CHARACTERISTICS OF PATTERN MAKING WORK OF MODELISTES IN FRANCE IN COMPARISON WITH PATTERN MAKERS IN JAPAN

Emi NAKANISHI^{a, b}, Kyoung Ok KIM^c, Tsuyoshi OTANI^d and Masayuki TAKATERA^{c*}

^a Graduate School of Science and Technology, Shinshu University, Japan

^b ENSAIT-Ecole Nationale Supérieure des Arts et Industries Textiles, France

^c Institute for Fiber Engineering (IFES), Interdisciplinary Cluster for Cutting Edge Research (ICCER), Shinshu University, Japan, takatera@shinshu-u.ac.jp

^d Faculty of Textile Science and Technology, Shinshu University, Japan

ABSTRACT

In French, *modéliste* describes a person who makes a toile for a fashion design produced by a designer at an *haute couture* or a *prêt-à-porter* house. A Japanese patternmaker, who is called a patterner in Japan, uses a basic pattern to make a new pattern based on a drawing by a fashion designer. The new pattern is made by adjusting the lines of the basic pattern to the desired shape. To understand the differences between French and Japanese clothing designs, we asked three French *modélistes* and four Japanese patterners to make a jacket pattern from the same design. Their background and working processes were compared and their thinking on *stylisme*, consciousness of work, and patternmaking process were investigated. As a result, Japanese patterners used flat patternmaking method whereas French *modélistes* draped a body with fabric. In the compatibility of the designs with different body shapes, the acceptable ranges of the French *modélistes*' patterns were wider than those of the Japanese patterners.

Keywords: modéliste, French, patternmaker, patterner

1. INTRODUCTION

In French haute couture houses, garment design is divided into stylisme and modélisme. Stylisme describes the professional activity of a styliste who is responsible for both departments. Modélisme describes the design and production of garment models [1]. The studio department handles stylisme and the atelier department handles modélisme. In Japan, the corresponding person to a styliste is called a designer, but their authority differs. In France, a modéliste performs modélisme, which is to make three-dimensional model of a garment according to the styliste's image as shown in sketches or a memo [2-4]. In other words, modélisme is a practice of producing a representation of a garment (i.e., a "figure" or "shape" model) from the styliste's imagination in fabric.

In French, a *modéliste* describes a person who makes a toile (simple-fitting clothing pinned together from muslin cloth) for a fashion design produced by a *styliste* at an *haute couture* and a *prêt-à-porter* house. *Modélistes* are also responsible for pointing out the difficulty of making clothing according to the sketch drawn by the *styliste*. In practice, the *styliste* and *modéliste* collaborate jointly to design the garment [5-7].

In Japan, the work of a French *modéliste* is performed by a patternmaker, but their roles are different. A Japanese patternmaker, who is called a patterner, uses a basic pattern to make a new pattern based on a fashion *styliste*'s sketch, usually with a plane drawing method. The new pattern is made by adjusting the lines of a basic pattern to the desired shape.

Different patternmaking methods from Japan, France, and Italy were investigated [8]. The effect of the different backgrounds of patternmakers on the appearance of the final garments was shown [9]. In a comparison of commercial Japanese and European jackets, more curved lines on European jackets were shown [10]. Japanese and Chinese jackets also have different appearances [11]. Furthermore, even with the same design, an Italian patternmaker made a more three-dimensional (3D)-shaped jacket pattern than the Japanese patterner did [12, 13]. Thus, Japanese patterners may tend to use a basic pattern to make new straight-line patterns with model limitations in expressing the figures and shapes of curvaceous human bodies. However, the differences between French *modélistes* and Japanese patterners in their practical patternmaking process, detailed work, and the resulting garment model are unclear.

To clarify the effect of patternmakers' work on garment modeling, we compared the work contents and consciousnesses of French *modélistes* and Japanese patterners. We also examined the influence of French and Japanese thinking on *stylisme*, work consciousness, and modeling methods for garments.

2. EXPERIMENTAL

To clarify the difference between Japanese and French *modélisme*, we asked French *modélistes* and Japanese patterners to create patterns and toiles for the same design. After they completed their work, we compared the resultant patterns, toiles, the working time before designer's check, and modification points. We also investigated the relationship between their working backgrounds.

A jacket with 3D volume (which means that it will be difficult to make a pattern from) was designed by a professional designer who had worked in both France and Japan. The jacket's size and measurements were determined by the designer. Figure 1 and Table 1 show the sketch, size, and measurements for the designer's jacket. Four Japanese patterners (J1–J4) and three French *modélistes* (F1–F3) were selected for this study. The patterners and *modélistes* have an average of 10 to 20 years of work experience in Japan and France, and have never worked with the designer before this experiment. They were given the design sketches and size measurements and asked to make patterns and toiles. To evaluate their understanding of the design, the designer did not check the patterns in the middle of all the processes. Before starting the patternmaking work, each *modéliste* and patterner completed a questionnaire about their work background. The questionnaire topics were as follows: (1) school where they studied, (2) career, (3) any experience of creating patterns using the draping method, and (4) any experience of creating patterns using the plane drawing method. The results are shown in Table 2.

After finishing all patternmaking, we asked the *modélistes* and patterners about their work process during this experiment, such as the type of basic pattern used at this time, work process during this time, and working time for the jacket (each toile, pattern, and modification). We then compared the toiles. We took photos of the toiles on two bodies: Stockman size 38 (Siegel & Stockman, France, bust 86.2 cm, waist 67.5 cm, hip 91.0 cm, front waist length [from front neck point to waistline] 36.5 cm) and Kypris 9AR size (Kiiya Co. Ltd., Japan, bust 85.8 cm, waist 63, hip 91.0 cm, front waist length 33.5 cm). The designer checked neckline curve, width of collar and lapel, volume of sleeve, waist constriction, volume of peplum, whole balance of the toiles, and scored each item. We compared the patterns using apparel computer-aided design.

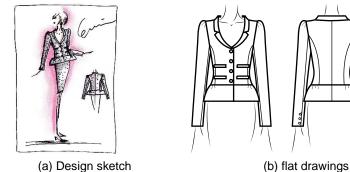




Table 1: Size measurements (French size 38)							
Bust	Waist Hip		Button size on bodice	Button size on sleeve			
87 cm	68 cm	93 cm	23 mm	15 mm			

Name	School	Work experience				
Name	301001	Years Haute couture		Draping	Flat patternmaking	
F1	French professional	17 years in	0	0	0	
	school	France				
F2	French professional	20 years in	0	0	-	
	school	France				
F3	French professional	26 years in	0	0	-	
	school	France	-	-		
J1	Japanese	15 years in	_	0	0	
71	professional school	Japan		U	0	
J2	French professional	10 years in			0	
JZ	school	Japan	-	-		
J3	Japanese	20 years in	_	0	0	
10	professional school	Japan	-			
J4	Japanese	15 years in	_		0	
14	professional school	Japan	-	-		

Table 2: Work experience of modélistes and patterners

3. **RESULTS AND DISCUSSION**

Figure 2 shows the toiles on a Stockman body. The toiles created by the modélistes can be worn by both Stockman and Kypris bodies. However, although the same size (i.e., bust, waist, and hip sizes) was specified, the toiles created by the patterners could only be worn by Kypris bodies and were small on Stockman bodies. The sizes for the patterners' toiles needed to be corrected, including an increase of 3 cm to 6 cm on bust measurements. In addition, the bodice length for all patterners' patterns were short.

The overall measurements were different between the modélistes' and patterners' patterns. The bust, waist, and back length dimensions of modélistes' patterns were larger, which could be because of the different size setting of the body and basic pattern used.

Table 3 shows the results of the designer's evaluation of the toiles and their required modifications. All of the Japanese patterners had more required modifications than did the French modélistes.

Concerning the patternmaking method, modélistes used the draping method (only F1 made sleeves from a sleeve pattern that was close to the design, which she obtained from her experience) while all patterners made patterns using the flat patternmaking method.

As for the creation time for the toiles, the work times using the flat patternmaking method were shorter than those for the draping method except for J3. However, *modélistes'* toiles had a few of the designer's required modifications in general in contrast to patterners' toiles.



Figure 2: Comparison of toiles on a Stockman body

Evaluative	Neckline	Width	Volume	Waist	Volume	Whole	Entire	Required
item	curve	of	of	constriction	of	balance	evaluation	modifications
		collar	sleeve		peplum			
		and						
Patternmaker		lapel						
F1	0	0	Δ	0	0	0	0	1
F2	×	×	0	0	Δ	0	Δ	3
F3	0	×	0	0	0	0	Δ	2
J1	Δ	Δ	Δ	Δ	Δ	Δ	Δ	6
J2	×	×	Δ	Δ	Δ	×	×	6
J3	×	×	0	0	0	Δ	Δ	4
J4	Δ	0	×	0	0	Δ	Δ	3

 Table 3: Designer's evaluation of toiles and required modifications

O: As it is; Δ : Partial modification is necessary; \times : need to recreate

4. CONCLUSION

We compared the patterns and toiles for the same jacket design produced by French *modélistes* and Japanese patterners. *Modélistes*' patterns showed a larger suitable body range than the patternmakers' patterns with different bodies. In addition, the back length of the Japanese patterners' toile was short compared with the balance of flat drawings, which could be because of differences in assumed body measurements in both countries. The designer evaluated French *modélistes*' toiles more highly. The draping method was more suitable for making patterns from a design with 3D volume. The flat patternmaking method had limitations in making a 3D shape from the design. The results of this study will help the design and production of ready-made garments.

ACKNOWLEDGMENTS

This work was supported under KAKENHI grant numbers JP24220012, JP17H01955, and JP16K16255 from the Ministry of Education, Culture, Sports, Science, and Technology of Japan.

REFERENCES

Modéliste. (n.d). In *Dictionnaires de français, Larousse*. Retrieved from <u>http://www.larousse.fr/dictionnaires/francais/mod%C3%A9liste/51926#8xiVmDv3OsZCpPMG.99</u>

The Japan Society of Home Economics Education. (2016) *Ifuku no hakkajiten* [Encyclopedia of clothing]. Maruzen Junkudo Bookstore Co., Ltd.

Takahashi, M., & Otani, T. (2016). An attempt for formulation of fashion apparel design. *Transactions of Japan Society of Kansei Engineering*, *15*(5), 615–623. doi:10.5057/jjske.TJSKE-D-16-00080

Suzuki, A., Takatera, M., & Otani, T. (2016). Some little bewilderment of "elegance" in the LA MAISON DIOR of Raf Simons. *Transactions of Japan Society of Kansei Engineering*, *15*(5), 589–601. doi:10.5057/jjske.TJSKE-D-16-00081

Marconi, R. (Director). (2014). Lagerfeld confidential [motion picture].

Otani, T., Kim, K.O., Takahashi, M., Inui, S., Morikawa, H., & Takatera, M. (2014). International presence and fashion business in Japan: to advocate the construction of fashion engineering. *Transactions of Japan Society of Kansei Engineering*, *13*(5), 629–668. doi:10.5057/jjske.13.629

Sorger, R., & Udale, J. (2010). Fashion design basics. BNN, Inc.

Fujii, C., Takatera, M., & Kim, K.O. (2017). Effects of combinations of patternmaking methods and dress forms on garment appearance. *Autex Research Journal*, *7*(3), 277–286. doi:10.1515/aut-2016-0020

Kim, K.O., Otani, T., & Takatera, M. (2017). Effect of patternmaker's proficiency on the creation of clothing. *Autex Research Journal*, *17*(2), 120–128. doi:10.1515/aut-2016-0005

Kim, K.O., Nozawa, A., & Takatera, M. (2015). Comparison of elegance of Japanese and European jackets. *International Journal of Clothing Science and Technology*, *27*(4), 506–522. doi:10.1108/IJCST-06-2014-0078

Kim, K.O., Takatera, M., Zhu, A.C., & Otani, T. (2015). Comparison of Japanese and Chinese clothing evaluations by experts taking into account marketability. *Autex Research Journal*, *15*(1), 67–76. doi:10.2478/aut-2014-0047

Kim, K.O, Miyatake, K., Sano, K., Takatera, M., & Otani, T. (2014). Research on jacket patterns and specifications of ready-to-wear for high-end in Italy and Japan. *International Journal of Affective Engineering*, *13*(1), 27–33. doi:10.5057/ijae.13.27

KEER2018, KUCHING, MALAYSIA | MARCH 19-22 2018 7TH INTERNATIONAL CONFERENCE ON KANSEI ENGINEERING AND EMOTION RESEARCH 2018

Kim, K.O., Miyatake, K., Sano, K., Takatera, M., & Otani, T. (2014). Comparison of high-end tailored jackets for ready-to-wear produced in Italy and Japan. *International Journal of Affective Engineering*, *13*(1), 35–41. doi:10.5057/ijae.13.35