# The Collar Shape and Image of Shirt Collars according to Pattern Design -Focused on Stand and Shirt Collar-

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## I. Introduction

The purpose of this study was to examine the transformation of the shape of shirt collar by applying some changes to the influential structural elements of collar in the shirt collar design and examined the principle of the transformation, together with the examination on the image of the collar formation newly formed, to provide as fundamental information to the pattern CAD system.

#### II. Method

For this study, the patterns of shirt collar was designed according to the transformation of structural elements of collar, and 15 different types of sample clothes made of muslin of 100% cotton were produced. This study examined the transformation of collar shape in the completed sample clothes and the pattern, and evaluated the difference of image in the collar shape. The semantic differential scale was used as the evaluation method of image by a group of the specialists majored in clothing and textiles.

SPSS Ver.11.5 was used in the analysis of the statistical data, and the analysis methods were correlation analysis, regression analysis and *t*-test.

Definitions of the terminologies used in this study are as follows.

- 1. Spread of collar edges is the angle formed by the right and the left collars being widened while wearing the shirt collar and the angle being widened to the right and the left with the center front line in standard.
- 2. Depth of stand collar neckline curve is the measurement being lifted upward vertically from the center front for the curve of collar line at the time of designing the stand collar.
  - 3. Depth of upper collar line is the drawing space being fixed at the time of designing the

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upper collar and the measurement of deciding the curve of the collar line,

- 4. Collar line means upper collar line and stand collar line.
- 5. Style line is the line to decide the final shape of shirt collar and the length between center back line and the collar edges among the collar circumference of upper collar.

#### III. Results and Discussion

The results of this study are as follows:

First, at the time of designing the shirt collar, as the length of style line is fixed, the transformation of collar shape according to the depth of stand collar neckline curve is as follows. As the depth of stand collar neckline curve of stand collar is increased, the length of collar line is shortened and becomes a shape of close adherence to the neck, and the spread of collar edges becomes wider.

At the time of designing the shirt collar, as depth of stand collar neckline curve of collar is fixed, the transformation of collar shape according to the length of style line is as follows. As the drawing space of upper collar increases, the length of style line increases, and the spread of collar edges becomes narrower.

The collar shape according to the transformation of the depth of stand collar neckline curve of collar and the transformation of the length of style line are as follows. As the drawing space is transformed according to the depth of stand collar neckline curve of stand collar, the length of style line is connected and adjusted to the depth of stand collar neckline curve, and the spread of collar edges does not transform. This shows that two types of phenomena shown by the transformations of the depth of stand collar neckline curve of stand collar and the transformation in the depth of upper collar line, as shown earlier in the results of this study, affect simultaneously, but did not affect to the spread of collar edges at all.

Second, the image difference of the collar shape according to the composition factors of shirt collar is as follows. As the length of style line is being fixed and the depth of stand collar neckline curve of stand collar increases, it is adhered to the neck closely. When there is a transformation in the spread of collar edges, the image evaluation is as follows: as the spread of collar edges gets increased, it perceives common, simple and brisk image. And, as the angle between collars gets decreased, it perceives keen image.

In addition, as the stand collar is fixed and the degree of adherence to the neck has not been changed, the image evaluation by the spread of collar edges being widened is as follows. The shorter the style line, the wider the spread of collar edges, and the image perceives soft, comfortable, brisk and active image. And, the narrower the spread of collar edges, the more splendid and keen image.

The image evaluation on the transformation of collar shape with the length of the style line being lengthened by the transformation of the depth of upper collar line, together with the depth of stand collar neckline curve, is as follows. As there is no change of the spread of collar edges, it perceives the image according to the degree of adherence to the neck. That is, as the more adherence of collar to the neck, the higher perception of smartness, elegance, professional, formality and intellectuality. It also perceives inconvenient and stuffy image simultaneously.

This study tried to define the difference of image according to the transformation of the collar shape of shirt collar in order for the shirt collar designer to estimate in advance the collar feeling and image at the pattern design. We sincerely wish that this will practically be useful information.

## References

- Chung, Ihn-Hee and Rhee, Eun-Young (1992). A Study on Clothing Images: Their Constructing Factors and Evaluative Dimensions. *Journal of the Korean Society of Clothing and Textules* 16(4):379-391.
- Masaru Yamakawa and Asako Uexura (1998). A Method to Pattern Shape of Collars from a Fashion Illustration(Part 1). *Journal of Home Economics of Japan* 49(7):783-790.
- Asako Uexura and Masaru Yamakawa (2000). A Method to Pattern Shape of Collars from a Fashion Illustration(Part 2). *Journal of Home Economics of Japan* 51(10):963-970.
- Armstrong H. J. (2000). *Pattern making for fashion design*. New York: Harper and Row Publisher Inc.
- Rohr M. (1981). Pattern drafting & Grading. NJ: Rohr Publishing Co.
- Nora M. MacDonald (2002). Principle of Flat Pattern Design. Third edition, New York: Fairchild Publications, Inc.