

STUDY ON THE EVALUATION GAPS BETWEEN JAPAN AND EUROPE REGARDING JAPANESE DESIGN STUDY ON THE DEVELOPMENT OF THE DESIGN EVALUATION AND DIAGNOSTIC SYSTEMS

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ABSTRACT

This study conducted an evaluation experiment of furniture applying the Quality Chart, which is a design evaluation and diagnostic tool whose development was uniquely advanced, and conducted a workshop for the analysis and interpretation of the findings. This evaluation experiment, which was conducted in Japan and Europe, evaluated several products of the furniture brand SAJICA that was developed in collaboration between Kyushu University and local companies. As the result of having analyzed the evaluation data obtained, particularly large gaps were found overall between Japan and Europe in criteria regarding aesthetics and flexibility, novelty, and product image. Furthermore, when a comparison was made between regions with the subjects subdivided into three groups – designers, consignors, and receivers – distinctive characteristics gaps were found between each group. As a result of analyses, points of view regarding products were found to be different greatly between consignors, with European evaluations generally high. Next, interpreting the factors in evaluation gaps by means of a workshop was conducted using the findings of the analysis. As a result, four major gap factors were isolated between Japan and Europe: differences in the understanding of the Japanese concept of Wa (Japanese style), differences in temperament (national traits), differences in the perception and value toward furniture, and differences in lifestyles.

Keywords: Furniture Design, Design Evaluation, Regional Gap

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1. INTRODUCTION

The mission of Kyushu University User Science Institute (USI) is to promote ‘the fusion of kansei and technology’, using the perspectives of diverse users, to work towards the creation and use of kansei design knowledge, and to create an original base of research and education for kansei design. Within this context, the Quality Chart is an evaluation tool that categorizes users as ‘designers’, ‘providers’ and ‘end users’, and elicits gaps in design evaluation among these user groups. The gaps are taken to be user needs, and these factors contribute to planning development in areas such as product design and space design. A further aim is for the Quality Chart to be used as a practical educational tool in Kyushu University Graduate School of Design and the new USI Graduate School.

As part of research on the Quality Chart, the aim of this paper is to examine how the region (nation) in which users live affects gaps in design evaluation. In the contemporary world of international competition, this kind of knowledge can be used as educational material in the training of personnel who are constantly aware of the global context in design. In an experimental study conducted in Japan and France, the Quality Chart was used to carry out an evaluation of ‘SAJICA’, a furniture brand developed in Japan and aimed at an international market. The resulting evaluation data were analyzed in order to examine the effects of differences in living environment and culture on design evaluation. [1] [2] [3]

Table 1: Evaluation Items

1 Sensuousness and quality		4.2	The item uses original materials
1.1	Attention has been paid right down to the finest detail	4.3	The item has unprecedented comfort of use
1.2	The item has a high degree of completion	4.4	The item offers unprecedented lifestyle ideas
1.3	The item has outstanding beauty	5 Economic competitiveness	
2 Flexibility		5	The item is appropriately priced
2.1	The item could be used in a variety of ways	6 Favorability	
2.2	The item is compatible with a variety of cultures	6.1	I find I have taken a liking to the item
3 Adaptability		6.2	I would like to buy the item
3.1	The item's appearance is acceptable to people of all generations	7 Comfort of use	
3.2	The item suits my lifestyle	7	The item offers physical and mental comfort to the user
4 Novelty, innovation		8 Product image	
4.1	The item has an original form	8.1	The item has a Japanese feel to it
		8.2	The item has an urban feel to it

2. PARTS OF MANUSCRIPT

The evaluation experiment was conducted in two locations; Japan and France. The object of evaluation was SAJICA furniture, which has been developed by Kyushu University in collaboration with the leading furniture production area of Japan, Okawa. The aim in developing this brand was to use traditional Japanese materials, craftsmanship, and wisdom to create furniture that would provide ‘Satisfied About Japan’s Inventive Creations Abroad’. In this study, five products considered to be highly necessary in living space were selected for evaluation, namely, a chair, a standing mirror with hanger, a bed, a chest, and a stacking light. Selection of question items to be used in the evaluation was carried out by choosing items from the 400 indices of the Quality Chart that were directly linked to furniture, and then narrowing these down further to 17 items thought to be affected by differences in location and culture (Table 1).

3. THE QUALITY CHART EVALUATION EXPERIMENT

In France, the evaluation experiment was conducted at the site of an international furniture trade fair held annually every January in Paris when SAJICA products were being exhibited. The questionnaire was available in bilingual format (English and French). Results were obtained from 22 designers, 11 providers, and 30 end users. The vast majority of respondents were directly involved in interior and furniture design, with over 90% of designers engaged in the field of furniture, interior, or architecture, and over 90% of providers engaged in the field of interior or furniture.

In Japan, the evaluation was carried out at an exhibition of SAJICA products held in a busy public space, with people showing an interest in SAJICA asked to take part in the experiment as respondents. However, the desk/bed was found to have suffered significant damage in postal transit from France to Japan, and so this was omitted from the study and only 4 products were used for evaluation. Results were obtained from 16 designers, 7 providers, and 86 end users. Of the designers, about 50% were engaged in the fields of furniture, interior, or architecture, while 40% were involved in graphics or other design areas. 85% of the providers were engaged in the field of interior or furniture (Figure 1).

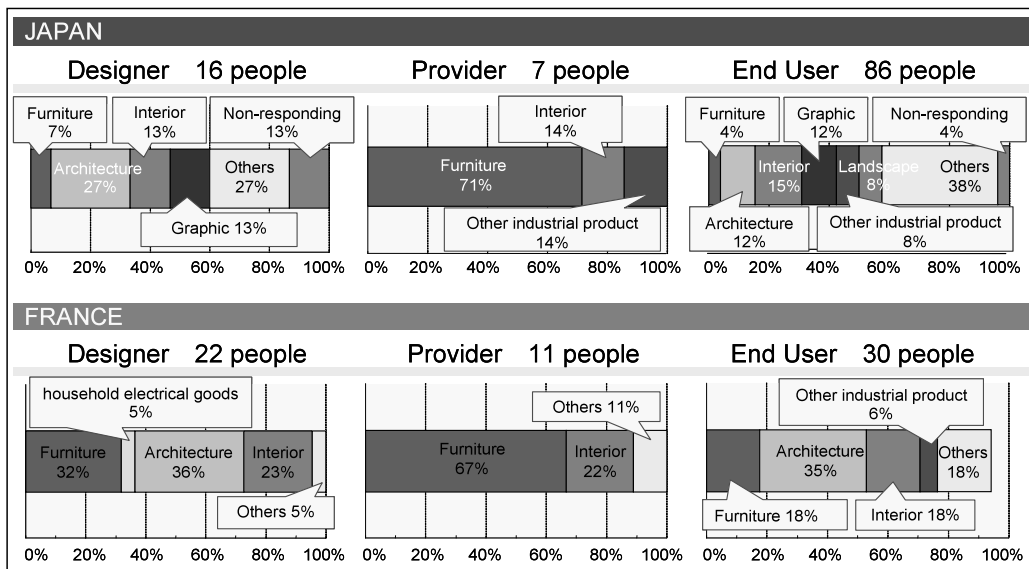


Figure 1: Respondent's Profile

4. ANALYSIS OF EVALUATION DATA

Analysis of the data obtained from the evaluation experiment was conducted. First of all, in order to see general tendencies for each item, averages on each item were compared for France and Japan, based on a quantification system of 4 points for 'agree', 3 points for 'somewhat agree', 2 points for 'somewhat disagree' and 1 point for 'disagree'. The results from this general comparison of tendencies showed that evaluation for all 4 products was higher overall in France, with a particularly noticeable difference on the chest. For the chest, extremely high ratings were obtained in France on items concerning flexibility and novelty, whereas these items received a low rating in Japan. For the stacking light, ratings on adaptability to lifestyle and price were very low in Japan (Figure 2).

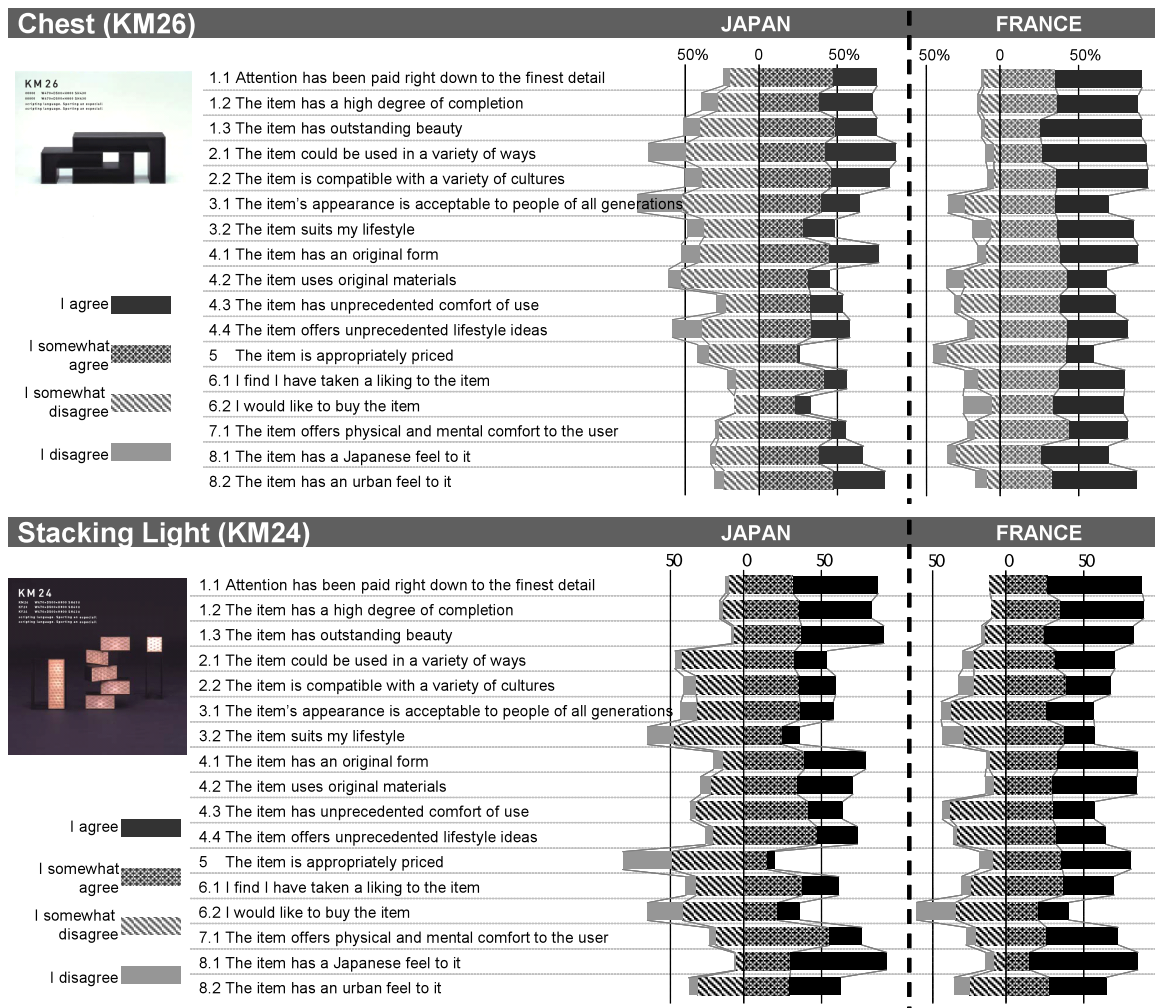


Figure 2: Totality Evaluation Result

It can be surmised from these results that furniture that can be assembled and used in various forms and shapes, or furniture that is produced using traditional Japanese craftsmanship and common Japanese materials, were evaluated as highly original and novel in France. It may also be assumed from the gap in evaluation concerning price that there is a difference in the sense of value regarding furniture.

Next, in order to investigate differences in evaluation of each item, data were analyzed using two-way ANOVA on location and perspective factors. This analysis produced significant gaps on 2 items for the chair, 7 items for the standing mirror with hanger, 14 items for the chest, and 6 items for the stacking light.

4.1. Chair “KY13”

The chair (KY13) has a wooden frame and fabric cushion seat, which is set at a low height to accommodate to the height of the table. On the item, ‘the price is appropriate’, the evaluation of designers in Japan and France was opposed, with designers in Japan considering that it was too expensive, while designers in France judged the price to be appropriate. There was a gap between designers on ‘unprecedented comfort of use’, with evaluation in France being higher. Concerning the item, ‘it has a Japanese feel to it’, there

was a gap between providers, with French providers considering the chair to exude a stronger feeling of Japanese-ness (Figure 3).

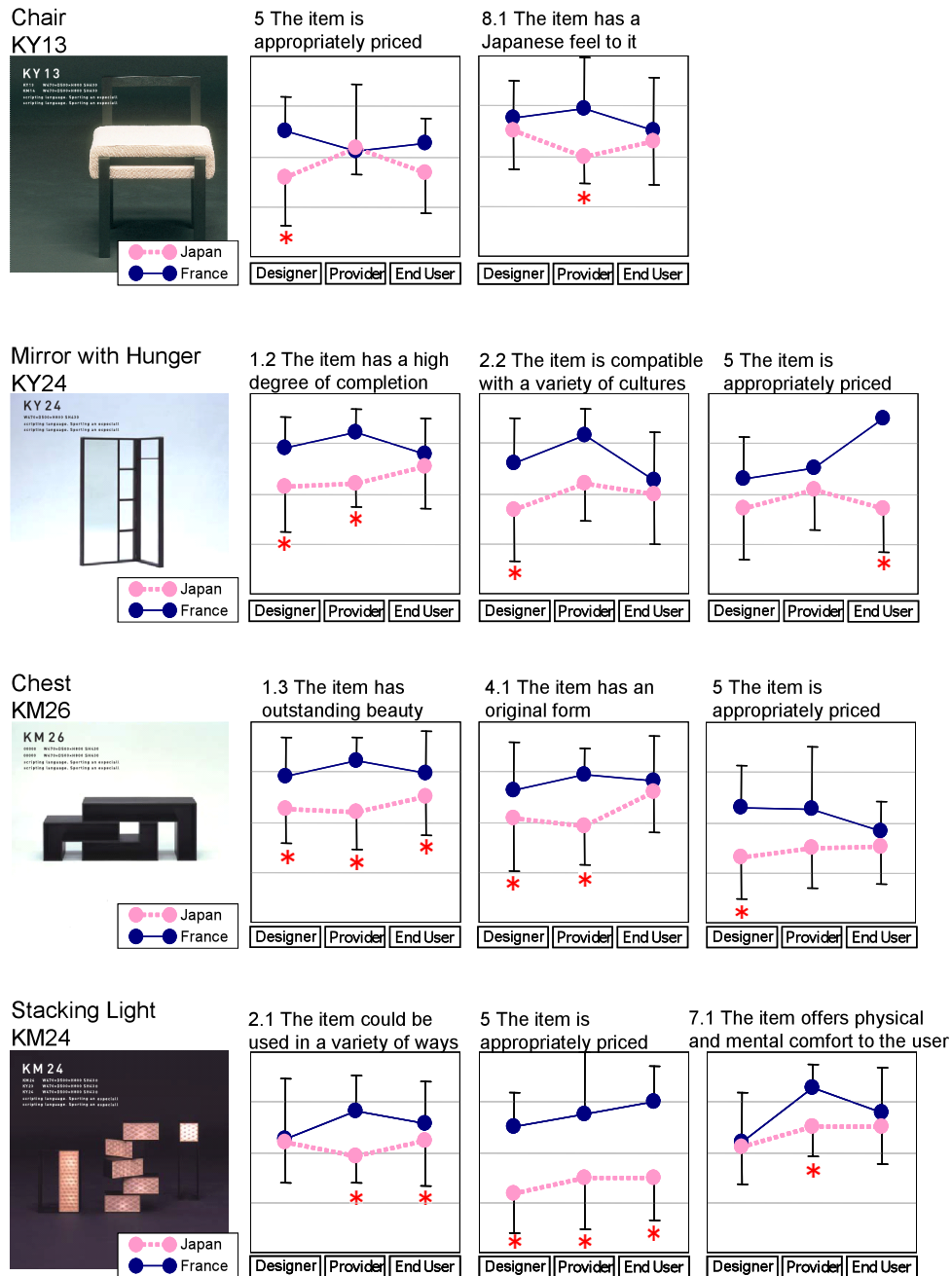


Figure 3: Result of Two-Way ANOVA

4.2. Standing Mirror with Hanger “KY24”

The standing mirror with hanger is a full-length mirror combined with hanger space, inspired by the motif of the well crib folding screen used in the Edo era. On the items concerning aesthetic value and quality, the main gap was between designers and providers, with evaluation in France being higher. There was also a gap between designers on items relating to use, compatibility with culture and adaptability to lifestyle, with higher ratings in France. On the item, ‘the price is appropriate’, there was a particularly wide gap between end users, with evaluation in France being extremely high (Figure 3).

4.2. Chest “KM26”

The chest (KM26) is a storage product consisting of 3 L-shaped blocks which can be assembled freely for various uses and display purposes. There were gaps on virtually all items, with gaps between all 3 groups in the two countries evident on several items. Particularly large gaps were apparent between designers and providers in the two countries, with evaluation in France consistently higher. The evaluation of designers in France was extremely high on items related to aesthetic value, quality and novelty. There was also a wide gap between designers on the items, ‘the price is appropriate’ and ‘I would like to buy the product’, with an overall negative rating being obtained in Japan, while a positive rating was obtained in France (Figure 3).

4.3. Stacking Light “KM24”

Affiliations The stacking light uses the traditional Okawa craft of ‘kumiko’ (latticework) to produce a versatile light that can be adapted to various lifestyle needs in terms of height (up to 5 units high) and direction. There was a gap between designers on the items, ‘can be used in a variety of ways’ and ‘brings emotional and physical pleasure to the user’, with evaluation in France being higher. On the item, ‘the price is appropriate’, there were large gaps between all 3 groups of users, with evaluation in France being extremely high (Figure 3).

From the above analysis, it is possible to summarize the following tendencies regarding differences in evaluation in Japan and France.

- French people experience a stronger sense of Japaneseness in the evaluation of Japanese furniture.
- There are differences between Japan and France in terms of the sense of value of furniture and its place in daily life.
- French people have a much stronger sense of novelty and originality with regard to the form and materials of the furniture.
- There are significant differences in the evaluation of furniture between designers in France and in Japan.

5. INTERPRETATION OF GAPS IN EVALUATION

In order to understand the gaps in evaluation manifested in the analysis, it was necessary to undertake further interpretation of the underlying causal factors. For this purpose, a workshop was held to examine the reasons for the gaps. A total of 9 design specialists from a variety of fields, including interior design, architecture and graphics, participated in the workshop alongside 9 specialists from our research institute. Participants were divided into 2 groups for the purposes of discussion. Due to time constraints, discussion was limited to the chair (KY13) and the chest (KM26), which demonstrated characteristic gaps in the analysis results (Figure 4). As a result of the workshop, it was possible to identify several factors

underlying the gaps in evaluation of furniture design between France and Japan. These factors can be broadly divided into the following 4 categories.



Figure 4: Scenery of a Solution Workshop

5.1. Differences in perception of the concept that Wa=Japan

In recent years, wa design has become fashionable in France and other parts of Europe, and this leads to high evaluation of wa factors used in SAJICA, such as straight-line design, the use of black and white, materials and traditional Japanese craftsmanship. For Japanese people, in contrast, wa design, far from being novel, tends to be seen as old-fashioned, and this engenders negative evaluation. Among providers, in particular, significant differences in evaluation seem to be related to the question of whether the image of ‘wa = Japan’ is seen as a plus factor or minus factor in sales.

5.2. Differences in nationality and character

It is likely that French people’s tendency to see things positively and Japanese people’s tendency to view things severely has some effect on the overall gaps in evaluation. This tendency was particularly marked among providers. Providers in France saw the products on exhibition as being in the process of development and allowed for future potential in their evaluation, whereas Japanese providers evaluated the products severely just as they were at the exhibition, mainly in terms of quality and functionality. This could explain differences in evaluation.

5.3. Differences in the sense of value regarding furniture

There are differences between Japan and France in the sense of value regarding furniture and its place in interior space. Whereas practical considerations such as functionality and price tend to be accorded priority in Japan, people in France are apt to be more aware of furniture as a means of enhancing the kansei of a space, and thus prioritize aesthetic elements and harmony with living space. In particular, this difference of sense of value can be seen in the wide gaps between all 3 groups regarding the price of the light (KM24), which evinces staging of space rather than functionality, with evaluation high in France.

5.4. Differences in living environments

There are differences in the structure of key household spaces such as living and dining spaces between Japan, where it was traditionally common to sit on the floor, and France, where sitting on chairs has predominated. This influences images of how and where furniture such as chairs, chests and lights can be used. It is possible that such differences account for gaps in evaluation of adaptability to lifestyle and living space.

6. SUMMARY

As a result of the study, we were able to identify gaps in evaluation of furniture between France and Japan on several items. Further interpretation led to 4 main categories of factors explaining these gaps. In particular, differences in the perception of wa seem to have a major influence on gaps in evaluation, with Japanese wa being evaluated even more highly than Japanese people think. This suggests that higher evaluation could be gained by aiming to develop products which appeal to this sense of wa. Further case studies should be conducted in other countries and regions for the purpose of examining tendencies and factors involved in regional gaps. The results of these studies should be used to advance research to promote techniques for further practical product development.

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