

A Study on The Pattern Shape(Figure) of the Korean Trouser in the Relation to its Fabric(Ground)*

- emphasized on the topological aspect -

Moon, Kong-Hwa** · Lim, Young-Ja***

**Ph.D Candidate, Sejong University

***Professor, Sejong University

I . Introduction

Fashion and clothing have been influenced by the social and cultural changes throughout the history.

It is in fact regarded as an essential of life. Symbolism found in a certain object inherits characteristics from the culture that contains the objects.

In Korea, topology, the Asian thought process that the part and the whole may be changed or altered but still remain one, can be seen in Korean trousers(Hanbokbaji), jackets(Jugori), coats(Po), sack(Jaru) and waist porch(Junde).

This study was intended to investigate the formative beauty of Korean trousers twisted the pieces together based on the way of Korean thinks and the Topology.

II . Theoretical Background

1) The Topological Example Found in Clothing Structure and the process of Consciousness Development

To begin, one must understand the topological paradigm. Topologically, the high dimension includes the lower dimension. The plane includes the straight line and the cylinder includes the plane. The cylinder shape is found in the Möbius strip¹, and Klein's bottle includes the Möbius strip and the cylinder, while the projective plane includes things under it. Seen from the topological example, the structure of clothing develops from the lower dimension to the high dimension, and with the development of consciousness, it comes to develop from the one-dimensional clothing Yui, through the 2-dimensional clothing Po, to the 3-dimensional clothings Yopo and Yokuni. For western trousers, the cylinder is divided into four parts lengthwise, where the front, back, right, and left are clearly symmetrical. This can also be seen in western architecture. In the case of Chinese trousers, the cylinder is made from the torso and the right and left clothes are made by cutting one part of the torso. Korean trousers, on the other hand, include all the rectilinear, planar, and cylindrical properties in the process of cutting out the

* This Project was Funded by the Brain Korea 21 team in 2001

garment and making the Hury, Marupok, and Sapok.

2) Traditional Thoughts Found in Korean Trousers

Unlike Chinese people, Korean ancestors twisted clothes together when making clothing, which included Jaru or Junde, which was necessary for the daily life, which indicates the Korean people's unconscious world as it is. The collective consciousness in the west can be said to be rectangular plane, that of China to be cylinder, and that of Korea to be the Möbius strip when linking the structure of trousers to consciousness development. The thoughts of Wonhyo, a Buddhist high priest, and Lee Yul-gok, a scholar of Yi dynasty can be understood only by the same topological expression.

III. Ground and Figure (Fabric and Pattern Shape) Found in Korean Trousers

Korean trousers consist of three parts: Hury, Marupok, and Sapok.

The small Sapok can be made by removing the Marupok and large Sapok (Figure) from the fabric(Ground) when making Korean trousers.

A Möbius strip is made when the large Sapok is adjoined with the small Sapok by reversing the small Sapok, making a 180° twist and then stitching together.

The theory of Möbius strip can be applied in joining Bajiburi, thus when the trousers are completed the Klein's bottle is seen because of the 2 existing Möbius strip.

If the trousers are divided into two separate parts; one part would consist of the Sapok and the other Hury.

Hury is cylinder while the small and large Sapok make up the Möbius strip.

As a result, the upper and lower part of Korean trousers form the projective plane.

The shape is formed by cutting from the fabric. When seen from the process of cutting out from the fabric and forming the shape of the garment, western trousers can be said to be rectangular plane, Chinese trousers to be cylinder, and Korean trousers to be the Möbius strip.

From the perspective of semiology, the fabric and the pattern shape correspond to ground and figure.

Ground and figure are identical with the principle of the whole and the part, which is the same in Korea, China, and the West. But in Korea, the 3-dimensional garment is made by adding a twist. This is very important and defines the difference in the way of thinking and topology.

Topology is the field dealing with the fact that part and whole may be changed. This is in concurrence with thought of Zen Buddhism which defines the relationship between unity and multiplicity of Hanism meaning one and simultaneously multiple. This concept is illustrated in the process that Korean clothes are made. Whereas western clothes are made by dividing the figure in the ground, Korean trousers are made by twisting a square piece of the fabric once, making the Möbius strip and stitching it.

Ground and figure are undistinguishable in Korean clothes. The whole garment is made by having all pieces bent and twisted. Korean ancestors made new garments by undoing and washing old trousers and re-twisting and stitching them. This concept is applied to the process of breaking Korean-style houses(Hanok) down, where the house is broken down without damaging anything and then restoring it to its original shape again.

With fabric, a pattern shape becomes fabric and fabric becomes a pattern shape, also. It is identical with the process that ground and figure, and space and figure or diagram become identical. When the form is changed from figure to space, the great shift in thinking occurs and part and whole reverse.

In Korean architecture, the Bashimi technique divides the ground and the part to be joined with it by making the joining space mutually in both timbers that are to be joined and joining both timbers together without using a single nail. The process of making Korean clothes is identical with the way of attaching the timber to the building by Bashimi technique in the Korean-style house. According to Kim Sang-il, the process of making clothes and buildings is formed by Bashimi logic, which is the logic that ground becomes identical with figure. This implies topology.

IV. Conclusion

The 21th century will become the century that the conscious world will be changed as we enter the super space.

But traditional Korean have already made the superspace in the life of food, clothing and shelter since the distant past and led a life in it.

The traditional thought found in tradition Korean trousers illustrates the relationship of oneness and multiplicity in which oneness is changed into multiplicity and vice versa and provides a look into Korean consciousness structure.

This is the proper nature commonly found in architecture, art and Yuk(易), and can be said to demonstrate the high consciousness structure when seen from the topological dimension.

And Möbius strip, Kleins' bottle, projective plan can be applied in cutting Hanbokbaji used in the countryside, so I have come to see that the traditional Korean way of thinking is closely related to the theory of topological.