



ROMANIAN TRADITIONAL MOTIF ELEMENT OF MODERNITY IN CLOTHING

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Abstract: *In this paper are presented the phases for improving from an aesthetic point of view a clothing item, the T-shirt for women using software design patterns, computerised graphics and textile different modern technologies including: industrial embroidery, digital printing, sublimation.*

In the first phase a documentation was prepared in the University of Oradea and traditional motif was selected from a collection comprising a number of Romanian traditional motifs from different parts of the country and were reinterpreted and stylized whilst preserving the symbolism and color range specified to the area. For the styling phase was used CorelDraw vector graphics program that allows changing the shape, size and color of the drawings without affecting the identity of the pattern. The embroidery was done using BERNINA Embroidery Software Designer Plus Software. This software allows you to export the model to any domestic or industrial embroidery machine regardless of brand. Finally we observed the resistance of the printed and embroidered model to various: elasticity, resistance to abrasion and a sensory analysis on the preservation of color. After testing we noticed the imprint resistance applied to the fabric, resulting in a quality that makes possible to keep the Romanian traditional motif from generation to generation.

Key words: *Apparel, printing, CorelDraw, BERNINA Embroidery Software Designer Plus.*

1. INTRODUCTION

One reason for the comparatively slow growth of digital printing on textiles may be related to the extreme demands of the textile applications.

Other challenges:

There are many types of synthetic and natural fibers, each with its own ink compatibility characteristics, in addition to dealing with a fabric that is stretchable and flexible, it is often a highly porous and textured surface.

Use requirements include light fastness, water fastness (sweat, too) through finishing operations and often outdoor use, heavy wear, abrasion, and cleaning.

The fabric not only has to look good but to feel good too, fabric has much greater sorbency, requiring many times the ink volume compared with printing on papers. [1]

2. THE EXPERIMENTAL PART

In this paper are presented the phases for improving from an aesthetic point of view a clothing item, a T-shirt for women respectively, with a Romanian traditional model using a computerised graphics software, CorelDraw [2] [3] respectively and an imprinting rubber system of the model. After the printing phase we passed onto embroidering the model on the T-shirt with the help of the embroidery machine [4] [5] [6] [7]. We also tested the strength of the printed and embroidered model by washing. The T-shirt was washed several times, dried and ironed. A sensory analysis on the preservation of color was performed (a comparative analysis with the elastin sample) to see if the substance with which it was printed did not degrade or crack, and a pilling test was performed by a repeated number of abrasive discs with an abrasive disc that lets us know if the quality of the model has not been affected.

The documentation part was done at the University of Oradea and the traditional motif was selected from a collection that includes a series of Romanian traditional motifs from different parts of the country **Fig. 1**.

The proper motif was stylized and re-interpreted, but the shape features were preserved (diamonds, rectangles, triangles), composition (the way the modules combine with each other) in order to maintain the degree of authenticity of the motif. Graphical model processing was done in the CorelDraw program **Fig. 2**.

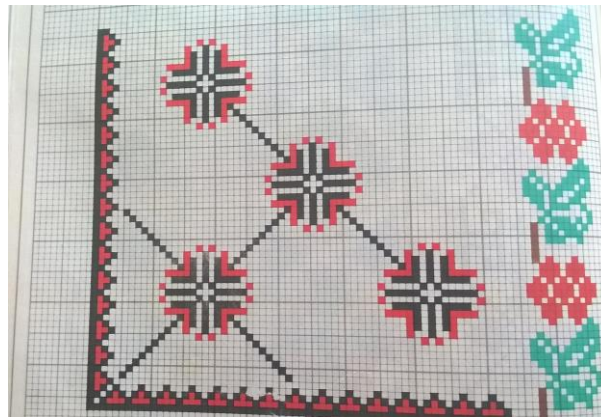


Fig. 1: Model selection

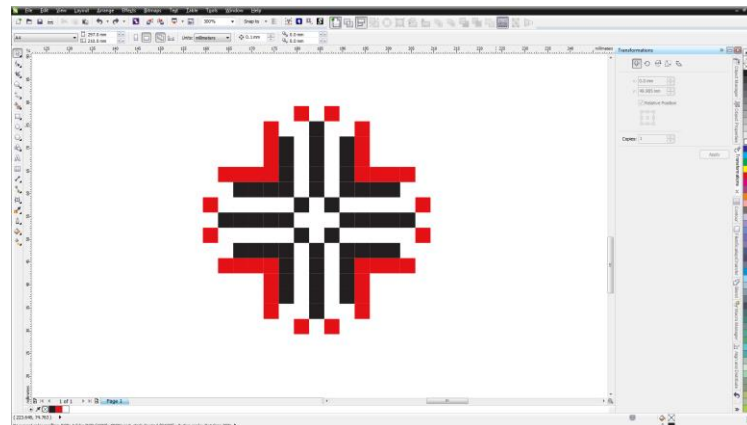


Fig. 2: Model processing in CorelDraw

The motif has been stylized in several sizes and chromatic combinations, and then one of these variants has been chosen, followed by the digitization of the motif using the CorelDRAW graphic program.

T-shirt printing was done with a thermal press and JET-ST transfer sheet.

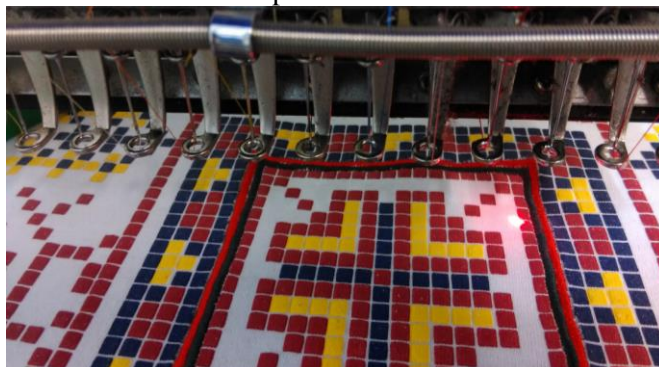


Fig. 3: Happy embroidery machine [8]

After the digitization phase, we passed onto embroidering the model on the T-shirt with the Happy embroidery machine **Fig.3** from S.C. CONFIDEX S.R.L Oradea. [8]

The embroidered pattern was made using the BERNINA Embroidery Software Designer Plus software. The software used to create the embroidery on the T-shirt also incorporates CorelDraw Graphics Suite X6 professional software (Corel PHOTO-PAINT™, PowerTRACE™, Corel Website Creator™, Corel CONNECT™, PhotoZoom Pro 2 and ConceptShare™), which helps us create the desired model in vectorial variant. Transforming into embroidery model is easy with a simple click. This software allows you to export the model to any type of embroidery machine. [2] [8]



Fig.4. Comparative analysis with elastin sample

3. CONCLUSIONS

Traditional Romanian motifs can be applied on different textile supports using modern technologies while preserving their degree of authenticity. These modern technologies allow a mix of old and new, combining the creative features with the technological ones, and can be stylized and reinterpreted in various graphic programs, embroidery programs that retain the shape and size of the designs and the chromatic palette.



As a result of the tests, we have noticed a strength of the imprinted model on the textile fabric, which leads to a quality that makes it possible to keep the traditional Romanian motive from generation to generation.

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