Volume 22 Issue 51
Originally issued as D2

Global Journal of human-social science: D
History, Archaeology & Anthropology
Volume 22 Issue 2 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Evaluation of the Keys from the Traditional Romanian Costume

By Viorica Cazac, Jana Cîrja & Elena Ursu

Techical University of Moldova

Rezumat- The paper presents the result of the study focused on the analysis of the structural elements of the traditional Romanian costume - the join points called "keys" that ensure the processing of the edges of the components of the pieces of the traditional costume, their combination and the increase of the artistic value.

The diversity, aesthetic and technical complexity of making the keys that combine the pieces of traditional shirts, both for women and for men, denotes the creativity and aesthetic taste of the creators. In addition to the structural variety of the keys, the functional characteristics are equally representative. Thus, the last part of the study is directed to the evaluation of the durability of the keys, demonstrating high strength and long service life.

The study was done within the State Project 20.80009.0807.17. “Education for the revitalization of the national cultural heritage through traditional processing technologies used in the Republic of Moldova in the context of multiculturalism, diversity and European integration,” running at the Technical University of Moldova.

Keywords: keys, cotton, linen, aesthetics, strength, traditional costume.

GJHSS-D Classification: DDC Code: 950.072 LCC Code: DS12



Strictly as per the compliance and regulations of:

© 2022. Viorica Cazac, Jana Cîrja & Elena Ursu. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creativecommons.org/licenses/by-nc-nd/4.0/ .

Evaluation of the Keys from the Traditional Romanian Costume

Viorica Cazac [α], Jana Cîrja [σ] & Elena Ursu [ρ]

Rezumat- The paper presents the result of the study focused on the analysis of the structural elements of the traditional Romanian costume - the join points called "keys" that ensure the processing of the edges of the components of the pieces of the traditional costume, their combination and the increase of the artistic value.

The diversity, aesthetic and technical complexity of making the keys that combine the pieces of traditional shirts, both for women and for men, denotes the creativity and aesthetic taste of the creators. In addition to the structural variety of the keys, the functional characteristics are equally representative. Thus, the last part of the study is directed to the evaluation of the durability of the keys, demonstrating high strength and long service life.

The study was done within the State Project 20.80009.0807.17. "Education for the revitalization of the national cultural heritage through traditional processing technologies used in the Republic of Moldova in the context of multiculturalism, diversity and European integration," running at the Technical University of Moldova.

Keywords: keys, cotton, linen, aesthetics, strength, traditional costume.

I. Introduction

The traditional Romanian costume of Dacian origin is represented by various constructive solutions with an impact on its aesthetics, complemented by the implications of the technical solutions of decoration with a great diversity of ornamental systems found on the elements of the costume, but also in the joints between them. Combining the elements of the traditional Romanian costume has excelled over time, from the most straightforward solutions for integrating through manual techniques to the most complex ones. Among the methods of combining the elements of a difficult aesthetic revelation are those generically called "keys."

The keys are the techniques of combining the elements of the pieces of the traditional costume of different complexity found especially in all the constructive types of traditional Romanian shirts with an aesthetic character. They are used from the most straightforward techniques of their reproduction to the complex forms generated by the imagination, and creativity of our predecessors, developed in new aesthetic, functional and sustainable structures.

II. Types of Keys

The shirt represents the most essential piece of the traditional Romanian costume, the constructive lines of which are accentuated by contrasting colors by the joints through the keys of the elements (fig. 1) or being made with the thread of the same type from which the textile is made, giving a remarkable elegance and refinement to the pieces.

The most extraordinary diversity of the keys is attested in the shirts made in the XIXth century- XX.

Maria Hedving Fromagiu [1] had to remark that "among the most archaic forms of ornamentation and highlighting of the silhouette using a special artistic effect, there is the great variety of stitches that assemble the parts of the piece, materialized in the beautiful "keys" ... important also in the decorative composition of men's shirts. They emphasize the shape of the cut while delimiting the spaces for the development of ornamental compositions. The presence of these orderly but particularly beautiful lines is often enough to recognize the play's artistic value."

In the same context, the researcher Secoşan Elena mentioned that "characteristic for each type of shirt is a certain arrangement of decorative stitching, taking different appearances within the numerous ethnographic areas, according to local traditions, "canons" shaped over time by social factors," ".. we find a surprising ingenuity and variety in the systems of joining the pieces of cloth, either through the "keys" sewn on the line of joining the elements or through the lace keys.... which have become the most precious achievements in the art of textiles" [3].

Thus, trying to structure the keys according to the principle of realization, they were structured in keys:

- uncrossed;
- crossed/lace.

Each of these groups includes a wide range of keys according to the realization technique. To the uncrossed keys, refer those:

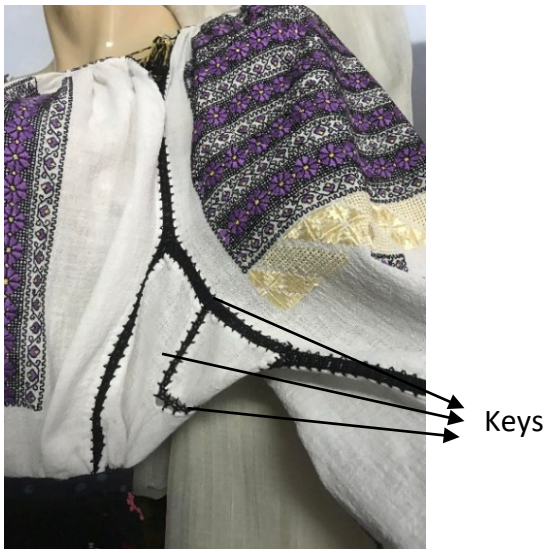
- simple;
- with chain;
- "piglets";
- beams type;
- with alternate legs;
- etc.

Crossed keys include those:

- knotted insertion stitch;
- twisted insertion stitch;
- from multiple knots, etc.

Author: Techical University of Moldova. Faculty of Design.
e-mail: viorica.cazac@dttp.utm.md

© 2022 Global Journals



Source: Cahul County Museum

Fig. 1: Traditional women´s shirt with joints through keys

The diversification of the keys can be performed depending on the size of the seam point pitch, the number of points per surface unit, and the visibility of the keys (visible in contrasting colors, with low perceptibility achieved in the primary color of the product).

a) Functions of keys

The keys as elements of joining the components have a functional, informative/communication, and decorative role. Regarding to the joining techniques [2], "the researchers Elena Secoşan and Ortnasa Dogaru mentioned that the seam points, both those with practical function and decorative role, constitute a precious documentary material in the study of ethnographic aspects, regarding the origin and evolution of the techniques practiced in the manufacture and ornamentation of the port pieces, all the more so as the being of the seam point cannot be isolated from the content of the ornament, given that the seam point is organically related to the ornamental structure and motif, being in relation and dependence on the shape and material of the ornamented object."

Undoubtedly, the aspirations and the aesthetic sense of the creators determined the generation of a great diversity of keys with implications on the image of the traditional Romanian costume unrepeatable and distinct from the decorativeness and capitalization of the lines of the cut of the pieces [5, 6]. Their diversity is determined by the technique of realization, the number of steps per surface unit, the type of threads used at the joint, the thickness of the threads, the number of threads, the chromatics and the number of colors used, their arrangement on directions of orientation, etc.

The ornamental structure of the reproduction of the keys is inscribed in wide lines with few white spaces, continuous.

From the aspect of the communication/ information function, the "keys" distinctly suggest the ethnic and zonal identity mark of the costume, the age, the social status, the civil status, and the material condition of the wearers.

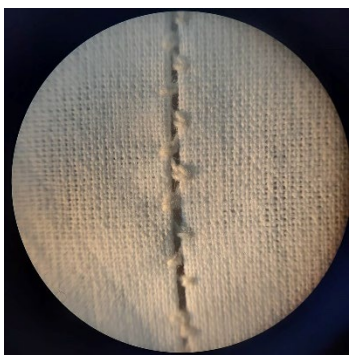
The functional character of the keys is determined by ensuring the following:

- the flexibility of the joints;
- elongation of joints;
- durability through tensile strength;
- protection of the edges of desirability.

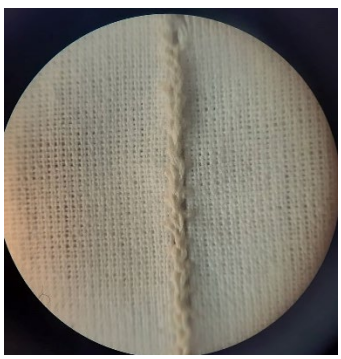
b) Durability of the keys

Durability of the keys is one of the objectives of this study, aimed at evaluating the keys´ functionality. Starting from the above-mentioned, nine types of keys were selected, made, and evaluated by tensile strength, both at their arrangement a horizontal direction and in a transverse direction. The experimental tests were carried out on samples of 4 types of materials: 2 cotton materials of different finesse, cotton mixed with linen-50%+50%, and linen-100% (Table 1). The step of the seam points was identical in all types of keys. The same is the type of thread with which the keys were reproduced: crochet thread, nr. 60/2x3, cotton-100%.

The types of keys included in the study were those presented in fig. 2: simple (fig. 2 a), with chain (fig. 2 b), with alternating points (fig. 2 c), piglets (fig. 2 d), knotted insertion stitch (fig. 2 e), twisted insertion stitch (fig. 2 i), with alternate legs (fig. 2 k), with double alternate legs (fig. 2 l) twisted insertion double stitch (fig. 2 m).



a)



b)

© 2022 Global Journals

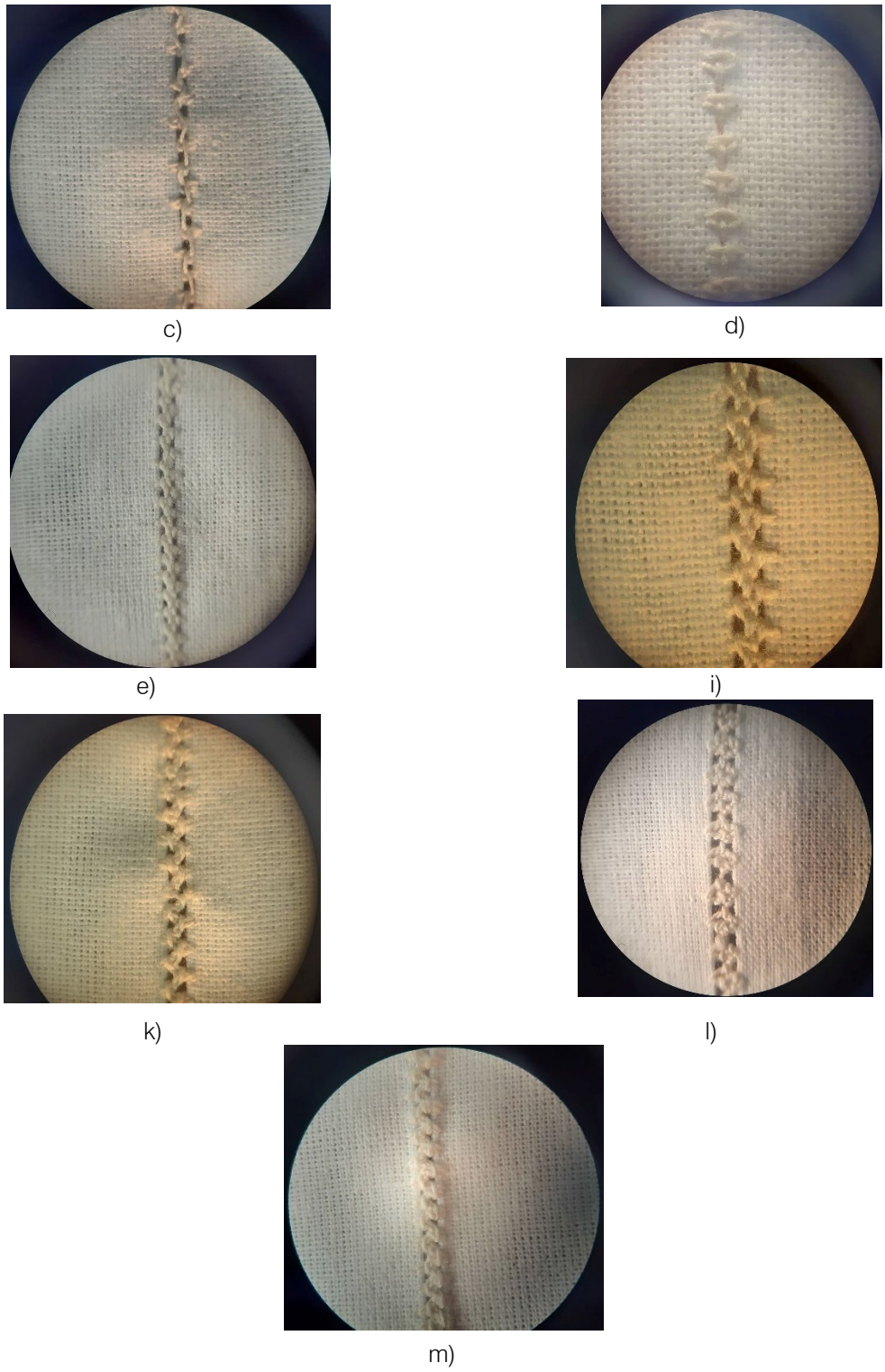


Fig. 2: Types of keys included in the study on the evaluation of tensile strength

© 2022 Global Journals

Table 1: Structural characteristics of the textiles analyzed

Nr. crt	Fabric width, L, m	Thickness of textiles	Surface density, M g/m²	The desiness of the threads No wires /10cm		Linear density of warp threads		Linear density of weft threads	
				U	*B*	*Ttex*	*Nm*	*Ttex*	*Nm*
I_1	1,5	0,35	159,6	140	220	30	33	57	18
I_2	1,7	0,4	160,4	190	140	48	21	50	20
B_6	2,1	0,3	140,4	190	240	32	31/1	30	32/1
B_8	1,5	0,3	90,4	150	220	10x2	25/2	10x2	24/2

The results of the sustainability assessment of the keys included in the study are presented in Table 2, fig. 3-6.

From the data presented in Table 2, it is obvious the durability of all types of keys, from the simplest to the most complex, indicates their long service life. The durability values of the keys increase directly proportional to the complexity of the keys. Thus, the double-knotted keys, those with double, double-knotted legs, denote a high resistance to tearing, ensuring an excellent resistance to the stresses determined by the dynamics of the movements of the human body, in the case of their use in traditional shirts.

The durability of the wrenches assessed by the tensile strength denotes their high resistance far beyond the strength of the textiles, which is contrary to the requirements according to which the resistance of the joints of the clothing elements must not exceed the strength of the textiles. It is necessary that the tensile strength of textiles be higher than that of the joints, thus keeping the elements of the products intact. In case of breaking the threads from the joint, they can be restored again.

Analyzed from an aesthetic point of view, the keys denote an elegant and fine presence that fits perfectly in the ornamental repertoire of the pieces of the traditional costume, assigning them personality, emphasizing the lines of the wearer's silhouette and those of the costume.

Table 2: Functional characteristics of the textiles analyzed

Indices for evaluation of breaking strength	Types of keys															
	1		2		3		4		5		6		8		9	
	warp	*weft*	*warp*	*weft*	*warp*	*weft*	*warp*	*weft*	*warp*	*weft*	*warp*	*weft*	*warp*	*weft*	*warp*	*weft*
	Basic fabric: linen-100%, code: I_1															
Absolute breaking load, $P_{r,}$ *[N],*	374	205	325	207	373	196	280	330	330	165	353	431	423	203	330	169
Absolute elongation at break, $l_{r/a,}$ *[mm],*	124	190	126	128	132	129	122	129	129	124	123	122	126	128	129	120
Basic fabric: linen-100%, code: I_2																
Absolute breaking load, $P_{r,}$ *[N],*	333	210	268	241	275	238	283	271	271	157	275	176	288	187	271	208
Absolute elongation at break, $l_{r/a}$, *[mm],*	120	116	123	128	120	133	118	121	121	114	131	115	131	118	131	118
Basic fabric: cotton-100%, code: B_4																
Absolute breaking load, $P_{r,}$ *[N],*	335	242	272	264	249	251	203	264	375	200	260	210	350	270	325	204
Absolute elongation at break $l_{r/a}$, *[mm],*	126	126	122	125	130	130	125	126	123	117	124	117	128	122	120	122

© 2022 Global Journals

Basic fabric: cotton-100%, code: B_6																
Absolute breaking load, $P_{r,}$ *[N],*	530	265	535	290	490	225	425	240	550	220	555	180	505	242	515	260
Absolute elongation at break $l_{r/a}$, *[mm],*	120	125	122	126	120	126	120	120	118	126	117	120	116	124	116	125

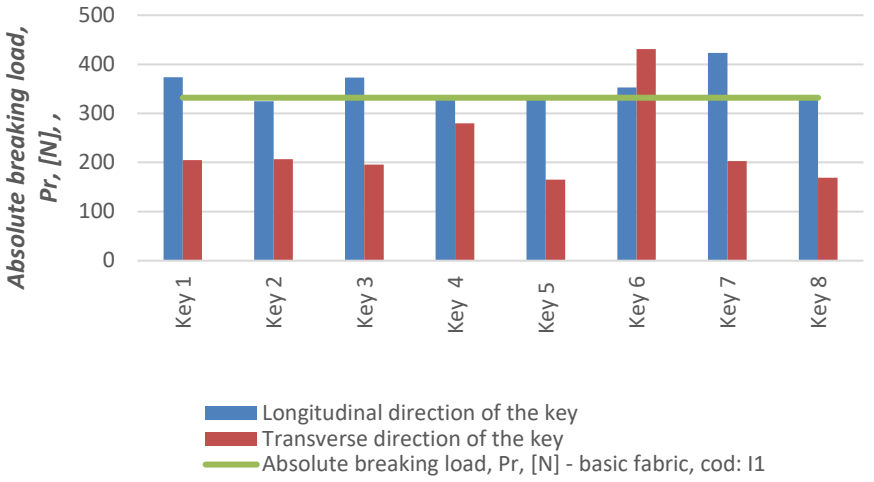


Figure 3: Basic fabric: linen-100%, code: I1

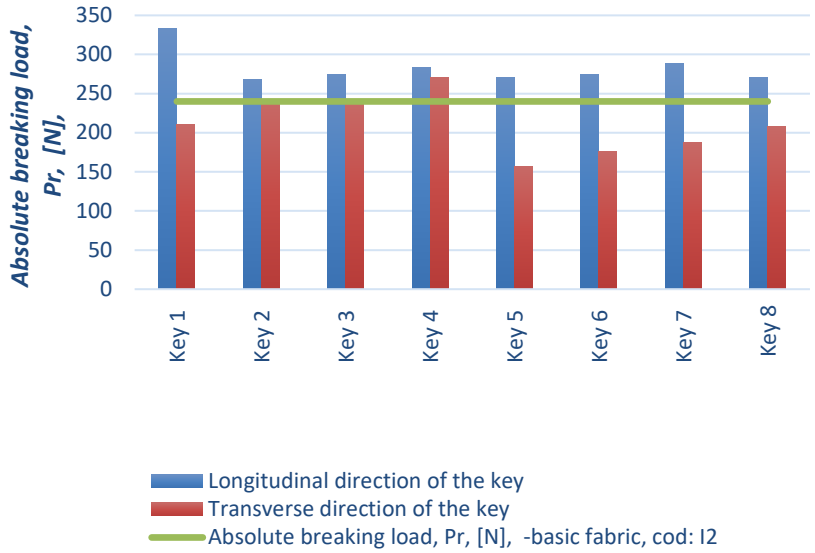


Figure 4: Basic fabric: linen-100%, code: I2

© 2022 Global Journals

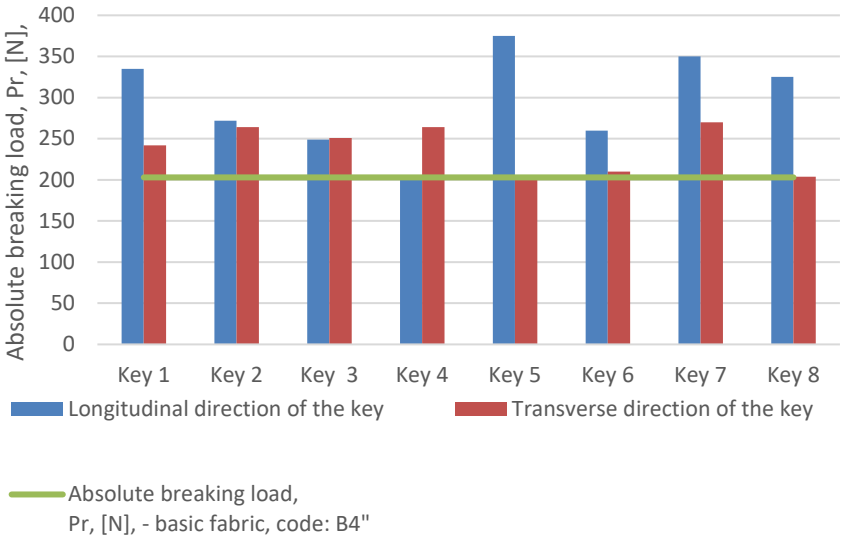


Figure 5: Basic fabric: cotton-100%, code: B4

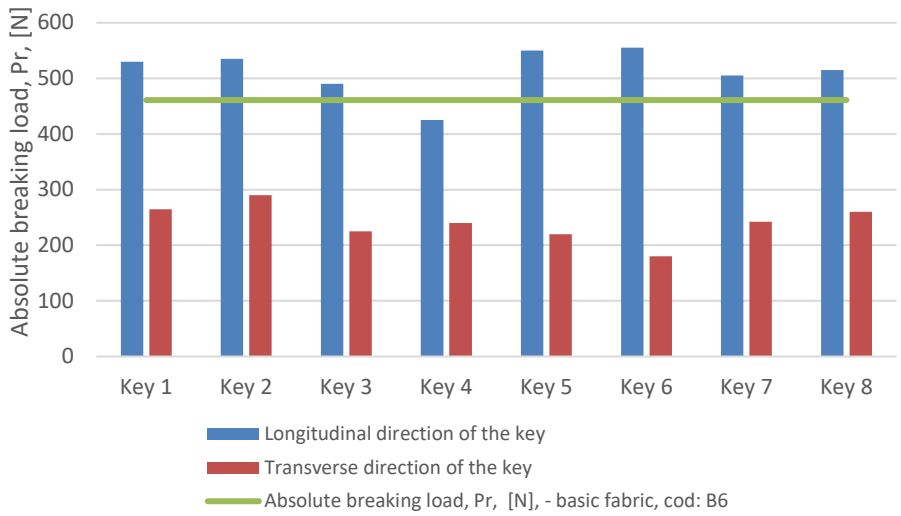


Figure 6: Basic fabric: cottom-100%, code: B6

III. Conclusions

The keys present techniques of processing and combining the elements of the traditional costume pieces that have implications on the aesthetics of the traditional costume pieces, functionality, and communication.

The keys are made by manual techniques involving the needle and the thread.

The reference criteria in the diversification of the keys are related to: the complexity of the keys conferred by the technique of realization, the number of steps per surface unit, the type of threads used at the joint, the thickness of the threads, the number of threads, the chromatics and the number of colors used, their arrangement on directions of orientation.

The evaluation of the durability of the keys confirmed their high resistance to various requests, as well as excellent elongation properties.

The techniques of making the keys allow aesthetic customization and diversification selected concerning the communication with the shape, the material of the ornamented piece, the ornamental concept, and the chromatics.

Acknowledgments

Acknowledgments to the scientific community of the Technical University of Moldova for the support provided during the activities within this project, to the Government of the Republic of Moldova through the National Agency for Development and Research for the financing of the project.

© 2022 Global Journals

We are grateful the museum representatives, the beautiful people of the country who had the openness to share with us valuable information with reference to the predetermined objectives.

Acknowledgments all our loved ones, colleagues for pertinent, competent and prompt advice.

Bibliography

1. Iorga, N. Scrieri despre arta. Editura Meridiane, Bucureşti.
2. Hedving Fromagiu, M. Portul popular din România, p. 38. Bucureşti, 1974.
3. Ţurcanu, V. Costumul: tradiţie şi modernitate-valorificări. Chişinău, 2012.
4. Secoşan, E., Petrescu, P. Portul de sărbătoare din România. Editura Meridiane, 1984.
5. Cazac, V., Ursu, E., Adascalita, L., Cîrja, J. Analysis of the identity peculiarities of the traditional romanian shirts from the Republic of Moldova. *Global Journal of Human-Social Science Research*, [S.l.], oct. 2021. ISSN 2249-460X. Vol 21, No 6-C (2021). Global Journal of Human-Social Science Research, Volume 21 Issue 6 Version 1.0 November 2021. Available at: [https://socialscienceresearch.org/index.php/GJHSS/article/view/3871 doi: https://doi. org/10.34257/GJHSSCVOL21IS6PG47.].
6. Cazac, V., Cârja, J., Ursu, E. Tehnicile de îmbinare a cămaşelor tradiţionale. *Materialele simpozionului naţional de etnologie: TRADIŢII ŞI PROCESE ETNICE Ediţia II.* CHIȘINĂU, 2021. p. 161-167. ISBN 978-9975-3337-8-8. Accesebil: [https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=_943peYAAAAJ&citation_for_view=_943peYAAAAJ:JV2RwH3_ST0C]

© 2022 Global Journals