
Study and Practice on the Partial Design of Shoes

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Abstract: Style changes are the soul of shoe design and the focus of change is embodied in partial design. Based on the domestic situations of shoe design, this paper analyzed the relationship between partial and whole sculpt, and proposes that the design of shoe products should pay more attention to partial design. Besides, the way of thinking in partial design, the key parts of different styles and the inspiration of clothing's partial design to shoes were researched in detail. Finally, this paper summarized basic principles, conception methods and practical skills, and provided a theoretical and practical basis for the methods of partial design used by shoe designers.

Key words: shoe design; partial sculpt; design style; thinking methods

China is recognized as a great country for shoe manufacturing, but not a powerful shoe design country. The main reason is the problems in product design. In the new economy, the ability of product design has become the focus of competition between shoe manufacturers, or it can be said that the competition between shoe manufacturers has changed into a competition between the ability of designers.

The current personnel structure of shoes designers in China is not reasonable, and some shoe manufacturers don't possess aptitude for self-development. It is necessary for the designers to improve their own professional knowledge, to grasp the developing trend of shoes sculpt through learning, and to study on the new designing techniques.

1 The intention of partial sculpt in shoes design

The sculpt of shoes design is to design the sculpt elements creatively, such as the shape of shoes, color, material, decoration, design pattern, and so on. The change of style is one of the objectives of designers, because only the changes of style could meet various consumers' requirements.

Partial sculpt is the basis for types and style changes of shoes, which not only embodies the designing level of shoe manufacturers, but also the designer's design talent. The contents of shoes' partial sculpt include: shape (toe shape, structure, the sculpt for upper, the sculpt for soles, the sculpt for heel, etc.), color, material, decorative techniques, pattern and accessory parts.

To grasp design techniques of shoes partial sculpt can improve the designer's designing ability, thereby improve the ability to develop new products for shoe manufacturers.

2 The principles for shoes partial sculpt

When designing shoes partial sculpt, six principles should be followed.

- (1) Partial sculpt should be variable according to the designing laws of partial sculpt;
- (2) Partial sculpt and detail handling should be in consistent with the whole style of shoes;
- (3) Partial sculpt for different types of shoes should emphasize the key point.

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(4) Partial sculpt of ordinary shoe designs should meet the wearing requirements, and can not be too exaggerated; partial sculpt of creative shoe designs should be creative and dare to break through the traditional style;

(5) Partial sculpt should consider to product and process ease according to enterprise's technical conditions;

(6) Partial sculpt should embody fashion trends.

3 The methods for shoes' partial sculpt design

3.1 *Thinking methods for shoes' partial sculpt design*

When designing shoes' partial sculpt, it is necessary to consciously and purposefully look through and recall the information gathered and sorted about the design subject, which can give designers inspiration.

To make comprehensive use of various forms of thinking in the design process, such as divergent thinking, reverse thinking, lateral thinking, and so on.

3.1.1 *Divergent thinking*

The main objective of divergent thinking is to find the breakthrough point and to adjust the direction of divergence. On the one hand, the breakthrough point should be found from either the limited scope or the expected objectives, such as expression style, functions, decoration techniques, etc; On the other hand, it can be found within the grasped materials, such as target market information, popular colors, new materials and so on. After the breakthrough point is determined, conception of all possibilities of partial sculpt in different directions around the breakthrough point is needed, such as style of last and toe of shoes, upper structure, pattern of outsole, heel shape, the whole sculpt, etc; or to get benefit from other art patterns, such as architectural art, abstract art, body art and so on. Divergent thinking provides a broad space of thinking for shoes partial sculpt design.

3.1.2 *Reverse Thinking*

Reverse thinking is to break through conventional ways of thinking and to think conversely, and its noticeable feature is that the ideas are novel and unique. The reverse thinking in shoes' partial sculpt design can put forward assumption skillfully and boldly according to the basis and clues of thinking generated by default or formed habits, for example, in shoes' sculpt, structure, shape, techniques, materials, colors, usage mode, etc. Then to attempt boldly from the new perspective, the designer determine the design subject after carefully thinking. This can often achieve an unexpected effect. As shown in Fig. 1, spring and summer boots are the result of applying reverse thinking in partial sculpt designing of ordinary shoes.



Fig. 1 Spring and summer boots

3.1.3 Lateral thinking

Lateral thinking refers to using outside information to analyze things from other areas or from a distant point of view, from which to get new thinking methods. During the partial design, you can put the thinking temporarily into other concepts not related to the design above, after being inspired, go back to the design subject again to generate a good idea. This can help the designer to get rid of inherent “good ideas” in the mind, to prevent from being lost into experiment, and to develop new designing areas beyond himself.

3.2 Key part in shoes partial sculpt

Generally speaking, shoes partial sculpt focuses on the upper and sole part. Because of the various types of shoes, the designers must focus on the characteristics of shoes during design, and different shoes have a different emphasis so as to shoot at the target.

Take the upper design as an example: The key part of Oxford style shoes is the ear, which can be square, round, pointed or a personalized form of asymmetry; the key part of tongue style shoes is the tongue, shoe strap, and the combined form of strip and apron of vamp; the key changing parts of shoes focus on the form of throat, boots sculpt, boot-top sculpt, etc; the focus of women sandals' change is the thickness, the way of winding or knitting, decoration style of shoes upper strappings.

As for partial sculpt of outsole designing, the proportion of outsole sculpt in sports shoes is greater than that in casual shoes, and casual shoes is greater than in dress shoes; in the heel sculpt design, the change in women's shoes is much more than that in men's shoes.

3.3 Revelation from partial sculpt of clothing

Costumes, come from the desire for self-beautification, are a symbol of emotion and a cultural linguistics too. Costumes are the crystallization of human wisdom, have a long history and many contents. Shoes and clothing all belong to costume products, so shoes should go with clothing when dressing, and an aesthetic sense of costume can be displayed only when they coordinate with each other. Therefore, shoes sculpt would be influenced by clothing sculpt to some extent, and they have differences and similarities.

Inspiration could be drawn from partial sculpt of clothing when designing partial sculpt of shoes. This can not only develop the design ideas of a designer, but also make shoe design forms become quite new.

3.3.1 The application of collar sculpt in shoes partial sculpt

Collar sculpt in clothing design are various, which can be applied in the throat part of pump shoes, vamp part of sandal, boots-top part, throat part of boots, etc. Fig. 2 displays the boots designed according to the collar.



Fig. 2 The application of collar sculpt in boots

3.3.2 The application of the front sculpt of clothing in shoe design

Front sculpt in clothing is various, which can be applied in boots-top part design and vamp part of pump shoes, etc. Fig. 3 shows the application of front style in shoe design.



Fig. 3 The application of front sculpt in shoe design

3.3.3 The application of other partial sculpt of clothing in shoe design

Besides collar and front sculpt, many other partial sculpt in clothing can be applied in shoe design. For example, pockets, sleeves sculpt, buttons, zippers, and fold, etc. Fig. 4 displays the application of pockets in shoe design.



Fig. 4 The application of pockets in shoe design

4 Conclusions

To sum up the above points, this paper studies on the intensions, principles and methods of partial sculpt in shoe design. This paper mainly analyzes the thinking method of partial sculpt in shoe design, key part of different types of shoe designs, and revelation from the partial sculpt of clothing. Theoretical and practical references are provided for designers to do partial sculpt in shoe design.

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