# DEVELOPMENT AND EVALUATION FOR THE JAPAN BRAND OKAWA FURNITURE "SAJICA" DESIGN A STUDY ON CONSTRUCTION OF QUALITY CHART EVALUATION / DIAGNOSTIC SYSTEM

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# ABSTRACT

The evaluation experiment that used the Quality Chart was executed in Japan and Europe for furniture brand "SAJICA". It has been understood that the Japanese is doing a low evaluation as a natural oppositely thing and an old-fashioned thing while people in Europe are doing a high evaluation to a traditional material and the shape of Japan when the evaluation tendencies to Japan and Europe were compared. Moreover, the part where it was felt that it seemed to be Japan was slightly different, and the difference of the image to "Japan (Wa)" was able to be seen. In addition, three series of SAJICA were compared, and the difference of the tendency to the evaluation by the feature of the series was considered.

Keywords: Furniture Design, Design Evaluation, Regional Gap

# 1. INTRODUCTION

The aim of this research is to analyze national gaps in evaluation between Japan and European countries which emerged from the SAJICA evaluation exercise results, and examine the differences in ways of thinking about furniture between Japan and Europe. The same evaluation exercise has been conducted 3 times since 2006, and a further purpose of the research is to compare the results over time, looking at evaluation gaps attributable to changes in the series, and analyzing how the SAJICA brand image has changed over this period.

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"SAJICA" is a new furniture brand developed by Kyushu University in collaboration with Okawa City, Fukuoka Prefecture, a leading furniture production area in Japan. New products have been launched as part of the brand each year from 2006, and 3 series have been put on the market so far.

# 2. RESEARCH PROCESS

Broadly speaking, 2 aspects were analyzed in this research.

Firstly, results of the SAJICA evaluation exercise carried out in 2006 in Europe and in Japan were compared, and the resulting clarification of gaps in design evaluation were used to investigate potential issues in product development. Next, results from the series of 3 evaluation exercises conducted in Japan and Europe were used to compare the different series (Figure 1).



Figure 1: Study flow

# 3. OUTLINE OF THE SURVEY

Five items were selected from the new SAJICA series - a sideboard, folding screen, bed, sofa and the IGUSA range (Figure 2) - and an evaluation exercise was conducted in Japan and Europe using the "Quality Chart", an independently developed evaluation tool.

The evaluation consisted of a total of 21 items. 17 of these items, in the 7 categories of 'aesthetic value and quality', 'flexibility', 'adaptability', 'innovation and originality', 'familiarity', 'ease of use' and 'product image', were used in previous evaluations, and a further 5 items were added in relation to adaptability, product image and familiarity.

For the product image items, the two keywords, "urban" and "brown" were elicited from descriptions of brand image, and a question on the favorable impression of naming was introduced.



Figure 2: Figure 2: 5 furniture items used in the evaluation

# 3.1. Summary of European evaluation exercise

A survey was carried out at the annual International Furniture Fair in Cologne, Germany. 5 products were displayed at the Fair, and visitors to the booth were asked to complete a questionnaire. Completed surveys were obtained from 98 respondents.

# 3.2. Summary of Japanese evaluation exercise

Using the same furniture and question items as at the Cologne International Furniture Fair, a Web survey was conducted with a group of monitor members administered by Kyushu University. A total of 132 responses were received. Responses were received from roughly an equal number of males and females, and the age range of respondents spanned from the 20s to 60s.

# 3.3. Factors considered important when purchasing furniture

The survey asked respondents to identify factors they considered important when purchasing furniture and results obtained revealed differences between Japan and Europe (Figures 3, 4). The top 10 factors were elicited and compared. It is clear that factors such as functionality, appearance, price, ease of use and quality were considered important in both regions and came up on top. However, materials, function and appearance were considered to be more important than price in Europe, while price was considered the most important factor in Japan, suggesting that many Europeans may be willing to pay more for an item if they are satisfied with its design and function. In contrast, it seems that even if people in Japan like the design and function, the ultimate decision about whether to make the purchase is dependent on the price. It can be assumed from this that ways of evaluating furniture are similar in Japan and Europe, but there are subtle differences on the criterion of price.



Figure 3: Title of the figure



Figure 4: Top 10 important factors in product purchase (Japan)

# 4. COMPARISON BETWEEN JAPAN AND EUROPE

A t-test analysis was used to ascertain evaluation gaps between Japan and Europe in the data obtained from the evaluation exercise, and items showing statistically significant gaps were examined, as were items showing similar evaluation tendencies.

## 4.1. Sideboard MUA-150s

Overall, this received a mid-range evaluation, but was evaluated more highly in Europe than in Japan. There were significant differences on 3 items, with European evaluation being higher on, "It can be adapted to a variety of uses", "It can be adapted to diverse cultures" and "The name gives a favourable impression". On the naming item, evaluation in Japan was low. Evaluation was high in both regions for the item, "It has a Japanese feeling to it", and low in both countries for the item, "I would like to buy this item".

#### 4.2. Folding screen KNO-135L

Overall, evaluation in Europe was much higher than in Japan. In Japan, evaluation tended to be low compared to the other 4 items, whereas it tended to be higher in Europe. There were wide differences between Japan and Europe in evaluation on almost all items,

and a significant gap in results between Japan and Europe was observed. In Europe, items which were particularly highly evaluated were, "The materials are original" and "It has a Japanese feeling to it", whereas the low evaluation in Japan seemed to be due to the fact that it was too typically Japanese (Figure 5).

## 4.3. Bed SAR-1C

In Japan, evaluation for this item was in the mid-range, and overall evaluation was higher in Europe. Significant differences between Japan and Europe were apparent on almost all the indices. This was the product rated most highly overall of the 5 products in Europe. In Europe, items which were highly rated were, "It is well made", "The materials are original" and "It has a Japanese feeling to it", suggesting that the use of tatami as a material provided a strong sense of Japaneseness, and using tatami as a material for a bed was highly evaluated as innovative. It can be surmised that in Japan, in contrast, using such everyday materials did not contribute to high scores on evaluation of originality or desire to purchase.



Figure 5: Comparison of evaluation results (folding screen)

#### 4.4. Base Point 2.5p / corner MSLBP (sofa)

Like the other products, evaluation in Europe was higher than in Japan. While almost all items received minus scores in Japan, almost all the items were given plus scores in Europe, and there were statistically significant differences on 17 of the 21 items. In Japan, the items receiving particularly low scores were "It fits my lifestyle" and "It has a Japanese feel to it". In Europe, the items "The materials are original", "It is familiar" and "It has a Japanese feel to it" were all highly evaluated (Figure 6). On other furniture items, the item, "It has a Japanese feel to it" showed similar patterns in evaluation in Japan and Europe, but this item showed opposing views, suggesting that there may be regional differences in the interpretation of Japaneseness.



Figure 6: Figure 6: Comparison of evaluation results (base point)

#### 4.5. IGUSA Series (low table, chair, stool)

The differences in evaluation on this product were minimal, with the only items which showed a statistically significant gap being "It suggests a new kind of lifestyle" and "It has an urban feel to it". On both of these 2 items, evaluation was higher in Japan, suggesting that the design was not unusual in Europe and there are differences in the image felt in the brand. In both regions, the items, "It is adaptable to diverse cultures" and "The materials are original" were highly evaluated. This is probably due to the fact that the way the materials were used was new to respondents in Japan, even though the traditional igusa (rush) material itself was familiar, while the impression of the natural material itself was fresh to respondents in Europe.

#### 4.6. Summary of evaluation results

In this evaluation exercise, the general trend was higher evaluation for all 5 furniture items in Europe. These results suggest that the following gaps in ways of thinking and impressions of furniture may exist.

## 5. COMPARISON OF SERIES

Next, a comparison of the various series of furniture was carried out, based on results of evaluations conducted in Europe and Japan over 3 years from 2006, links between the features of each series and evaluation trends were analyzed, and the reception of the SAJICA brand was examined (Table 1). For the purposes of comparison, responses on the scale from "Agree" to "Disagree" were quantified and converted into a 0-100 scale.



Table 1: Summary of each evaluation exercise

## 5.1. Comparison of overall evaluation trends

The average score of SAJICA products on these surveys was 57.2, with a tendency for higher scores in Europe than in Japan. In Japan, the highest scores were obtained in 2006, and subsequent years saw a gradual decline of about 5 points annually. In Europe, too, the highest scores were obtained in 2006 and there was a fall of about 5 points in 2007, but 2008 saw a slight increase.

## 5.2. Comparison of products in the series

Looking at comparisons between individual products, the smallest gap between products was seen in 2006, when scores were distributed within a relatively high-scoring range. Next, while there were gaps between products, the year in which the gap between Japan and Europe was smallest was 2007. While gaps between products were large, European scores were consistently distributed 2 to 8 points higher than the Japanese results. It was the products of 2008 that resulted in a striking gap both between products and between Europe and Japan (Figure7).

The above results show that the 2006 was the most coherent overall, receiving the highest evaluation in both Japan and Europe. The 2007 series lacked coherence as a whole, but was evaluated in a similar way without significant gaps in each region. It seems that the 2008 series, which produced large gaps between regions on a number of products, lacked coherence as a series, but was more amenable to a positive reception in Europe than Japan, as evaluation was higher on all products.



Figure 7: Comparison of product evaluation trends

## 6. SUMMARY

In this evaluation exercise, there was a tendency for all 5 furniture items to be rated more highly in Europe. It can be assumed that the materials used, such as Japanese paper and tatami, and the feeling of Japaneseness embodied in the designs are more attractive in Europe. In contrast, the design seems to be seen negatively as excessively Japanese in Japan, leading to a gap in the evaluation of Japaneseness.

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