UNIVERSITY OF WEST HUNGARAY Simonyi Károly Faculty of Engineering, Wood Sciences and Applied Arts

Theses of the PhD Dissertation

DECONSTRUCTION AND RECONSTRUCTION

The reconstructional analysis of the cutting patterns of Hungarian male garments from the XVII - XVIII century

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Sopron

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1. Introduction

Traditional garments are usually observed by textile restorers, museologists, art historians who focus on costume history, historic costume designers and those tutors who have seminar topics in the field, while fashion designers and apparel industry experts usually deal with modern garments. However, there is a strong connection between the two fields, designers often go back to traditional clothing to get inspiration from historic garments. Being a fashion industry expert I have always been interested in the construction of garments. The silhouette and other formal details of the garments are defined by the creative process of designing and modelling. The producer of the garment has to make sure that the parts that follow the cutting patterns would really result in the needed form after the construction. Computer programs can help a lot, but the creative part still depends on human factors.

Due to its topic and aspect my research involves more fields of expertise. I try to summon the research results of the above fields of expertise, and I obviously include my experience as a constructor. I also use relevant computer programs.

The antecedents of the scientific research work

Garments with authentic cutting patterns can be produced by the reconstruction process of museologists, who create scale models, or by using the original cutting patterns.

Special thematic biographies about garments in Hungarian textile collections, which include correctly sized cutting patterns, has not been published yet. There are a few cutting patterns published in various studies without correctly sized cutting patterns.

Guild masters' pattern books in the area of historic Hungary has been collected by Dr. Ottó Domonkos historian and museologist. Some of these pattern book sketches have been published in various publications, but only a lady's dress and a magister coat have been reconstructed in their authentic, historic form. Male garments, for example trousers have not been reconstructed so far.

2. The aim, importance, and actuality of the scientific work

The target of my research is the reconstruction of the typical 17-18th century male garments published in Hungarian guild masters' pattern books of that age.

The theoretical question is how to reconstruct the cutting patterns published in these authentic books, and how to transform and produce those historic garments to the models of our times. I have also been looking for the up to date presentation of the garments and alternative ways in the reconstruction of cutting patterns. The main important target is the development of a method by which the guild masters' pattern book sketches can be transformed into sized cutting patterns for contemporary use and thus can be virtually presented.

The reconstruction of authentic, historic garments is usually processed by film and theatre costume makers and designers, and the creators of traditional folk costumes. They often aim to have the original outlook, which is processed by optimal technological and formal changes depending on the type of use. They usually use contemporary cutting pattern production methods. Firstly, they design contemporary garments, and, secondly, they change the models to get the needed silhouettes. However, without the thorough examination of the cutting patterns garments can be only more or less similar to the authentic ones. The publication of more original cutting patterns would even help costume designers' work.

Museums now usually aim to present their artworks in details, from different aspects. Exhibitions often apply modern technology to present various pieces of art. 3D programs offer a good chance to exhibit objects, thus garments in a new aspect.

3. Research methodology

The methodology I followed in my research is empiric. I observed technological solutions, the cutting patterns and the ornamentic elements of authentic garments in a world famous costume collection, and also in the textile collections of Hungarian museums. I scaled the selected pieces and I designed their cutting patterns. The study of the authentic pieces was indispensable to understand the sketches in guild masters' pattern books. I analysed some selected cutting patterns from the guild masters' pattern books, and I processed a comparative analysis with the original cutting patterns.

Due to my experience I supposed that using the guild masters' pattern book sketches the cutting patterns of the selected garments can be sized to specific, real models.

To prove my assumption, I developed a method to transform the original sketches to real, upto-date size models. I produced the cutting pattern of a pair of authentic Hungarian trousers and a Hungarian dolman. The cutting patterns in the guild masters' books are adapted to the bodies of today's models. By the correctly sized cutting patterns the original, authentic piece of garment can be reconstructed. To prove this, I made a case study, and featured other areas, where authentic cutting patters could be involved.

4. Research theses

The conclusions of my research are as follows.

Thesis 1

In her research the author revealed that guild master's pattern books – though they are valuable documents of cultural history in the 17^{th} century in Hungary – present only *functional sketches*. Cutting patterns do not show the real cutting layout of the parts on the textile, though they suggest the directions.

- 1.1. The drawings of different parts presented in guild master's pattern books are only partly proportionate, they are not scaled, they only reveal the most significant parts of the garments in the form of simplified sketches. The sizes are only shown in a few cases. The magnified patterns become crooked, so simple magnifying is not a suitable method for creating correct patterns.
- 1.2. The cutting patterns produced with different drawing techniques are used to present only "half patterns", namely patterns from the front middle to the back middle, sometimes including sketches placed on one another, rotated or not fully completed sketches as well. The understanding is complicated due to forms we do not use today. The cutting patterns of complementary parts are not represented, though the cutting of these is inevitable.
- 1.3. The real cutting layout of the parts on the textile are not given in the pattern books, the width of the textile or the possible sawing lines at blow ups are only indicated in a few cases, so that one can hardly predict the localization on the textile and the directions of the cuttings. The author proved that the extended blow up lines on the trousers' legs meet in right angle, one line of which is parallel with the warp, and the other one with the weft on the layout. The layout of the blow up lines in the case of known pieces also prove this.

Thesis 2

There has been no change in the length proportions of the parts of the normal human body as compared to the full body. The sizing of the main body parts for the purpose of producing garments also remained about the same.

2.1. The author proved her conclusions by comparing data from ancient times and the size data of contemporary human male bodies. If one knows body proportions, and the sizes of a special piece of garment, and the way the garment was worn, one can conclude the main size parameters of the owner's body.

2.2. There is no data in Hungarian guild master's pattern books about the sizes of the garments and the ways of garment sizing. In the research the author tried to reason out the traditional ways of sizing from illustrations and written documents of that age. 19th century and contemporary methods of garment sizing are compared and revealed that the main body proportions and the sizing of main body proportions has not really changed for 150 years. Thus it is concluded that through the transmission of expertise garment sizing for human bodies was quite similar to the today's sizing methods.

Thesis 3

Cutting forms kept changing slowly and continuously, as it can be noticed on the cutting patterns of typical garment pieces in the 17th and the 18th century guild masters pattern books, and also on the illustrations, in the written documents and the garments remained from that age.

The leg part of Hungarian trousers is cut from one piece, between the 16th and the 18th century and its seam is on the back crease. It is revealed in the research that the seaming line is continuously moving towards the side of the legs, and in the 19th century the seam line is definitely on the sides.

Thesis 4

One can produce the cutting patterns of the traditional garment types for the proportions and sizes of a special body shape, if one knows the details of the remained pieces of garments, and also the artworks of the age and the written documents. Taking into consideration the sizes of the body and the additional plus for comfort, by the proportions of the shape the cutting patterns of the traditional types of garments in pattern books can be defined.

The author worked out a method by which it is proven that the trousers and "dolman" cutting patterns in 17th century guild masters' pattern books can be compiled to a special body shape. Thus the pieces of garments produced by the cutting patterns adapted to the body shape of today represents genuinely the cutting of the traditional garments.

Thesis 5

Original sized cutting patterns, based on the cutting patterns of guild masters' pattern books, and adapted to the size of a special body shapes, make 3D presentations of the traditional garments possible by 3D computer programs used in today's fashion industry. Through this traditional cutting forms can be presented precisely.

The author proved this statement with two pieces of traditional garments, a pair of Hungarian trousers and a "dolman". The above method helps presenting and "exhibiting" traditional garments that perhaps exist in museums, but their condition would not allow exhibiting.

5. Important publications related to the research work

Journal articles

Hottó, É. – Dr. Kisfaludy, M.: Changes of Form In Hungarian Trousers. Magyar Textiltechnika, (eISSN 2060-453x) LXVII. year 2014 - accepted for publication

Hottó, É.: Hungarian folk traditions in the contemporary fashion Tekstil, Zagreb, Croatia, (ISSN 0492-5882) Vol 62. 2013/5-6, pp. 249-255

Hottó, É.: Hungarian Folk Costumes in Contemporary Fashion. Magyar Textiltechnika, (eISSN 2060-453x) LXV. year 2012/1. pp.37-39

Hottó, É. - Szűcs Á.: A Renaissance of Costumes from Various Historical Periods. Magyar Textiltechnika, (ISSN 1788 1722) LXI. Year 2008/5. pp.126-128

Articles in scientific conference publications in Hungarian and English

Hottó, É.: The Change in the Pattern of Hungarian Trousers from the Second Half of the 16th Century to the End of the 19th Century; 4th International Joint Conference on Environmental and Light Industry Technologies 20-21 November 2013. Budapest, Óbuda University; (ISBN 978-615-5018-93-0) accepted for publication

Hottó, É.: Reinterpretation of Szűr Dolmans in the 21st Century. Jubilee Conference and Alumni Forum on Textile-Clothes-Leather, 22. 06. 2012. Óbuda University (ISBN 978-615-5018-34-3) Budapest, pp. 19-26

Hottó, É.: Hungarian folk costumes and fashion. 2nd International Joint Conference on Environmental and Light Industry Technologies 21-22th of November 2011. Óbuda University, Hungary (ISBN 978-615-5018-23-7) pp. 309-312

Hottó, É.: Tailoring Today and in the Past. International Joint Conference on Environmental and Light Industry Technologies 18-19th of November 2010. Óbuda University, Hungary (ISBN 978-615-5018-08-4) pp.433-440

Hottó, É.: Problems of Recreating Costumes Regarding Historical Costumes: Recreating a Set of Female Costumes from Renaissance Times. Conference on Environmental and Light Industry Technologies, 12. Nov. 2009. Budapest Technical College pp. 55-60

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Scientific conference posters in Hungarian and English

Hottó, É.: The Change in the Pattern of the Hungarian Trousers from the Second Half of the 16th Century to the end of the 19th Century. 4th International Joint Conference on Environmental and Light Industry Technologies 20-21 November 2013. Budapest, Óbuda University

Hottó, É.: Hungarian Folk Costumes and Fashion.2nd International Joint Conference on Environmental and Light Industry Technologies 21-22th of November 2011 Budapest, Óbuda University

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Hottó, É. – Szűcs, Á.: A Collection Inspired by the Renaissance. 'Science and Innovation in the Service of the Future' Conference Workshop; 07. 11. 2008. Budapest Technical College

Conference presentations

Hottó, É.: Reinterpretation of Szűr Dolmans in the 21st Century. Jubilee Conference and Alumni Forum on Textile-Clothes-Leather, Óbuda University, Budapest, 22. 06. 2012.

Hottó, É. – Szűcs Á.: The Connections of Construction Shaping and the Silhouettes of Hungarian Folk Costumes in Historic Times. New Approaches in the Innovation of a Traditional Branch of Industry (35 Years of Collage Training and Research in the Light Industry) Conference, Budapest Technical College 19. 11. 2007

Hottó, É.: An Analysis of Female Tailoring with Regard to Traditions. Conference, Budapest Technical College, 29. 11. 2002.