A STATISTICAL STUDY ON FEMALE FASHION COORDINATES IN JAPAN

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ABSTRACT

Female fashion magazines published in Japan are often grouped by the colors of title logos; red-letter magazines and blue-letter magazines. And the fashion coordinates appeared in the magazines are called red-letter style and blue-letter style, respectively. In the present study, fashion coordinates appearing in 16 magazines issued throughout one year were analyzed by the corresponding analysis. The results showed that the red-letter style coordinates uses feminine items, like frilly blouses, mini-skirts, pumps and handbags with flower, small polka dot and hound's tooth check patterns, which were made of organdy, lace, chiffon and thick fabric materials. The blue-letter style coordinates use casual or sporty items such as parkas, half pants, sneakers and backpacks with camouflage patterns embroidery, small flower patterns, and paisley patterns, which were made of satin, fleecy stitch and boa.

Keywords: female fashion coordinates, fashion magazine, correspondence analysis, red-letter style, blue-letter style

1. INTRODUCTION

Female fashion magazines published in Japan are often grouped by the colors of title logos; red-letter magazines and blue-letter magazines. The first female fashion magazine, "CanCam", was published in 1982, and other fashion magazines, "JJ", "Ray" and "Vivi" were published following "CanCam". They presented fashion coordinates for young office workers and university students. It is said that males are attracted to females who wear these coordinates. The title logos of these magazines are colored red, and the fashion coordinates appearing in these magazines are called "red-letter style". Contrarily, the fashion magazines, "mini", "mel",

"KERA", "Soup." use blue title logos. The fashion coordinates in these magazines are called "blue-letter style", and emphasize the unique personalities of females. It is said that females rather than males are attracted to this fashion.

2. METHODS

First, Japanese female fashion magazines appearing in the chart of the total number of copies during July 2011- June, 2013 (Ad link, n.d.) were listed up. Then, the magazines which were categorized as teens' general-interest magazines, young-adults' magazines and career ladies' magazines, were eliminated from the list. Magazines not issued monthly were also eliminated. The remaining 16 monthly magazines listed in Table 1 were surveyed in the present study. Table 1 also shows the fashion style for each magazine described in the chart. The style of "street fashion" corresponds to so-called "blue-letter style". Color photographs, which show whole-body fashion coordinates in the initial special pages of the 16 magazines published from May 2015 to April 2016, were used in the present study. The magazines which is described as street style in Table 1 corresponds to the blue-letter style magazines.

Table 1: Fashion magazines surveyed in the present study

magazine	Publisher	style
SWEET	TAKARAJIMASHA,Inc.	high end
Soup	J International	street (blue letter style)
mini	TAKARAJIMASHA,Inc.	street (blue letter style)
mer	Gakken Plus Co.,Ltd.	street (blue letter style)
SPRING	TAKARAJIMASHA,Inc.	street (blue letter style)
KERA	J International	street (blue letter style)
non•no	SHUEISHA	girly
mina	SHUFUNOTOMO Co.,Ltd.	girly
vivi	Kodansha Ltd.	red letter style
CanCam	SHOGAKUKAN Inc.	red letter style
Ray	SHUFUNOTOMO Co.,Ltd.	red letter style
JJ	Kobunsha Co., Ltd.	red letter style
MORE	SHUEISHA	career ladies, conservative
With	Kodansha Ltd.	career ladies, conservative
steady.	TAKARAJIMASHA,Inc.	career ladies, conservative
S-cawaii	SHUFUNOTOMO Co.,Ltd.	gal

Fashion items were divided into tops, jackets, pants, overalls, skirts, bags, shoes, hats/caps, accessories belts and socks and these items were subdivided into 170 categories except for belts and socks. There were 23 categories for tops, 25 for jackets, 21 for pants, six for overalls, fourteen for skirts eleven for dresses, eleven for bags, 24 for shoes, ten for hats/caps and 25 for accessories. For each of the belts and socks, two categories (wore or not wore) were used. The number of each category for the fashion items were counted. Then, materials of the fashion items were divided into 27 categories, and the patterns used in the fashion item were divided

into 24 categories listed in Table 2. There were 162 combinations between the fashion-items of tops, jackets, pants overalls, skirts and dresses hats/caps and the 27 kinds of materials and 144 combinations between the 6 fashion-item categories and the 24 kinds of patterns. The number of each combination were also counted. The numbers of 172 fashion-item categories, and the 316 combination categories were used in the analysis, in the present study. A cross-tabulation table was constructed with the 16 magazines in rows and the 480 categories in columns, and was used in the correspondence analysis.

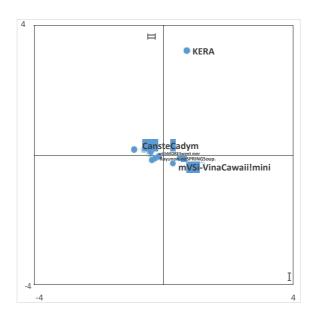
Table 2: Categories of materials and patterns

knit, suede, fur wool, shaggy, mouton, boa, corduroy, cashmere, camel, sliver, material velours, lace, chiffon, cotton, linen, mesh, organdie, tulle, satin, denim, thick,		
fleecy stitch, leather, chino, not listed, others		
pattern	flower pattern, small flower pattern, large polka dot, small polka dot, border, stripe, check, gingham check, botanical pattern, fruit pattern, tropical pattern,	
	tribal pattern, paisley pattern, print, logo, brand logo, nordic, leopard pattern, hound's tooth check, camouflage, embroidery, not listed, plain, others	

3. RESULTS AND DISCUSSION

The results of the correspondence analysis showed that the three-dimensional solution accounted for 53.7 % of the data variance. The correspondence analysis plots the 16 magazines in the three-dimensional space. The close proximity of the magazines in the space implies that the numerical distributions of the categories are similar among these magazines. Contrarily, magazines placed far apart implies that the distributions are quite dissimilar. As well as the magazines, the fashion items, materials and patterns are plotted on the same three-dimensional space. For example, a fashion item plotted near a magazine can be interpreted that coordinates in the magazine frequently use that item. Using these correlations, the characteristics of the fashion coordinates in the different styles are revealed, in the present study.

The three axes of the space were labeled I, II and III respectively. The 16 magazines were plotted on the I-II plane (panel (a)) and the I-III plane (panel (b)) in Fig. 1. Figure 1 shows that so-called red-letter style magazines listed in Table 1, such as "CanCam", "Ray" and "JJ", are placed in the left side on the I-axis. The blue-letter style (street style) magazines such as "mini", "mer" and "KERA" are placed on the right side on the I-axis. The magazines, which are not categorized in the red-letter style or blue-letter style in Table 1, are place between the two groups. They are called "intermediate style" magazines and the coordinates appearing in the magazines are called "intermediate style" coordinates, in the present study.





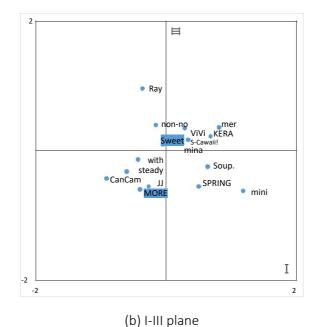


Figure 1: Plots of the 16 magazines

Figure 2 plots the examples of fashion-item categories in the same three-dimensional space. Figure 2 shows that feminine items, like a frilly blouse, a mini skirt, pumps and a handbag, are placed on the left side on the I-axis. On the right side, casual or sporty items such as parkas, half pants, sneakers and backpacks are placed on the left side. This implies that the feminine items are frequently used in the red-letter style coordinates and the casual or sporty items are frequently used in the blue-letter style coordinates. Figure 2 also shows that T-shirts, blouses,

clutch bags are placed in the center on the I-axis. This implies that these items are used both in the red-letter and blue-letter style coordinates. These fashion items are also frequently used in the intermediate style coordinates.

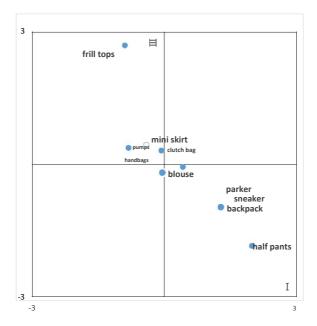
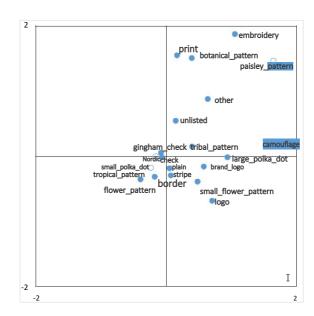


Figure 2: Plots of examples of the fashion items

Figure 3 plots the patterns on the three-dimensional space. Figure 3 shows that the flower pattern, small polka dot and hound's tooth check are placed on the left side on the I-axis. These feminine patterns are often used in the red-letter style coordinates. The camouflage pattern embroidery, small flower pattern and paisley pattern are placed on the right side on the I-axis. These patterns often appear in the blue-letter style coordinates. In Fig. 1, "Ray" is plotted in a high position and "mini" is in a low position. In Fig. 3, the flower pattern is placed in a similar position to that of "Ray" in Fig. 1. Moreover, the camouflage patterns is placed in a similar position to "mini" in Fig. 1. In fact, the flower patterns frequently appear in "Ray" and the camouflage patterns appear in "mini", respectively. Moreover, the embroidery and small flower pattern are placed in near position of "mer" and the paisley pattern is placed in a near position of "KERA". In fact, embroideries and the small flower patterns often appear in "mer" and paisley patterns appear in "KERA", respectively.





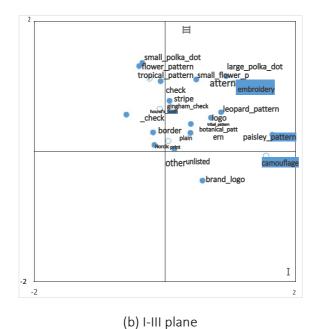
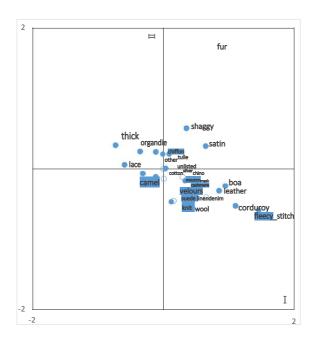
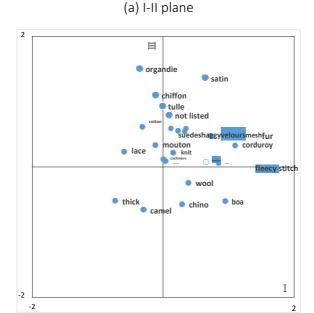


Figure 3: Plots of the patterns

Figure 4 plots the materials in the three-dimensional space. Figure 4 shows that organdy, lace, chiffon and thick fabric are placed on the left side. In fact, these materials are often used in in the red-letter style magazines, such as "Ray" and "CanCam". Satin, fleecy stitch and boa are placed on the right side in Fig. 4. They often appear in the blue-letter style magazines, such as "KERA", "mer" and "Soup".

In Fig. 4, Panel (b), thin and cool materials, such as organdy, satin, chiffon and lace, are placed at the top, and thick and warm materials such as thick fabric, boa and knit, are placed at the bottom. This suggests that the III-axis corresponds to seasons; the top corresponds to spring and summer, and the bottom corresponds to autumn and winter. In Fig. 3, Panel (b), flower patterns, gingham check and botanical pattern, which are suitable to spring and summer are placed at the top. Nordic pattern, hound's tooth pattern, which are suitable to autumn and winter, are placed at the bottom on the III-axis. Figure 1, Panel (b) plots "Ray" at the top and "mini" at the bottom side. In fact, fashion coordinates in "Ray" frequently use chiffon materials with flower patterns and "mini" frequently uses thick materials with camouflage patterns even in summer issues.





(b) I-III plane Figure 4: Plots of the materials

In Fig. 1, Panel (a), only "KERA" is placed at the top and the other magazines are placed in the center on the II-axis. This implies that "KERA" shows unique coordinates, which are dissimilar to the other magazines. Actually, coordinates in "KERA" often uses unique fashion items, such as pairs of corsets, wristbands and button pins and unique combinations of fashion items, such as a skirt with pants or a dress with a skirt. In Fig. 3, Panel (a), unique patterns of leopard patterns and fruit are placed at the top. This was because the frequency of the appearance of these patterns was the highest in "KERA".

4. CONCLUSIONS

In the present study, female fashion coordinates appearing in 16 magazines were analyzed by the correspondence analysis. The magazines, fashion items, patterns and materials were plotted in a three-dimensional space. The plots showed that the I-axis divided so-called red-letter style magazines and blue-letter style magazines. The II-axis separated the magazine "KERA" from the other magazines. The III-axis corresponded with seasons. The results showed that the red-letter style coordinates use feminine items, like frilly blouses, mini-skirts, pumps and handbags with flower patterns, small polka dots and hound's tooth check patterns, which were made of organdy, lace, chiffon and thick fabric materials. The blue-letter style coordinates use casual or sporty items such as parkas, half pants, sneakers and backpacks with camouflage patterns embroidery, small flower patterns, and paisley patterns, which were made of satin, fleecy stitch and boa.

5. REFERENCES

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