Retrospective Analysis of European Men’s Suit from 1850s to 1920s for Virtual Reconstruction

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Abstract. Historical costume not only offers a rich source of inspiration for contemporary fashion designers, but also provides important area of research for sociologists, anthropologists and historians. This article analyzed European men's suit from 1850s to 1920s from written sources and real historical prototypes and investigated how the historical garments were worn layer by layer. This investigation could help to understand the historical methods of pattern block drafting, suit shaping during sewing, which will be applicable in high-precision reconstruction of men costume in virtual reality for online museum.

Introduction

“Material culture is the conventional name for the tangible yield of human conduct. We have things to study, and we must record them dutifully and examine them lovingly if the abstraction called culture is to be compassed.”… “The design is a record of the process of design and … of the designer’s mind and provides a resource for the historian and scholar created in time and shaped to cultural pattern”¹. Historical and modernity are inseparable, the design elements of historical costume are widely used in contemporary fashion industry. Especially the turn of 20th century, men's everyday suits were similar to contemporary styles, emphasized quality tailoring, practicality and well-dressed.

However, up to now, historical costume is still affected by many limitations in preservation. Therefore, we urgently need new knowledge to restoration or reconstruction these cultural heritages, so that we can better convey the material and spiritual culture of this period. This knowledge also creates the data base which will be useful for generating of digital replica of historical costume as a part of virtual museum.

Garments of Men’s Suit

The Romanticism (1850-1890) is a mixture of the three early styles of the Renaissance, the Gothic and the Rococo². During this period men’s wear has begun to simplify and emphasize functionality. Standard and international styles of clothing began to appear³.

At the turn of century, named Art Nouveau (1890-1914) and after the First World War (1918), the rapidly development of science and technology has affected people’s lifestyle in all aspects depending on different purpose and occasion, kinds of fabrics, colors and styles could be chosen. No man who was properly dressed without an appropriate hat, well-polished shoes and a distinctive walking stick⁴, as shown in Fig. 1 (a). Fig. 1 (b) shows the location of five garments which were formed the men’s suit during this period.
Figure 1. Men’s suit: (a) prototype (1895-1915)\[^5\], (b) cutaway view.

For example, men usually wear fitted suit during daytime and dress tailcoat for official evening events. The structure of a fashionable men wardrobe included five garments - shirt, drawers, trousers, waistcoat and coat\[^4,6\].

1. **Corset**
   Men started to wear the corset to achieve “soldierly bearing” sometimes\[^7\].

2. **Shirt**
   The shirt was usually made of white cotton or linen fabric with a detachable collars which were cut quite high on the neck. Sleeves were covered with small pleats over the sleeve crown and ending with a buttoned cuff\[^4,6\].

3. **Drawers**
   Length of drawers were near the knee horizontal line\[^7\].

4. **Trousers**
   Trousers were cut narrowed and structure changed slightly, with flat fronts and a sharp central crease by using the iron. The trousers had a silhouette of stovepipe and ends above the instep\[^4,6\].

5. **Waistcoat**
   Waistcoat was the second most important garment in men’s suit, usually plaid wool for front and silk for back were popular. The differences between popular styles were created by length under waist level, single or double-breasted and collars\[^4,6\].

6. **Coat**
   There were many kinds of coats since the second part of the 19th century. Among them, as for a daily wear, frock coat was the most prevailing, they did smarten up again with more fitted with body and long skirts, emphasizing a slim silhouette. The coats were extremely cut with nipped-in waistlines and narrow sleeves\[^4,6\].

   As we can see from Fig.1 (b), the thickness of textile fabrics was different around the torso, so to get the real-looking replica or its digital twin we should know the construction of each garment and the properties of textile fabrics used.

**Coat**

Men’s silhouettes was primarily affected by the coats which were different in terms of relatively simple style of shirt, pants, vest, the style of coat is diverse. According to the season and wear’s occupation, the men coat could be divided into three categories: (1) undercoats; (2) overcoats,
shoulder capes and hoods; (3) clerical, military and livery overcoats and undercoats, and the Spanish or military cape\[8\].

1. Style

Since the range of wear of the undercoats was more widely. Fig. 2 shows five styles of undercoats.

![Figure 2. Silhouettes and structure of undercoats.](image)

Sack coat also named lounge jacket, H type, which was an informal garment. Notched collar with lapels, with or without pocket flaps, length was reached above the thigh. This kind of coat has become the dominant style of menswear in nowadays.

Cutaway frock also named morning coat or riding coat, A type, less formal than frock coat because it used the sloping front edges replace the straight front cut. Cutaway frock has narrow sleeves with cuffs.

Dress coat, V type, which was the prior garment for evening. It was cropped horizontally along the waist level in the front and tails to the back of knee. The front was always open to display the shirt, cravats and waistcoat.

Straight-front single breast frock, H slim silhouette, had a suitable body extending to the bottom of skirt that generally above the knee. The special features were stand or revers collars and small dart seamed at waist level called “fish”.

Double breast frock, H type, retained stiffened and high waist, the body part looks similar with the military coats and the skirt was long and slight loose fitting\[4, 6\].

2. Methods of Shaping

In order to reconstruct historical costume with high-precision, it is essential to know the methods of pattern drafting, sewing and shaping, including the special knowledge related to craftsman skills which have been lost in the past.

From the mid-19th century, making and finishing technologies have made a great progress. In 1880s, the bottom edges of frock and tail coat were started to turned in expect, however, it usually depends on the textile materials which were used\[6\]. Fig. 3 (a) exhibits the tail coat before the First World War by using the method\[9\].

In order to make a good looking of chest, canvas in the forepart was padding. The armholes of coats were cut loosely, so interlining and paddings were increased, wadding graded to shape was laid round the back and front of the armhole, the shoulder held out by inserting a three-cornered pad made from two or three layers of canvas, and a little padding was also places in the sleeve head. Shoulder padding was known as “American shoulders”. Men’s coats were totally lined, the forepart was usually used the same fabric with the coat. Heavy fabrics were used for side, skirt and tail. Silk, satin or light weave cotton used for sleeve. Fig. 3 (b) presents men’s evening coat turned inside out\[10\].

Moreover, the tailor's iron was used with great skill by stretching and shrinking throughout the whole process of making men’s suit\[6, 11\]. Fig. 3 (c) shows the places of wedges which would be
shaping by iron of men’s undercoats. The length of edges would be elongated or shorten after the heat moisture treatment. The range of area 1 was 0 to 0.9cm, area 2 was 0.6 to 1.3cm, area 3 was 0.6 to 6.4cm, area 4 was 0.6 to 2.5cm\(^\text{12}\). So, without these values, we can’t reconstruction the coat which is exactly same with the prototype.

Figure 3. Schemes of shaping of men’s costume in the late of XIX century: (a) tail coat\(^\text{9}\), (b) inside out - coat\(^\text{10}\), (c) the areas of steam pressing\(^\text{11}\).

Summary

This article described the wearing ways and important design point of each garment of men’s suit. Analyzed the main style of undercoat during this period. The methods of clothing shaping during drafting, making and finishing of undercoat was studied. It could be used not only reconstruction of historical costumes but also in the educational disciplines such as European costume history and garment design. This research are significant to the inheritance and development of material cultural heritage.

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