

Survey on Furniture Awareness of Each Race in Malaysia

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Abstract: Malaysia is a multiracial and multiculturalism country, with Malays, Indians, Chinese, etc. Speaking about furniture, today, Malaysia is the 9th biggest exporter of furniture in the world and mainly focuses on the design of furniture for overseas markets. Nevertheless, as a furniture exporting country, families in Malaysia often use local manufactured furniture or imported furniture, thus the designs of furniture that reflect the sense and cultural traditions of races are not seen commonly.

In this paper, we focused and clarified on the changes of furniture usage in families of Malay and Chinese respectively, and conducted a survey on the furniture awareness of different races (Malay, Chinese) in Malaysia. The result of sensory evaluation experiment of furniture, we found that there is different consideration between these two races when it comes to sense of furniture. The Malays consider those furniture with decorated design is very exquisite. On the other hand, Malaysian Chinese feel high quality in furniture with rectilinear configuration.

Lastly, in order to understand further about the furniture awareness of different races in Malaysia, we will have to investigate the type of furniture that each families uses and will propose a new Malaysia's style of furniture in the future.

Key words: Furniture, Malay, Malaysian Chinese, Sensory Evaluation

1. Introduction

Malaysia is a multiracial and multiculturalism country, with Malays, Indians, Chinese, etc. The differences among these races are lifestyles, religions, languages, and cultures. Each race is related to each other, and has been living with harmony and coexistence among each other. Speaking about furniture, Malaysia is wealthy in high quality timber, which has great demand in furniture since ancient times. In the 1980s, plywood was frequently utilized as the material to manufacture furniture. The furniture transformed from the heavy and dull stereotype to light and elegant ones. The newly born design has led the vigorous development of furniture industry in Malaysia. Furniture boom occurred, people began to care the design of their own house and furniture. With the boom of furniture, the street of furniture shops is built. Today, Malaysia is the 9th biggest exporter of furniture in the world and mainly focuses on the design of furniture for overseas markets. Nevertheless, as a furniture exporting country, families in Malaysia often use local manufactured furniture or imported furniture from China and Indonesia, thus the designs of furniture that reflect the sense and cultural traditions of races are not seen commonly.

Based on this background, in this research, we clarify the needs and preferences of furniture in Malaysia, with the aim of finding the direction of furniture design in the future. In this paper, we mention the changes of furniture in design that have been used by Malay and Chinese families, by focusing on the furniture that used by each race and conducted a survey on the furniture awareness of different races in Malaysia.

2. Changes of furniture used in families of Malay and Chinese

2.1 Malay families

We assume the description and illustration of "KAMPUNG BOY" [1], work of a Malay comic artist LAT, as a main document to clarify lifestyle, furniture used and preferences of the Malay families in the 1950s of Malaysia. "KAMPUNG BOY" was narrated in English with a smattering of Malay, and the work has been translated into other languages, such as Japanese and French languages. The background of the story is set in the 1950s, and it is a valuable document picturing in details of little things of the traditional life scene, an indoor state of Malay family of that time. We are able to classify the indoor life act described in the illustration of "KAMPUNG BOY" roughly into sleeping, eating, and cooking. They mainly laid out the bedding to the floor of living room for sleeping. The family sat on the floor and surrounded a plate nearby the kitchen for meals. They used a cooking stove, which looks like a table made by wood. They covered the gravel on the table and put the firewood on it for cooking (fig.1). In the kitchen, we can see a number of ceramics and metal buckets. It can be considered as the installation of water service was not well installed that time, they used to take the water from a well which is set outside, and stored the water in the pot (fig.2). Speaking about furniture, besides the shelf for storage, legged furniture, such as table, chair and bed are not common in the house. Cupboard in the kitchen is built using the edge of the eaves that connect the roof and wall of the building. This part is constructed into a shape of duckboard and became a part of building naturally. They even left the washed dishes there, leaving the water to drop directly to outside (fig.3,4). Both of the furniture were designed in straight line and as long as they worked out functionally. On the other hand, when we looked into the building, basically Malay's with a post and lintel structure raised on stilts. The fence to prevent a fall from window, which had been processed to wooden turner shape. Besides, wooden sculpture decorations of plant design around the surfaces of windows and the end panels can also be observed. From this aspect, we understand that Malay did not adopt decorations for furniture, but focusing on making decorative fixtures of the building.

After 1960s, there is a great change in the life act of Malays, due to the modernization of the cultures and the society. It was common that Malays kept expanding and renovating their buildings due to the expansion of the family members. Besides, the Malaysian Government has also emigrated some of the inhabitants from the village to the suburb area. These are drawn in the work "TOWN BOY"[2] of LAT which narrated the times of Malaysia in the 1960s. Focusing into the kitchen, they were still sitting on the floor during meals, but there is a difference with "KAMPUNG BOY" because there is a cupboard drawn on it (Fig. 5,6). From this, we know that Malays have started to have attention on the functions and interiors of housing, and they started to use furniture such as rattan chairs, sofas or dining sets. Now, it is common to see Malays to have their meals on a dining set.

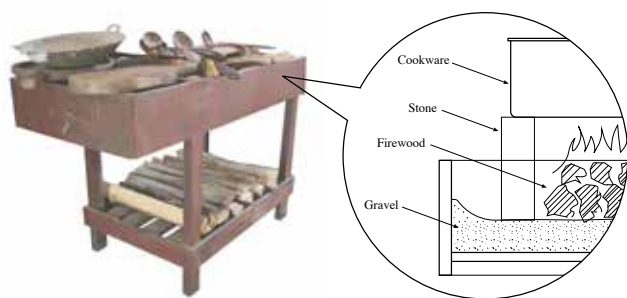


Fig. 1 Cooking Stove had been used in Malay family
(Picture token in "Mini Malaysia[4]")



Fig. 2 Kicthen is drawn in
"Kampung Boy"



Fig. 3 Space for putting dishes
(Picture taken in "Mini Malaysia[4]")

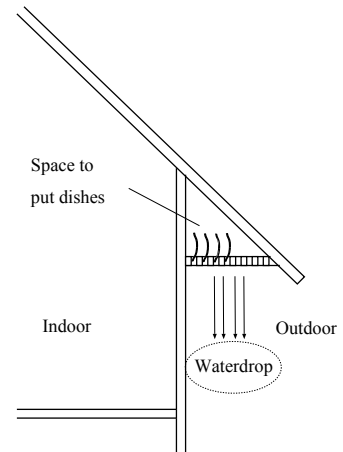


Fig. 4 Structure of space



Fig.5 Kitchen is drawn in "Town Boy"



Fig.6 Cupboard

2.2 Chinese families

From 1860s to 1950s, some inhabitants emigrated from the China southern coast to Southeast Asia, especially from the 1900s to the 1950s, which were the peak time of emigrations. A small proportion of Chinese emigrated to Malaysia for business, but most of them left China to live as workers in those time. Houses of Malaysian Chinese in 1950s could either be detached style or attached style. The inhabitants of attached style houses are the businessmen's houses, and the detached style houses are the farmers' or fishermen's houses. The floor plans, elevations and ornamentations of the chinese houses in Malaysia reflect their desire of following the house type from their homeland, Southern China. Even today the Southern China culture can still be seen. [3]

There is a hall after entering the detached style house, this hall is used for praying and serving the coming visitors. Thus, we can see a sofa and an altar in this hall. This hall is surrounded by bedrooms and they slept on the beds in the bedrooms. Kitchen is located in the end of building, cooking and meals were done here. They sat on the stools and round dining tables are commonly used (Fig 7). There are many kinds of furniture seen in a house, such as altar, benches, beds, tables, closets or cupboards. As for figure 8, the used dining table is made of wood, but a metal is used on the top of table top to cover the wood. The leg tray is equipped to the table legs, with water-inserted to protect the food from the insect. Figure 9 is a plywood cupboard by mid-1980s. In this period,

we can conclude that materials such as plywood, glass, and metal are used manufacturing furniture in Malaysia. The Malaysian Chinese succeeded to continue the China lifestyles, and continue using the furniture even after they emigrated to Malaysia. Speaking about design, we know that Chinese brought along their Chinese Southern furniture when they emigrated to Malaysia, but the design of furniture is changed to suit the climate of Malaysia and is also affected by the modernization.



Fig.7 Dining table



Fig.8 Serving table



Fig.9 Plywood cupboard

3. Sensory evaluation of furniture

After investigating the changes in furniture usage, we knew that the situation of using furniture among Malaysia families has been changed. In this section, we clarified the current needs and preferences of furniture between Malays and Chinese. As a method, we used the catalog pictures of furniture which are currently available in Malaysia and carried out a sensory evaluation experiment by using the SD method.

3.1 Experiment method

As a sensory evaluation experiment, we did the sight experiment to measure a sense of sight only. Subjects for the experiment are 30 people of Malaysian Chinese, 30 Malay, total 60 people. Age of the subjects is all 20s. The evaluated method is visual sensation using method SD and we have evaluated the five levels of evaluation items, which consisted 13 adjective pairs that are translated into Malay and Chinese (Fig10,11).

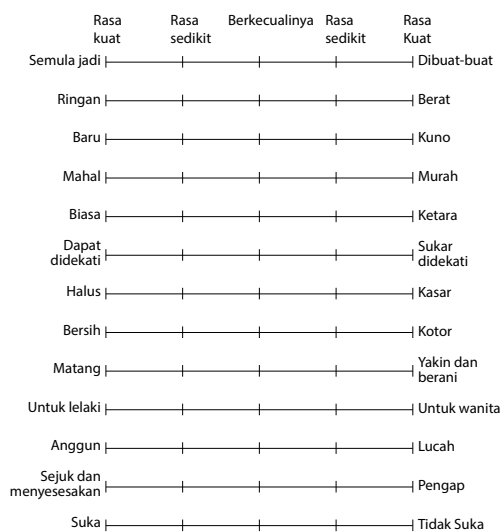


Fig.10 Evaluation sheet in Malay

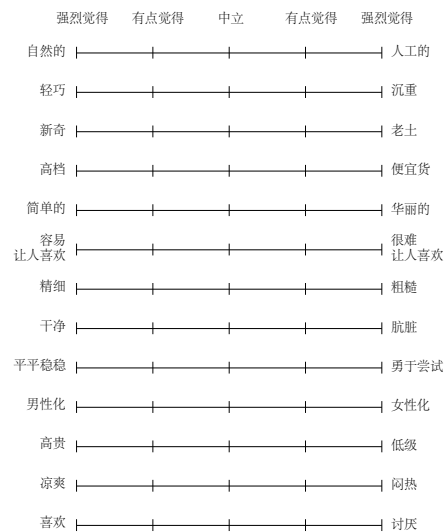


Fig.11 Evaluation sheet in Chinese

3.2 Choice of the sample to use for a sense evaluation

We chose twenty types of wooden dining set from approximately 100 types of legged furniture catalog[5], which are currently available in Malaysia as the sample of sensory evaluation experiment. As a condition of the choice, the materials of dining set being wood material or wood-based material, which are solid wood with the grain and decorative laminate or Opaque paint finishing to hide the grain of the wood. In addition, the top of the dining tables being rectangular shape. Design of the legs and the back of the dining chairs, which are unique characteristics such as rectilinear configuration type, decorative types and etc. Figure 12 show the sample we chose, and the captions are explanation about dining chairs.

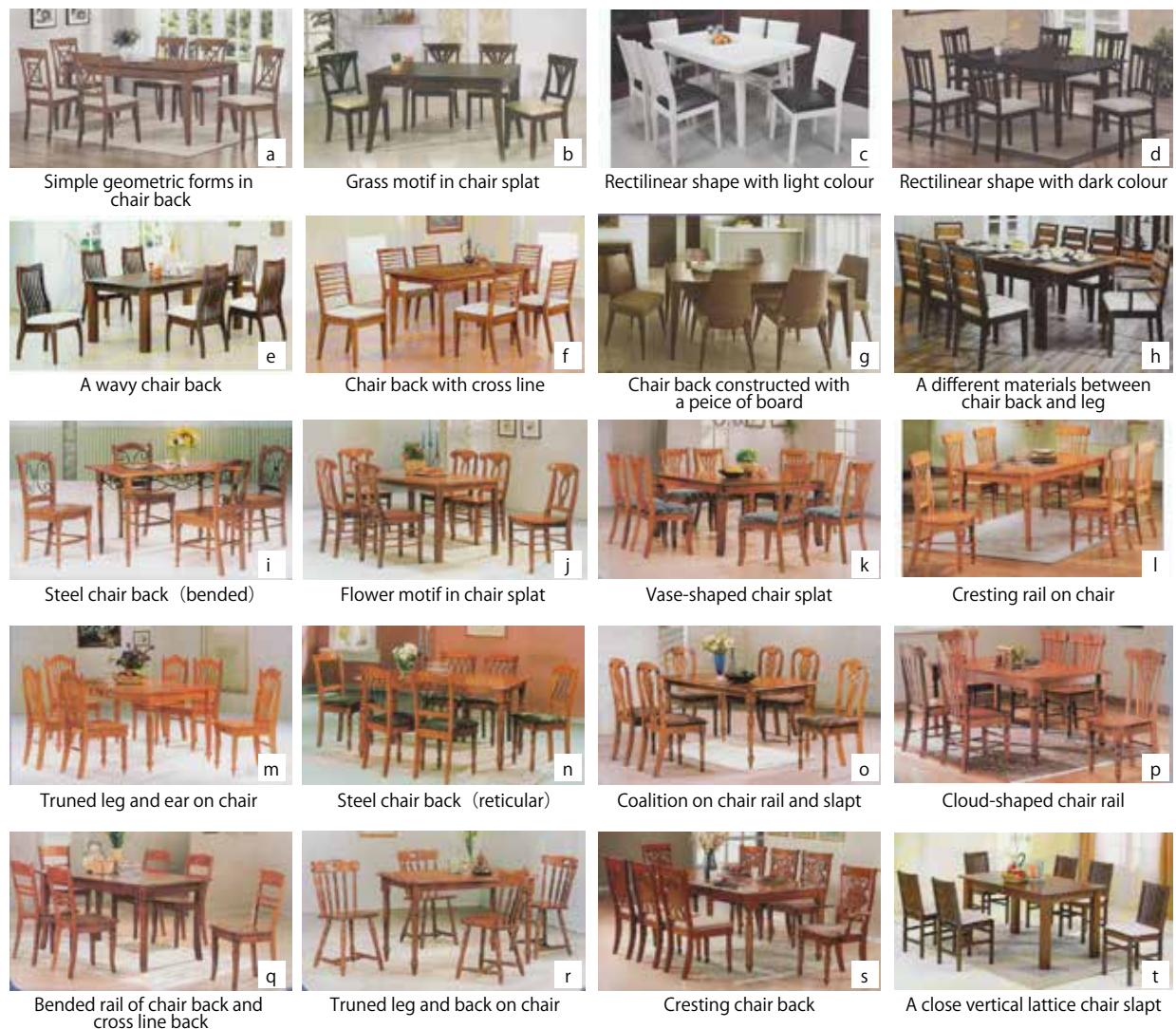


Fig.12 Samples to use for a sence evaluation

4. Result and consideration of experiment

4.1 Factor analysis

Factor analysis is done by using the sensory evaluation data of each sample with the SD method, and the adjective pairs of 12 except “like–dislike” for the sense of sight experiment. Table 1 showed factor loading after varimax method in sense of sight in Malay. The after varimax method cumulative was 52.70%. As a result of performing, we named to six factors, which is “Refined factor”, “Showy factor”, “Novelty factor”, “Softness factor”, “Natural factor”, and “Massive factor”. Table 2 showed factor loading after varimax method in sense

of sight in Malaysian Chinese. The after varimax method cumulative was 66.48%. As a result of performing, we named to six factors, which is “Quality factor”, “Casual factor”, “Natural factor”, “Softness factor”, “Showy factor” and “Massive factor”. Due to the reason that most of the subjects of Malay are foreign students, who came from various states of Malaysia and their living environment is different with each other, we consider that the reason of slightly low of accumulation contribution rate. When we compared the Malay with the Chinese, we know that the first factor of Malays was “Refined factor” which affect the Malays in furniture consideration are the cleanliness and cool sensation. On the other hand, quality factor is the Chinese main consideration over furniture, which gives the feeling of luxury, novelty, and refinement.

Table 1. Factor loading after Varimax method in sense of sight (Malay)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
clean - dirty	0.664	-0.007	0.185	0.043	0.053	0.065
refined - unrefined	0.662	-0.113	0.086	-0.086	0.142	0.146
quiet - bold	0.574	0.077	-0.071	0.240	0.038	-0.091
cool - stuffy	0.537	-0.143	0.257	-0.127	0.150	0.093
plain - showy	-0.132	0.970	0.047	0.015	-0.032	0.065
novelty - old fashioned	0.163	-0.030	0.660	0.017	-0.077	-0.032
approachable - unapproachable	0.116	0.146	0.511	0.146	0.164	0.246
mannish - feminine	0.029	0.009	0.098	0.806	-0.072	-0.027
natural - artificial	0.223	-0.031	0.019	-0.077	0.811	0.013
casual - heavy	0.104	0.009	0.109	-0.066	0.041	0.581
expensive - cheap	0.430	-0.169	0.247	-0.150	0.152	-0.470
elegant - inelegant	0.465	-0.161	0.296	0.006	0.123	-0.169
Costruction of factors	Refined Factor	Showy Factor	Novelty Factor	Softness Factor	Natural Factor	Massive Factor
Sum of Squares	2.65	1.14	0.85	0.63	0.58	0.48
Contribution rate(%)	22.05	9.46	7.11	5.28	4.81	3.99
Accumulation contribution rate(%)	22.05	31.52	38.62	43.91	48.72	52.70

Table 2. Factor loading after Varimax method in sense of sight (Chinese)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
elegant - inelegant	0.821	0.126	0.075	0.025	-0.125	0.059
expensive - cheap	0.819	-0.021	0.127	0.056	-0.084	-0.104
approachable - unapproachable	0.644	0.353	0.233	-0.040	0.171	-0.014
refined - unrefined	0.635	0.376	0.080	-0.040	-0.187	0.038
novelty - old fashioned	0.556	0.302	0.147	-0.052	-0.039	-0.508
cool - stuffy	0.165	0.625	0.077	-0.089	0.037	-0.022
casual - heavy	0.082	0.595	0.177	-0.171	0.161	-0.309
clean - dirty	0.536	0.570	0.047	-0.084	0.031	0.076
natural - artificial	0.259	0.198	0.899	0.027	0.033	0.059
mannish - feminine	0.006	-0.221	0.020	0.916	-0.055	0.241
plain - showy	-0.159	0.124	0.030	-0.048	0.821	0.184
quiet - bold	0.065	-0.034	0.102	0.215	0.208	0.568
Costruction of factors	Quality Factor	Casual Factor	Natural Factor	Softness Factor	Showy Factor	Bold Factor
Sum of Squares	2.89	1.55	0.96	0.94	0.84	0.79
Contribution rate(%)	24.09	12.90	8.04	7.85	6.98	6.62
Accumulation contribution rate(%)	24.09	36.99	45.03	52.88	59.86	66.48

4.2 Cluster analysis

We done the cluster analysis by using the result of factor analysis data. From the result of cluster analysis, we got the cluster dendogram which shown in figure13 (Malay) and figure 14 (Chinese). Firstly, the result of cluster analysis in Malay, it had been separated into the following 5 clusters.

Cluster 1: “a, d” with “A rectilinear design chair back with curve shape rear legs”

Cluster 2: “f, j, q” with “A simple design chair back”.

Cluster 3: “e, n, k, i, l, o, h, r” with “An organic design chair back”.

Cluster 4: “b, c, p, t, m” with “A high density and rectilinear design chair back”

Cluster 5: “g, s” with “A solid design chair back”

Secondly, the result of cluster analysis in Chinese, it had been separated into the following 5 clusters.

Cluster 1: “a, l, m, i, j, r” with “A decorated design”

Cluster 2: “c, f, q” with “A simple rectilinear design chair back with bright colour”.

Cluster 3: “b, p, h, k, n, o,” with “An organic design chair slapt”.

Cluster 4: “d, t, g” with “A rectilinear design with dark colour”

Cluster 5: “e, s” with “A solid design chair back”

Above are the Malay and Chinese clusters those had been separated in to 5 groups. From this result, it can be seen that the cluster is constructed by color of material and design of chair (back & leg).

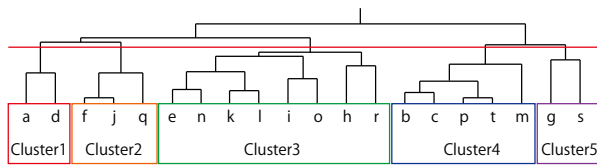


Fig.13 Cluster dendrogram after cluster analysis in each sample (Malay)

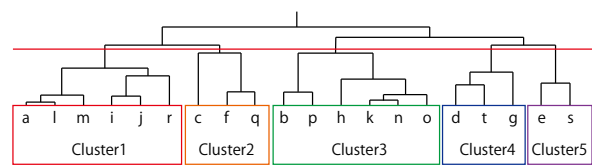


Fig.14 Cluster dendrogram after cluster analysis in each sample (Chinese)

4.3 Configuration map between factors

In order to understand the characteristic of the sense of each sample to the comparison between each factor, configuration map between factor 1 and factor 2 with high amount of the factor load is made respectively. Furthermore, we loaded the result of cluster analysis on configuration map. As sense experiment configuration map in Malay, Fig.15 is divided by factor 1 “refined factor” and factor 2 “showy factor”. Samples in cluster 1 with “A rectilinear design chair back with curve shape rear legs”, which is most plain and featureless in refined factor. Samples in cluster 2 with “A high density and rectilinear design chair back”, which is unrefined and plain. Samples in cluster 3 with “An organic design chair back”, which is showy but a little unrefined. Samples in cluster 4 with “A high density and rectilinear design chair back”, which is refined but featureless in showy factor. Samples in cluster 5 with “A solid design chair back”, which is most refined and most showy. As sense experiment configuration map in Chinese, Fig.16 is divided by factor 1 “quality factor” and factor 2 “casual factor”. Samples in cluster 1 with “A decorated design”, which is a little casual but bad quality. Samples in cluster 2 with “A simple rectilinear design chair back with bright colour”, which is most casual but featureless in quality factor. Samples in cluster 3 with “An organic design chair splat”, which is heavy but in bad quality. Samples in cluster 4 with “A rectilinear design with dark colour”, which is most in good quality and a little of casual. Samples in cluster 5 with “A solid design chair back”, which heavy and in good quality.

When we compare the sense of furniture between Malay and Chinese, it appears the first factor of Malays was “Refined factor” but samples were arranged around center area on the configuration map. From this, that it is not really the difference between refined and unrefined. However, we can read the refined sense of Malay according to group of cluster 5 (s, g) is a group with “A solid design chair back” and most refined and most showy. On the other hand, quality factor is the Chinese most to mind. They feel the high quality between a rectilinear design with dark colour and a solid design chair back. Indeed, each race has their own sense of furniture.

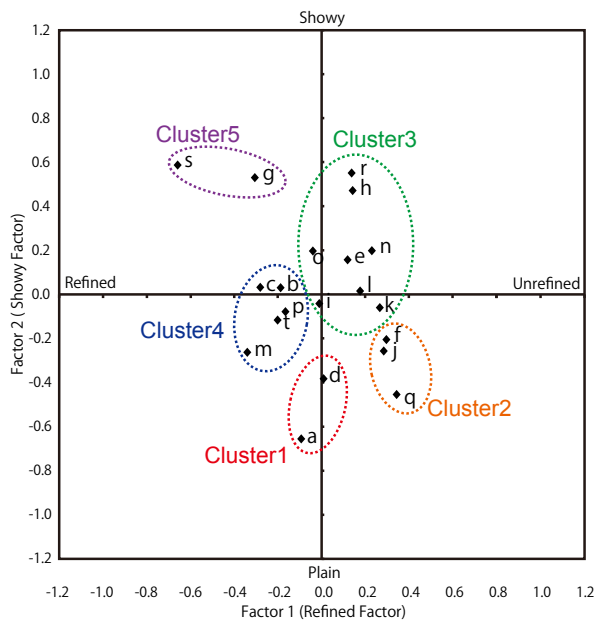


Fig.15 Configuration map of each sample in sense of sight (Malay)

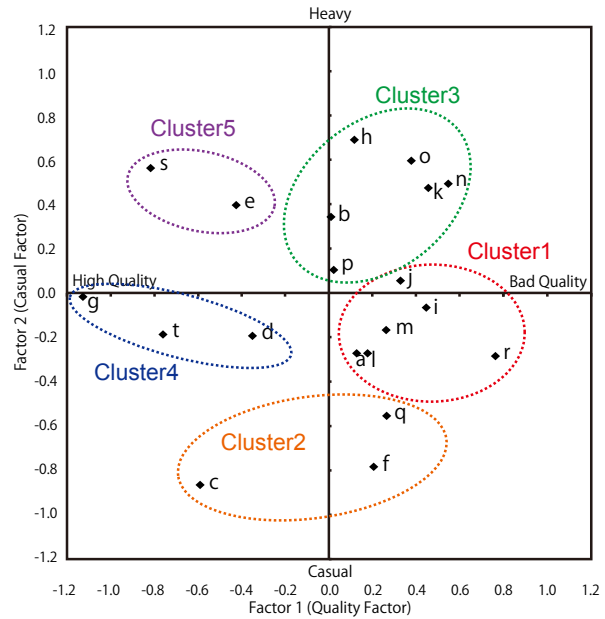


Fig.16 Configuration map of each sample in sense of sight (Chinese)

5. Conclusion

In this paper, we focused and clarified on the changes of furniture usage in families of Malay and Chinese respectively, and mentioned the result of the sensory evaluation experiment of furniture in each race (Malay, Chinese) in Malaysia. By looking at the change of furniture used in families, furniture is not really used by Malay at first; we can say that they begun to use furniture because of the influence of Chinese society and the effect of modernization. However, from the result of sensory evaluation experiment of furniture, it is found that there is different consideration between these two races when it comes to sense of furniture. The Malays consider those furniture with decorated design is very exquisite. We think that it is because they been brought up and contact with traditional scenery, and affected by traditional events in Malaysia. On the other hand, Chinese feel high quality in furniture with rectilinear configuration. We though that is because most of the Chinese who emigrated to Malaysia were workers in those days, and affected by simple furniture had been used by them. Lastly, in order to understand further about the furniture awareness of different races in Malaysia, we will have to investigate the type of furniture that each families uses. Based on the outcome of the result, we will propose a new Malaysia's style of furniture in the future.

6. References

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