An investigation of shaping in design of Christian Dior and Cristobal Balenciaga

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Abstract. Many contemporary fashion designers show Christian Dior and Cristobal Balenciaga as their inspirators and teachers. Many designers present contemporary interpretation of forms of parts and silhouettes of designs of Dior and Balenciaga. But forms of pieces have to be studied not only as separate elements of design. It is important that they have to be investigated on the base of connections between them. An investigation of shaping in designs of both designers on the base connections between forms of parts, and between forms of parts and silhouettes is presented in the paper. The results of the study of shaping in design of Christian Dior and Cristobal Balenciaga, obtained by correspondence analysis, can be used in fashion design education and by fashion designers in their creative work. This is especially important for young designers in the process of development of their style and creative ideas.

1. Introduction
The contemporary designers in their complicated fashion designs often rediscover and develop the works of the famous masters of the 20th century, rediscover their ideas according to the spirit and requirements of the present times.

Many of the contemporary fashion designers show Christian Dior and Cristobal Balenciaga as their inspirators and teachers. Many designers present contemporary interpretations of forms of parts and silhouettes of designs of Dior [1, 2, 3, 4, 5, 6] and Balenciaga [5, 6, 7, 8, 9, 10, 11]. But forms of pieces have to be studied not only as separate elements of design. The investigation of connections between them is very important.

An investigation of shaping in designs of both designers on the base connections between forms of parts, and between forms of parts and silhouettes is presented in the paper.

2. Method used
The connections between forms of parts, and between forms of parts and silhouettes are investigated with the statistical method of correspondence analysis with the help of the software STATISTICA 7.0. [12] The results of the correspondence analysis are presented in graphically. In the graphics: The closeness of the elements of the two investigated groups shows the level of the connection between them. The short distance between elements shows a strong connection between them. The shortest distance between elements from both studied groups shows the strongest connection.
3. Experimental
With the use of correspondence analysis, the following connections in the design of Dior [1, 2, 3, 4, 5, 6] and Balenciaga [5, 6, 7, 8, 9, 10, 11] are investigated: connections between the forms of parts and the silhouettes [13, 14] of designs, and between the forms of parts of the lower pieces of designs and the forms of parts of the upper pieces of designs. The chosen designs are famous, and studied and presented in fashion publications. [1-11]

3.1. Investigation of connections between the forms of parts and the silhouettes of Cristobal Balenciaga
Figure 1 presents the graphic of the correspondence analysis between the forms of the upper parts and the silhouettes in the designs of Cristobal Balenciaga.

Figure 2 shows the graphic of the correspondence analysis between the forms of the lower parts and the silhouettes in the designs of Cristobal Balenciaga.

Figure 3 presents the graphic of the correspondence analysis between the forms of the upper and the lower parts in the designs of Cristobal Balenciaga.

3.2. Investigation of connections between the forms of parts and the silhouettes of Christian Dior
Figure 4 presents the graphic of the correspondence analysis between the forms of the upper parts and the silhouettes in the designs of Christian Dior.

Figure 5 shows the graphic of the correspondence analysis between the forms of the lower parts and the silhouettes in the designs of Christian Dior.

Figure 6 presents the graphic of the correspondence analysis between the forms of the upper and the lower parts in the designs of Christian Dior.

Figure 1. The graphic of the correspondence analysis between the forms of the upper parts and the silhouettes in designs of Cristobal Balenciaga.
Figure 2. The graphic of the correspondence analysis between the forms of the lower parts and the silhouettes in designs of Cristobal Balenciaga.

Figure 3. The graphic of the correspondence analysis between the forms of the upper and lower parts in designs of Cristobal Balenciaga.
Figure 4. The graphic of the correspondence analysis between the forms of the upper parts and the silhouettes in designs of Christian Dior.

Figure 5. The graphic of the correspondence analysis between the forms of the lower parts and the silhouettes in designs of Christian Dior.
Figure 6. The graphic of the correspondence analysis between the forms of the upper and lower parts in designs of Cristian Dior.

4. Results and discussions

4.1. Results of correspondence analysis between the forms of parts and the silhouettes of Cristobal Balenciaga

The most often designed by Balenciaga silhouettes are straight, U turned under the waist, X, A- lines, and oversized.

The most seen forms of the upper parts are sleeveless bodices, bustiers, classic one- and two-pieces sleeves, and curved shoulders.

The most seen forms of the lower parts are straight and A skirts, and ones with tucks.

The analysis presents elements, which are especially characterized for Balenciaga – a train in the back, draperies in the back, tucks in the back, a bustle in the skirt.

On the base of the correspondence analysis, presented with graphics n Figures 1, 2, and 3, some strong connections in the designs of Cristobal Balenciaga are seen:

- There is a strong connection between X and A- lines, and straight silhouette with clothes with sleeves, raglan, curved shoulders, and sleeveless bodices. Therefore, Cristobal Balenciaga combined one of these three silhouettes with one of the shown parts and characteristics in the area of shoulders and sleeves.
- The combination between the oversize silhouettes and sloped shoulders was often used by Balenciaga.
- In the more cases, Y turned line is designed with bustiers.
- The skirts in U turned under the waist and O under the waist silhouettes are designed often with tucks.
- Usually X and A- lines are results of constructing without 3D elements.
• V and Y lines, the straight and semi-fitted silhouettes in the more times are combined with straight skirts.
• Cristobal Balenciaga often combined classic one- or two-pieces sleeves with straight skirts in his designs.
• Often the tucks and A form of the skirts are combined with bustiers and sleeveless upperparts.

4.2. Results of correspondence analysis between the forms of parts and the silhouettes of Christian Dior
The silhouettes which are mostly designed by Christian Dior are: U turned under the waist, Y turned ones, X line.

The most used forms in the upper parts are sloped shoulders and bustiers.
The most used forms in the lower parts are A-line and gattered skirts.

On the base of the correspondence analysis, shown with graphics in Figures 4, 5, and 6, some strong connections in the designs of Christian Dior are seen:
• The most designed by Dior line – U turned under the waist silhouette is often combined with bustiers, especially on the formal dresses, and clothes with a curved shoulder.
• Other preferred by Cristian Dior silhouette Y turned line also is combined with bustiers or curved shoulders.
• X and Y lines are combined with kimono or sloped shoulders sleeves.
• The U turned under the waistline often is designed with A-line or gartered skirt.
• The skirts of X and Y lines are with tucks or pleats.
• According to connections between the upper and the lower parts, the closest connection is between the curved shoulders and pleated skirts.
• Other close connections are between the sloped shoulders and ruffled skirts, and between the bustiers and A-line skirts.

4.3. Discussion
According to the preferred silhouettes, it is seen that Christian Dior’s favourite silhouette is U turned under the waist, which expresses the forms of the women’s body with a thin waist and volume hips. Oppositely, Balenciaga preferred the straight silhouette, but he designed U turned under the waist silhouette too. In Balenciaga’s designs, the straight silhouette expresses gentleness and balance, and the U turned under the waist silhouette is alive, dynamic, and feminine.

4.3.1. Balenciaga’s shaping is characterised by:
• He often made the linear design of the straight silhouette with a combination of a straight skirt and classic one- or two-pieces sleeves.
• In designs with X and A-lines he combined one- or two-pieces sleeves, raglan sleeves, curved shoulders, or sleeveless bodices with A-line skirt.
• In the more cases the Y turned silhouette is formed with bustiers or sleeveless bodices, combined with skirts in A-line or tucks.
• In the character of his S line, Balenciaga made designs with bustle skirts in combinations with bustiers or curved shoulders.

4.3.2. Dior’s shaping is characterised by:
• He designed his preferred U turned under the waist silhouette with combinations of bustiers or curved shoulders with A-line or gartered skirts.
• Dior combined in X and Y lines kimono sleeves and sloped shoulders with pleated skirts or skirts with tucks.
• In more cases, he designed Y turned silhouette with an A-line skirt with bustiers or curved shoulders.
5. Conclusion
The results of the study of shaping in the design of Christian Dior and Cristobal Balenciaga, obtained by correspondence analysis, can be used in fashion design education and by fashion designers in their creative work. This is especially important for young designers in the process of development of their style and creative ideas.

References
[1] Cullen O 2019 Christian Dior: Designer of Dreams (UK: V&A Publications)
[2] Keenan B and Fonteyn M 1981 Dior in Vogue (London: Random House Value Pub)
[3] Müller F and Baron F 2017 Christian Dior – designer of dreams (UK: Thames & Hudson)
[4] Sinclair Ch 2015 Vogue on Christian Dior (Harry N. Abrams)
[5] Metropolitan Museum https://www.metmuseum.org/
[6] V&A Museum Collections http://collections.vam.ac.uk/
[7] Miller E L 1993 Cristobal Balenciaga (Holmes & Meier Pub)
[8] Godtsenhoven K, Arzalluz M and Debo K 2016 Fashion game changers: reinventing the 20th-century silhouette (London: Bloomsbury)
[9] Mulvagh J 1988 Vogue history of 20th-century fashion (London: Viking)
[10] Walker M 2006 Balenciaga and his legacy (Yale University Press)
[11] Balenciaga Museum https://apps.euskadi.eus/emsime/online-collection/museo-cristobal-balenciaga/museo-93
[12] Hill T and Lewicki P 2007 Electronic Statistics Textbook http://statsoft.com/textbook/stathome.html
[13] Kazlacheva Z 2007 Silhouettes in the ladies outer garments Tekstil i obleklo vol 2007 no 9 pp 8-11
[14] Kazlacheva Z 2010 Silhouettes of lady's elastomeric clothing Tekstil i obleklo vol 58 no 1 pp 12-15