanation and evaluation. In this research, we focused on ‘Haru-no-yume’. From the result, in five-sixth patterns, we found that the evaluations varied as we gave more information. Furthermore, we conducted another experiment. Through an evaluation of six painting illustrations which were created by two students, we investigated on the relationship between the evaluation process and title. Similarly to the result of the previous study about Wa-Gashi, it was revealed that the evaluations were certainly affected by the titles in several cases. Moreover, we saw that the evaluations were not only affected by direct elements but also indirect elements, such as something with which it is associated with, or resemble.
Keywords: familiarity, knowledge, evaluation, background information, impression.

1. PREVIOUS STUDY

Since we evaluate things by processing them through our Kansei, there can be difference whether someone previously knew 'the meaning of name or concept' behind the things being evaluated. In the previous research, we focused on the Japanese traditional sweet ‘Wa-Gashi’ as stimuli because of their unique names (Mei in Japanese)' and the 'background story based on tradition' which serves to inspires more than their taste or beauty of shape. We set the objectives of this research to reveal the differences and the tendencies of the inspiring ability by the combination of Wa-Gashi and its title in the presentation process for Kansei evaluation.

1.1. Result of previous study

The shapes of Wa-Gashi are often associated with their name. Then, we considered the shape characteristics “realistic – abstract” as a shape factor. Secondly, we observed the way of titling as ‘directly following the shape’ and ‘indirectly named with a rich background’. Therefore, we also considered “direct – indirect” as a naming factor. Moreover, we observed that the Wa-Gashi under the category of ‘abstract and indirect’, were difficult to understand in relation to their meaning and background. Hence, we selected Wa-Gashi with middle realistic and indirect naming. As a result, we could select three kinds of typical Wa-Gashi: ‘Himawari’, ‘Haru-no-yume’ and ‘Mizu-yamabuki’, as appropriate varieties. We showed the subjects three types of information about Wa-Gashi, such as the title, the shape, and explanation containing the background story. There were six order patterns of showing information (Table 1). At each step, subjects evaluated with SD questionnaire.

Table 1: The order patterns of showing information

	Pattern 1	**Pattern 2**	**Pattern 3**	**Pattern 4**	**Pattern 5**	**Pattern 6**
The first	Wa-Gashi	Wa-Gashi	Title	Title	Explanation	Explanation
The second	Wa-Gashi + Title	Wa-Gashi + Explanation	Title + Wa-Gashi	Title + Explanation	Explanation + Wa-Gashi	Explanation + Title
The third	Wa-Gashi + Title + Explanation	Wa-Gashi + Explanation + Title	Wa-Gashi + Wa-Gashi + Explanation	Wa-Gashi + Explanation + Wa-Gashi	Explanation + Wa-Gashi + Title	Explanation + Title + Wa-Gashi

In the result, we found three commonly affected evaluation adjective sets throughout three Wa-Gashi samples: cool, premium and beautiful. These adjective sets may work as major impression for Wa-Gashi. Also, for the effectiveness of evoking good impression, there we found correlation between the reality of shape and the order of showing information. For the middle abstract shaped Wa-Gashi, the most effective order was 'show Wa-Gashi -> show explanation -> show title', and 'show title -> show explanation -> show Wa-Gashi' for the realistic shaped Wa-Gashi. For the very abstract shaped Wa-Gashi, the order of showing story first scored best. This result was totally different from other case. Also, in the ‘very abstract’ case, the evaluation for ‘like’ tends to correlate with that of ‘difficulty’.

From the annotation made during evaluation, we could estimate the different imagining process according to the realistic characters of shape and shape-name association.

1.2. Additional Consideration

Additionally, we focused on ‘Haru-no-yume’ and on the evaluation of ‘like-dislike’ in this research. We focused on ‘Haru-no-yume’ because its shape is semi-realistic and explanation was effective in changing evaluation. According to the comments from the subjects, ‘Himawari’, the most realistic one, was too easy to understand, and ‘Mizu-yamabuki’ was too difficult to understand. The detail about ‘Haru-no-yume’ is below.

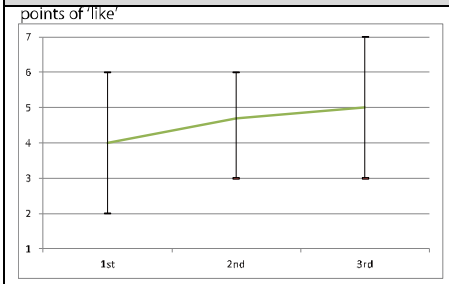
- Photograph: Figure 1.
- Title: ‘Haru-no-yume’. ‘Haru’ means a spring, and ‘Yume’ means a dream. Altogether, it may mean ‘Dream in the spring’.
- Explanation: ‘Haru-no-yume’ is a ‘joyo bun’, and represents a white butterfly. This is named after the Chinese historical story ‘Kocho-no-yume’. In the survey, 6% of the subjects answered that this Wa-Gashi represents a ‘butterfly’, and 30% has known the story of ‘Kocho-no-yume’, Chinese historical story.

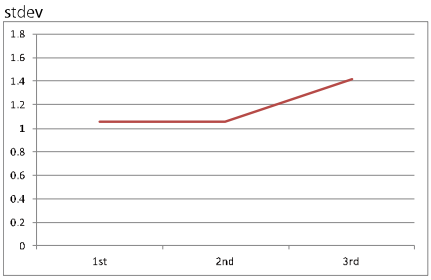
Figure 1: ‘Haru-no-yume’

As a result of previous study, pattern 1, 2, and 4 increased on the points of ‘like’ higher than the first step. On the other hand, pattern 3, 5, 6 decreased on the points.

Table 2: The results of pattern 1, 2 and 4

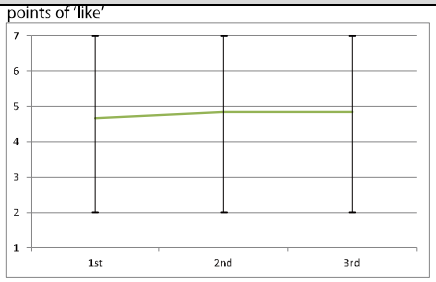
Pattern 1

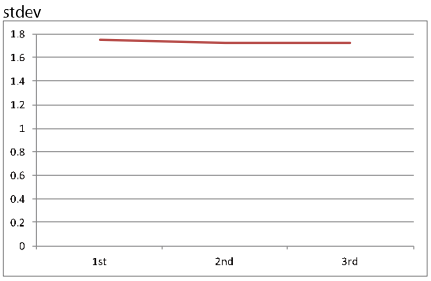




	maximum	minimum	average	stdev
1st	6	2	4	1.054093
2nd	6	3	4.7	1.05935
3rd	7	3	5	1.414214

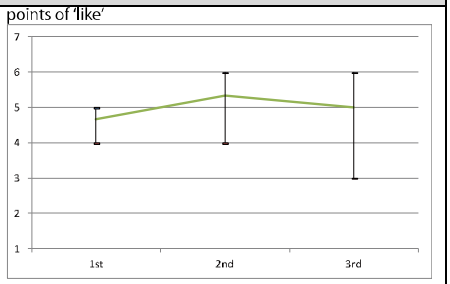
Pattern 2

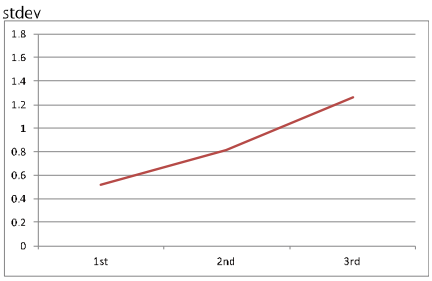




	maximum	minimum	average	stdev
1st	7	2	4.666667	1.75119
2nd	7	2	4.833333	1.722401
3rd	7	2	4.833333	1.722401

Pattern 4



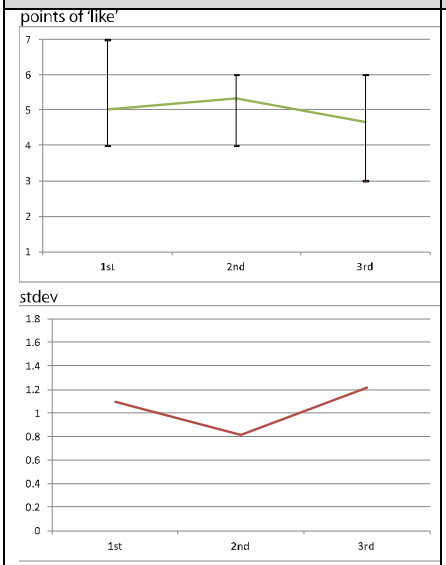


	maximum	minimum	average	stdev
1st	5	4	4.666667	0.516398
2nd	6	4	5.333333	0.816497
3rd	6	3	5	1.264911

In the pattern 1 and 3, the points, which were in the third step, were more dispersed than the first step. In the pattern 2, the points were consistently dispersed. The individual point was virtually changeless. Therefore, showing information like pattern 2, the order of 'show Wa-Gashi -> show explanation -> show title', was not effective on changing evaluations.

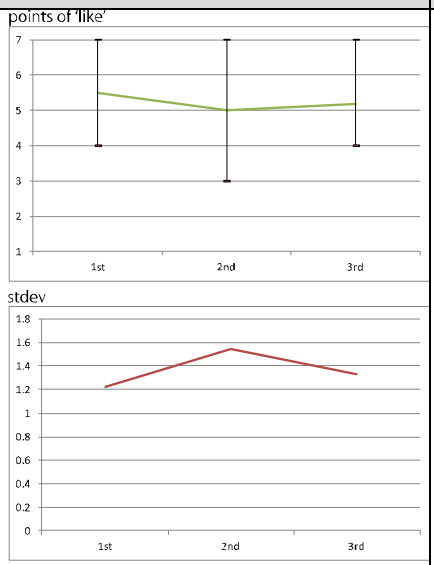
Table 3: The results of pattern 3, 5 and 6

Pattern 3



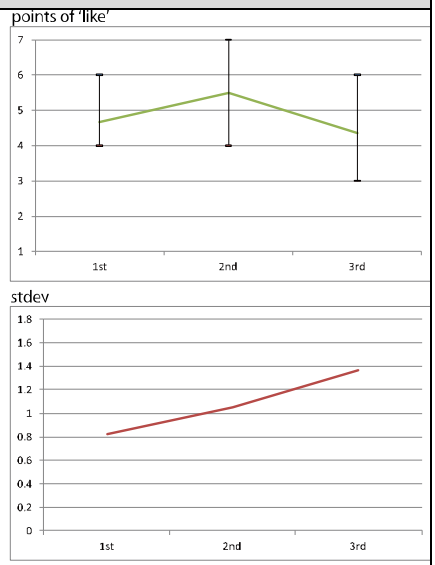
	maximum	minimum	average	stdev
1st	7	4	5	1.095445
2nd	6	4	5.333333	0.816497
3rd	6	3	4.666667	1.21106

Pattern 5



	maximum	minimum	average	stdev
1st	7	4	5.5	1.224745
2nd	7	3	5	1.549193
3rd	7	4	5.166667	1.32916

Pattern 6



	maximum	minimum	average	stdev
1st	6	4	4.666667	0.816497
2nd	7	4	5.5	1.048809
3rd	6	3	4.333333	1.36626

Showing explanation first is common to pattern 5 and 6. We considered that 'Haru-no-yume' should not be revealed by its story first. In both pattern 3 and 4, we show the title first. However, pattern 3 effectively decreased the points, on the other hand, pattern 4 widely increased. Therefore, we considered that the timing of 'understanding' was important. In other words, in pattern 3, subjects were satisfied with the information when they saw Wa-Gashi in the second step, and explanation was too much.

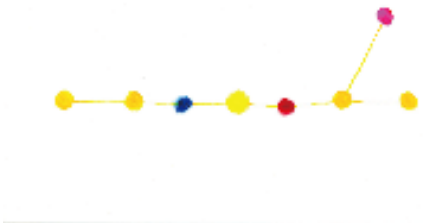
However, almost all Wa-Gashi are intentionally designed to enjoy thinking about a title of Wa-Gashi, form of Wa-Gashi, the season, historical events, and so on. In the next experiment, we investigated the relationship of another object and its title.

2. EVALUATION EXPERIMENT OF ILLUSTRATIONS

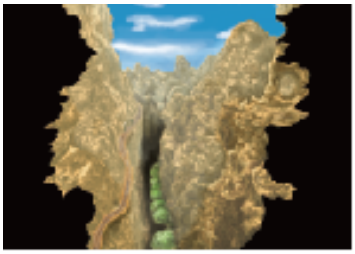
On November 2013, two students held an exhibition of their art works at the University of Tsukuba Festival. Then, some visitors look on thoughtfully, or commented on the meaning of exhibit title and painting. Through the evaluations of illustrations and titles, we investigated on the relationship between the evaluation process and title.

2.1. Evaluation experiment

In an evaluation experiment, we randomly selected six illustrations from the art works of the two students. (Figure 2)



my rule (2001/10/22~2013/10/23)



Canyon

パン屋：bakery

崖わたり

*Gake-watari: crossing precipice

←18:50→

朝の通学風景

*scene of attending school in the morning

Figure 2: Six illustrations

We interviewed six Japanese subjects using an evaluation-grid method. The subjects consisted of four females and two subjects were males, and all had never seen the illustrations before. We instructed the subjects to see the illustrations in the orientation at which titles can be read, and to tilt the composition, so as to ensure they read the title properly. (Figure 3)

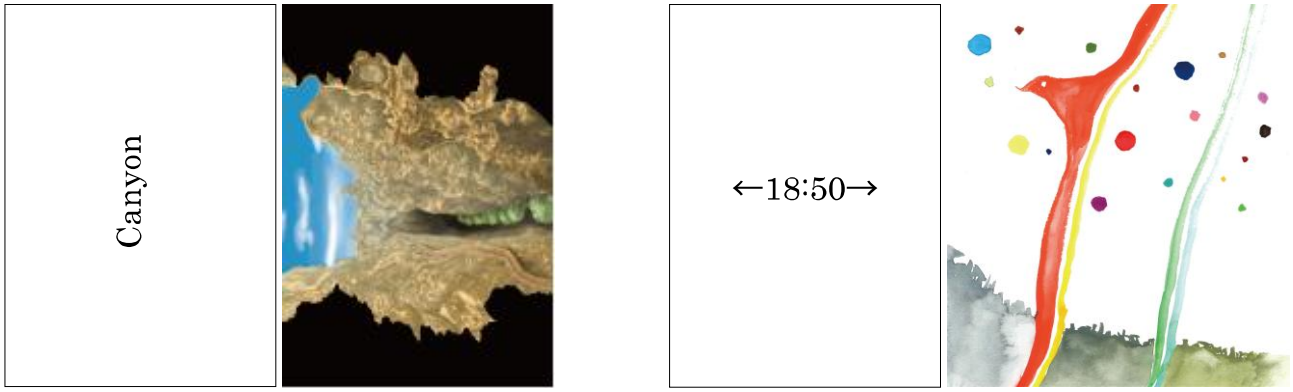


Figure 3: Samples of title and illustration

Firstly, subjects ranked six illustrations. In the second place, we asked subjects the reason and more detailed elements as possible by using laddering method. There are upper construct, which shows conceptual element, and lower construct, which shows concrete element.

The result of this study is presented in the Figure 4. The left part shows the upper construct, and the right part shows lower.

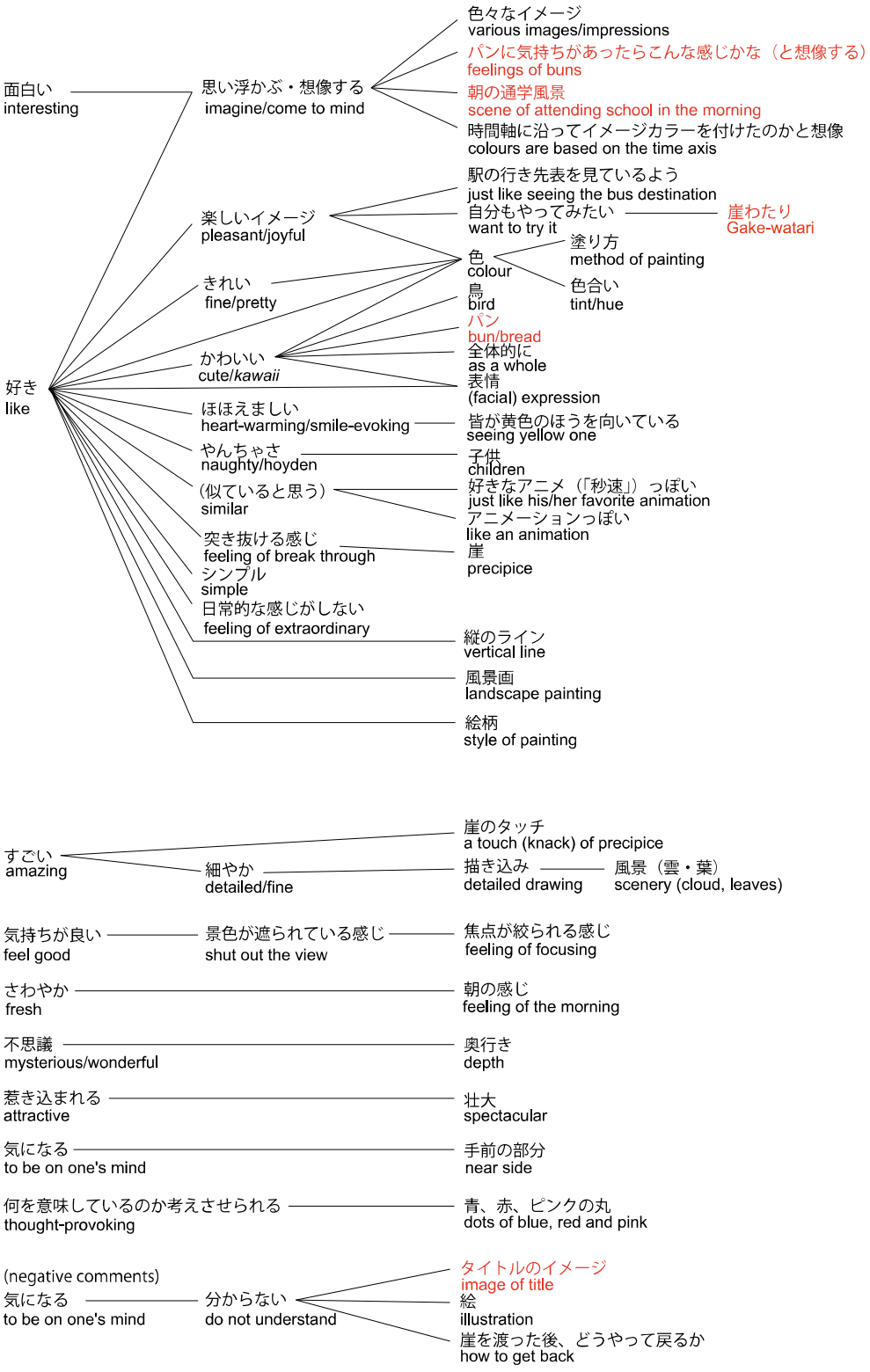


Figure 4: Result of e-grid interview

2.2. Discussion

The elements, which are shown in red, are concerned with titles or the title itself. Some subjects answered that they did not understand the concept of title, and so as a result did not like the illustration. One example of such comment is ‘too difficult and dislike’. On the other hand, subjects who imagined something, pleasant or cute image, answered that they like the illustration, or it is interesting. After the experiment, we asked subjects a question about ‘buns’. Then subjects answered that they did not think the characters are buns without the title: ‘bakery’. Moreover, we confirmed that evaluations are affected by indirect elements, something with which they were associated with, or resemble.

2.3. Conclusion

Following the result of this study, similar to that of the previous study about Wa-Gashi, we revealed that evaluations are certainly affected by titles in the several cases. Through the interview, we confirmed some examples of evaluation process. Moreover, we confirmed that evaluations are affected by various elements, not only direct elements, such as colors and shapes, but also indirect elements, something relating to association or resemblance. We hope to utilize this result in our next study.

REFERENCES

Yoshio, T., Yuki, K. (2008). 評価グリッド法支援ツールの開発と応用 [Development and application of a supporting tool for the evaluation grid method]. AIJ. J. Technol. Des, 14(27), 205-208.

Masato, U., Gen, M., Jyunnichiroh, S. (1999). 電子メールを用いた評価グリッド法の開発：魅力あるガソリンスタンドの条件に関する調査研究 [Development of evaluation grid method using electlonic-mail: A study on users' preference for gas stations]. J. Archit. Plann. Environ. Eng., AIJ, 518, 75-80.

Jyunnichiroh, S., Masao, I. (1986). レパートリー・グリッド発展手法による住環境評価構造の抽出－認知心理学に基づく住環境評価に関する研究(1)－[Phenomenological approach to the evaluation of places: A study on the construct system associated with place evaluation : 1]. J. Archit. Plann. Environ. Eng., AIJ, 367, 15-22.

Seiya, I., Takeshige, H., Shinichi, T., Toshiharu, O. (2005). 美術作品の鑑賞構造に関する一考察--美術館来館者を対象としたアンケート調査を通して [A study of appreciation of art works: in questionnaire survey of museum visitors]. Japan Society of Kansei Engineering. Journal of Japan Society of Kansei Engineering, 5(2), 17-24.

Sadamitsu MIYAGI. (1999). 落語の「オチ」についての一考察：認知的観点から [A study of ‘ochi’ of Rakugo: from the point of view of cognition]. Osaka Literary Review. 38 129-144.

Kelly, G. (1955) The Psychology of Personal Constructs. Oxford, England, Norton & Co.,

Nami, W. (2008) User Needs for Food Preparation Process: Study of suggestion against food outsourcing.

Yoshio, T. (1999) About the Evaluation-grid Method. Retrieved September 23, 2012, from http://wwwr.kanazawa-it.ac.jp/~tsuchida/lecture/e-grid.pdf.