Romanian traditional motif - element of modernity in clothing

L Doble¹, O Stan², M D Suteu³, A Albu¹, G Bohm¹, A Tsatsarou-Michalaki³ and E Gialinou³
¹ University of Oradea, Faculty of Energy Engineering and Industrial Management, Department of Textiles-Leather And Industrial Management, B.Stefanescu Delavrancea street, no. 4410058, Oradea, Bihor, România
² A.G.I.R, Calea Victoriei no.118, Bucharest, România,
³Piraeus University of Applied Sciences 250, Thivon&P.Ralli – 122 44 Athens
E-mail: liadoble@yahoo.com

Abstract: In this paper are presented the phases for improving from an aesthetic point of view a clothing item, the jacket respectively, with a straight cut 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 Ethnographic Museum of Transylvania from Cluj Napoca where more traditional motifs were selected specific to Transylvania ethnographic region and were reintepreted 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. In the patterns design phase Gemini CAD software was used and for the modeling and model development Optitex software was used. The part for garnishing the model was performed using Embrodery machine software reproducing the stylized motif identically. In order to obtain a significantly improved aesthetic look and an added artistic value the pattern chosen for the jacket was done using a combination of modern textile technologies. This has allowed the realization of a particular texture on the surface of the designed product, demonstrating that traditional patterns can be reintepreted in modern clothing

1. Introduction
The variety of the traditional clothing pieces and the complexity of the decorative motifs became valuable inspirational sources for fashion designers. [1]

In traditional descriptions, the embroidery represents the emphasized sewing by specific compositions with an aesthetic role of certain surfaces decoration highlighted by documentation and illustrated by personal fashion products.

Any image or drawing can be converted to embroidery through the programming of machines, so the ones that are part of this fascinating and boosted towards the art ranks field, will always have the creative freedom. [2]

2. The experimental part
In this paper we present steps to improve the aesthetics of a garment, specifically the straight silhouette jacket for women, using pattern design software, computer graphics and different modern textile technologies including: industrial embroidery, digital printing, sublimation. Romanian
traditional clothes are characterized by unity and continuity, the unity comes from the features of the traditional clothes across the country, such as the composition of the garment, the raw material from which the pieces of clothing are made, the cut, color or stitching points, and the continuity is represented by the clothes' evolution over the years. [3]

The chromatic of Romanian folk costumes is characterized by harmony and freshness, with colors being combined aesthetically.

![Fig. 1: Processing the graphic design in Paint](image1)

The documentation for this project was done at the Ethnographic Museum of Transylvania in Cluj-Napoca [4]. The traditional Romanian pattern was selected based on several studies, the pattern itself was styled and reinterpreted in a modern manner, but the shape characteristics (diamonds, rectangles, triangles) and composition (how modules are combined) were kept, to maintain the authenticity of the pattern. The graphic design processing was done in Paint Net (Figure 1) [5].

![Fig. 2: Processing the pattern in CorelDraw](image2)

![Fig. 3: Processing the pattern in CorelDraw](image3)
The pattern motive was stylized in several variations in size and color and after one variation was chosen, the pattern was digitized using the CorelDRAW graphics program.

In the Figure 2, Figure 3, Figure 4, Figure 5 are shows the steps in processing the pattern, using the CorelDraw program which allows for the shape and the size of the drawing to be changed, and offers a wide range of colors allowing us to stylize the drawings. The printing was done on a Azon Tex Pro printer which can be used as a replacement for screen printing or heat transfer.

The embroideries, decorating the garments help maintain the unity of the Romanian folk costume. The threads used to decorate the costume pieces are wool, floss silk, cotton, silk.
plant. The crucial part was how the ornament was arranged on white fabric, thus providing a balance between the different ornamental fields, aesthetically pleasing. [5]

Fig. 7: Embroidery machine Happy [7] [8] [9]

After the digitization phase we went on to embroidering the model on the jacket with the help of the embroidery machine Happy, from S.C. CONFIDEX S.R.L Oradea. [8] [9]

The embroidered model was done with the help of the software BERNINA Embroidery Software Designer Plus. The software used for creating the the embroideries on the jacket integrates the professional software CorelDraw Graphics Suite X6( Corel PHOTO-PAINTTM, powerTRACETM, Corel Website CreatorTM, Corel CONNECTTM, PhotoZoom Pro 2 and ConceptShareTM), this is the one that helps us create the desired model in vector version, the transformation in embroidery model being very easy just by a simple click. This software allows exporting the model to any type of homely or industrial embroidery machine regardless of brand.

In (Figure 8) is presented the pattern for the jacket, and in (Figure 9) the final product of the jacket.

Fig. 8: Jacket pattern
Fig. 9: Jacket – final product

3. Conclusions
- The paper highlights the possibility of using Romanian traditional motifs that can be applied to various textile supports using modern technologies while keeping their degree of authenticity. These modern technologies allow a mix between old and new, combining the creative aspects with
those of technology, they can be stylized and reinterpreted in different programs, graphics, embroidery, keeping the shape and size of designs and color palette.

- At the same time it was meant to transpose the plane forms of products clothing patterns from 2D made with different Optitex systems in 3D which is a laborious activity that requires knowing the possibilities of changing patterns according to the changes of the human body shape and material characteristics.

References

[1] Mocenco, A., Olaru, S., Popescu, G., Ghituleasa, C. 2014 - “Romanian folklore motifs in fashion design” Annals of the University of Oradea fascicle of Textiles-Leatherwork, Volume XV, No. 1, pp. 63–68

[2] Carp, M. 2010 - “Traditional embroidery employment in modern fashion design ” Annals of the University of Oradea fascicle of Textiles-Leatherwork, Volume XI, No. 1, pp. 35–40

[3] http://enciclopediaromaniei.ro/

[4] http://www.muzeul-etnografic.ro/

[5] Indrie, L., Stan, O., Doble, L. 2015-“Romanian traditional patterns reinterpreted and stylized using computer graphics program ”, Conference eRA – 10, organized by Piraeus University of Applied Sciences at Piraeus University of Applied Sciences ISSN-1791-1133, Greece.

[6] http://www.linos.ro

[7] Şuteu, M., Baidoc, M., Indrie, L., Ganea, M. 2014 – ”Determinarea regimului optim de funcționare a mașinii de brodat, folosind tehnica măsurării vibrațiilor”, Revista Industria Textilă, vol 65, nr. 1, ISSN 1222–5347 (1–62), pp. 17-21

[8] http://www.confidex.ro

[9] Şuteu, M., Stan, O., Doble, L. 2016 -” Improving the aesthetic look of garments, using computerised graphics program” Annals of the University of Oradea, Fascicle of Engineering and Industrial Management, ISSN 1843-813X, Oradea, Volume XVII, No. 2, pp. 133-138.