Weaves and Colours of Lithuanian Folk Skirts Fabrics

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In the article weaves and colours of Lithuanian folk skirts fabrics are analysed. The investigation objects are the skirts from funds of three Lithuanian Museums: 258 skirts from National M. K. Čiurlionis Museum of Art, 85 skirts from Lithuanian Open Air Museum and 16 skirts from A. and A. Tamošaitis gallery "Židinys". Distribution of skirts fabrics according to weaves was estimated, and it shows, that fabrics of plain weave are most widespread (53%), combined and twill weaves are less popular (19% and 18%, respectively). The weaves of fabrics are determined during investigation and plans of weave were made proposing recommendations for manufacturing of similar fabrics. Also distribution of colours and number of colours in the fabrics were analysed. The biggest number of colours is in fabrics of simple weaves (plain and twill), and the most characteristic are green, red, black and blue colours. *Keywords*: folk skirts fabric, weave, plan of weave, colour, pattern.

INTRODUCTION

Characteristics of the fabric are determined not only by such parameters like raw material of threads, thread settings, linear density and others, but also by fabric weave. These fabric parameters are especially important today, when fashion world in particular is coming back to authentic fabrics, which are designed with different check, stripes, and other patterns and ornaments of various complexity, obtained by various thread colors and weave of woven fabric.

Kumpikaitė ir Nėnienė [1] have reviewed directions of Lithuanian folk textile ornaments. However, prevalence and adaptation of weaves in folk textile are not researched extensively. In 1961 Balčikonis wrote, that it is expedient to group patterns of fabrics according to weaves, because they decide the character of pattern. He generally reviewed the main weaves (plain, twill, sateen, damask, overshot, pick-up, overlaid) used in Lithuanian folk textile, picked out the characteristic weaves for some goods, discussed methods of pattern composing [2]. Nėnienė [3] examined weaves of folk Lithuanian peasants' shawls and chronological and territorial tendencies of their diffusion. In historical-ethnographical atlas of Baltic countries [4] it was written about weaves of skirts fabrics, the intensive change in weaving technique, patterns and silhouette of village skirts in the end of the 19th century – the beginning of the 20th century, when plain texture fabrics with color patterns were replaced by uneven texture fancy weave. Kumpikaitė and Nėnienė paid attention to weaving technique of skirts in the 19th century – the I half of the 20th century. They reviewed collection of one museum and analyzed variants of diamond twill, gave plans of weave [5], and analysed compound weaves, widespread in skirts [6].

Pick-up and overshot folk fabrics were studied by Lithuanian technologists Kazlauskienė, Neverauskienė and Milašius [7]. Refering to the method suggested by Woods and developed by Hann [7], they also presented their own system of classification, applying it to woven ornaments and basing it on various groups of symmetry and operations with matrix. Katunskis, Milašius and Taylor [8] also designed software to create a base of data, which allows preserving ornaments of folk fabrics by the way of presenting structure of the ornament and methods of its Neverauskienė, creation. Milašius, Katunskis, Kazlauskienė [9] established that 12 from 17 possible symmetry groups are used in Lithuanian woven fabrics. Zdanavičiūtė, Milašius, Katunskis [10] created the software for preserving and analysis of pick-up sashes and overshot fabrics ornaments, which enabled to analyze peculiarities of ornament symmetry to look for relationship between the culture's mentality and technologies.

Ethnologist Alsupe [11] widely researched weaving techniques and patterns spread in Latvian folk textile. She disclosed interrelation of weaving technique of craftsmen and peasants and gave some knowledge about weaving character and patterns of skirts, noted that skirts of fancy patterns were mostly woven by craftsmen in Vidžemė.

So, the aim of this article is to show the peculiarities of weaving character in the 19th century – the I half of the 20th century, establishing types of weaves and their prevalence, as well as colour distribution in folk skirts fabrics. The work has also applicable character – the recommendations for setting of weaving loom are given and it has important input to textile conservation science.

MATERIALS AND METHODS

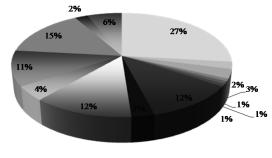
The objects of investigation are the folk skirts from A. and A. Tamošaitis gallery "Židinys", National M. K. Čiurlionis Museum of Art (the data was collected by I. Nėnienė and E. Kumpikaitė) and Lithuanian Open Air Museum (the data was collected by M. Marcinkutė and E. Kumpikaitė), the weaves and colours of the fabrics.

During investigation the data of Lithuanian folk skirts from three Museums of Lithuania, their colours and weaves were summarised, their territorial peculiarities

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were reviewed. The fabrics of 16 skirts from A. and A. Tamošaitis gallery "Židinys", 258 skirts from National M. K. Čiurlionis Museum of Art (NČDM) and 108 skirts from Lithuanian Open Air Museum (LBM) were analysed. Periods of skirts weaving were divided according to the inventorial data of Museums. All folk skirts analyzed were weaved from the middle of the 19th century till the beginning of the 20th century. The skirts, weaved in 1860–1894, were attributed to the end of the 19th century in the Lithuanian Open Air Museum. In some cases the direct decade of weaving is unknown. In Fig. 1 distribution of folk skirts are represented according to the weaving periods indicated in inventorial data of exhibits.

It was established from the collected data (Fig. 1) that the largest amount (27 %) of the skirts from all Museums are weaved in the 19th century – the 3rd decade of the 20th century, and 15 % of skirts are weaved in the 3–4 decade of the 20th century, 12 % – in the end of the 19th century and in the beginning of the 20th century. 11 % of skirts were weaved in the 1–2 decades of the 20th century, 4 % – in the first half of the 20th century. 1 %–3 % of skirts were weaved in other periods. About 6 % of skirts were rejected because of too late period of their weaving, i.e. the 6th decade of the 20th century – the end of the 20th century. In this period the old traditions were not hold so, and the 386 skirts from all three Museums remain for analysis.



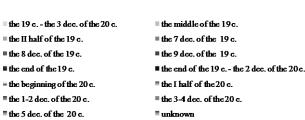
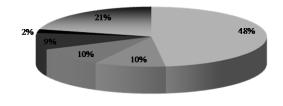


Fig. 1. Distribution of folk skirts according to the weaving period: a - LBM, $b - N\check{C}DM$



Dzūkija Suvalkija Aukštaitija Žemaitija Klaipēda district Unknown

Fig. 2. Territorial distribution of folk skirts

From the distribution of folk skirts according to the regions (Fig. 2) it can be stated that the largest amount of

skirts (48 %) are from Dzūkija region, and least amount (2 %) – from Klaipėda district, from Suvalkija – 10 %, from Aukštaitija – 10 %, from Žemaitija – 9 %. The weaving region of skirts is unknown in 21 % skirts in all Museums.

The softwares "Audiniai" and "Ornamentika" created by V. Milašius and J. Katunskis were used for analysis of weaves and making of their plans of weave. The inventorial numbers of skirts (LBM – Lithuanian Open Air Museum; NČDM – National M. K. Čiurlionis Museum of Art; skirts of gallery "Židinys" has not letter code of inventorial number) are presented by the views of fabrics weaves. Fabrics colours and weaves were established organoleptical.

RESULTS AND DISCUSSIONS

Analysing the skirts fabrics according to weaves, the following weaves were separated: plain, twill, satin/sateen, rep, compound and combined. Overshot, overlaid, pick-up, backed weaves were included into group of compound weaves. Bedford cords, fancy diamond twills, combinations of few weaves were reconed among combined weaves.

It can be seen from Fig. 3 that the skirts of plain weave dominated in all regions when territorial distribution of skirts weaves is analysed. The rep weave skirts is met only in Dzūkija region, but there and in Aukštaitija the skirts weaved in satin/sateen weave were not found. Plain (54 %) and combined (25 %) weaves are widespread in Dzūkija. Plain (53 %), twill (17 %) and combined (17 %) weaves dominated in Suvalkija district. Plain weave (60 %) and twill (20 %) are widespread in Aukštaitija. Less amount of plain weave (34 %) is obtained in Žemaitija, twill weave is widespread in 24 %, combined - in 24 %. In Klaipėda district there was found only plain (83 %) and one skirt of satin/sateen weave. Similar results were got analysing the territorial distribution of weaves in reference [1]. Also Balčikonis [3] investigated the territorial distribution of weaving techniques in clothing fabrics and he picked out similar groups of weaves.

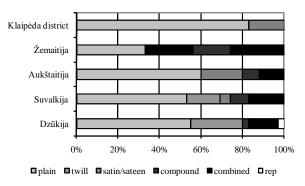


Fig. 3. Distribution of folk skirts weaves according to the regions

The plan of weave of combined weave, fancy pattern fabric is presented in Fig. 4. Two skirts were weaved in this weave with different colours threads, but the weaving period and place are known just for one skirt – it is Dzūkija, the end of the 19th century. Both skirts were purchased in Dzūkija region. 10 heald shafts are needed for this weave. Threads should be drawn-in in fancy draft. There were skirts weaved in similar weave in reference [1].

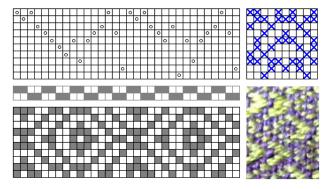


Fig. 4. Plan of weave of combined weave fabric (inv. No. LMB-2525, LMB-37591)

The plan of weave of one more simple weave is shown in Fig. 5. 4 heald shafts in straight draft are needed for its weaving. The weaving place of this plane pattern skirt is unknown, it was weaved in the 3rd decade of the 20th century, purchased in Aukštaitija region.

View of fabric and plan of weave of fabric weaved in fancy diamond twill, fancy pattern are presented in Fig. 6. 17 heald shafts drawn-in in fancy draft are needed for this weave. Two skirts from Dzūkija are weaved in the same weave, but different colours. One of them is weaved in the end of the 19th century, other – in the 3rd decade of the 20th century (LBM). The skirts from Dzūkija region were weaved in similar weave in reference [5].

The view of fabric and plan of weave of one from compound weaves (overshot) are shown in Fig. 7. The weaving place and period are unknown, but it is purchased in Dzūkija region. 8 heald shafts drawn-in in fancy draft are needed for this weave. One more skirt was weaved in the same fragment, but different colours; it was bought in Dzūkija. Similar overshot fabrics were analysed in references [7, 9]. The software for analysis of overshot and pick-up fabrics was even created [8, 9].

The view of fabric and the plan of weave of weft rep weave are presented in Fig. 8. 2 heald shafts drawn-in in fancy draft are needed for this weave. This checked skirt is weaved in Dzūkija in the 1st decade of the 20th century.

Fabric view and plan of weave of one from compound weave, are presented in Fig. 9. This skirt is weaved in Aukštaitija region. 8 heald shafts drawn-in in straight draft are needed for this backed sateen weave fabric. This checked skirt of nine colours is weaved in the end of the 19th century. The plans of weave of fabrics in the same weave were analysed in reference [6].

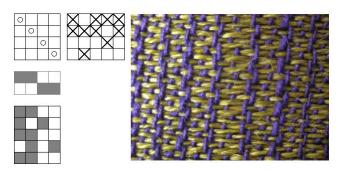


Fig. 5. Plan of weave and fabric view of satin/sateen weave (inv. No. LMB-5331)

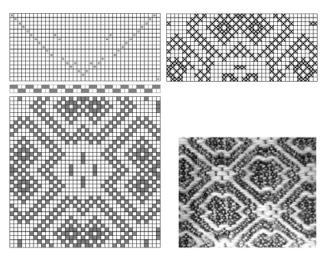


Fig. 6. Plan of weave of fancy diamond twill (inv. No. LMB-12556, LMB-37590)

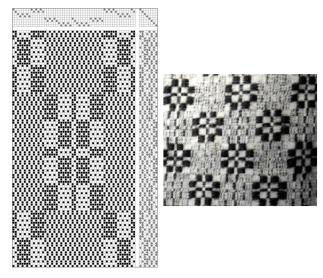


Fig. 7. Plan of weave of compound (overshot) weave fabric (inv. No. LMB-12564)

Other skirt of compound overshot weave (Fig. 10) is weaved in Suvalkija in the beginning of the 20th century. 5 heald shafts drawn-in in fancy draft are needed for weaving of this fabric.

View of one of combined weave fabric is shown in Fig. 11. 7 heald shafts drawn-in in fancy draft are needed for its weaving. This vertically striped skirt of four colours was weaved in Žemaitija.

Skirt from Dzūkija weaved in mock leno weave is presented in Fig. 12. 9 heald shafts drawn-in in fancy draft are needed for this weave. This fancy pattern skirt of two colours was weaved in the beginning of the 20th century.

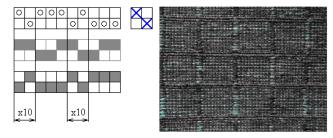


Fig. 8. Plan of weave of weft rep (inv. No. NČDM E 3950)

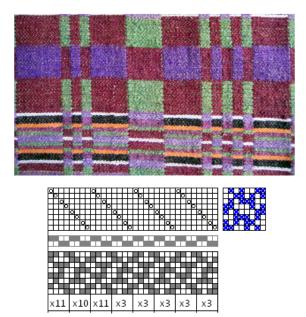


Fig. 9. Plan of weave and view of fabric of compound backed sateen weave (inv. No. NČDM E 3508)

Form the diagram of distribution of colours number according to weaves (Fig. 13) it can be seen that the most colours are used in simple plain and twill weaves. Also many colours were used in skirts of combined weave, though the combination of two colours is most popular (59 %), and pattern effect is got because of weave. Plain weave skirts are often weaved using two (24 %), four (21 %), five (20 %) and three (15 %) colours. Combination of two colours was found in twill skirts the most often (58 %). Combinations of one (12 %) and three (11 %) colours are in the second and third places, respectively. The satin/sateen weave was composed the most often from three (29 %) and five (29 %) colours. Compound as well as combined weaves are made often combining two (37 %) colours. Nėnienė [4] analysed weaves and distribution of weaving techniques of shalws. It was established that twill weave fabrics are more used in shalws. It was estimated [11] that fancy pattern of fabrics is most popular in Latvian cloth fabrics.

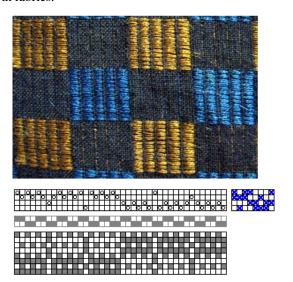


Fig. 10. Plan of weave and view of fabric of compound overshot weave (inv. No. NČDM E 4326)

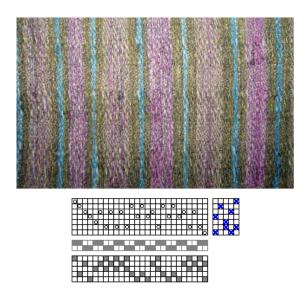


Fig. 11. Plan of weave and view of fabric of combined sateen and Bedford cord weaves (inv. No. NČDM E 2165)

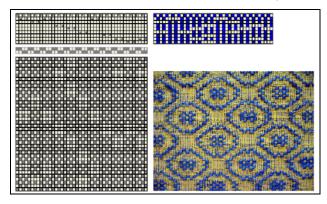
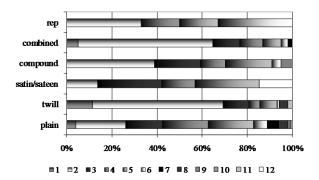


Fig. 12. The quarter of plan of weave and view of fabric of mock leno weave (inv. No. NČDM E 2922)



 $\textbf{Fig. 13.} \ \textbf{Distribution of number of colours according to weaves}$

From the diagram of distribution of skirts pattern according regions (Fig. 14) it can be seen that pattern of skirts weaved in Dzūkija vary the most – there exist almost all types of pattern except of diagonally striped. Checked pattern is the most popular in Dzūkija (45 %) and Aukštaitija (58 %). Checked, vertically striped and plane patterns were used in all regions. Fancy pattern was obtained in less amount: in Dzūkija, Suvalkija and Žemaitija – about 10 %, in Aukštaitija – just 2 %, and in Klaipėda district this type of pattern was not found. Diagonally stripped fabric was obtained just in Aukštaitija region. Vertically striped fabrics are the most popular in Suvalkija (44 %), Žemaitija (36 %) and Klaipėda district

(30 %). In Aukštaitija and Dzūkija this pattern is less widespread (18 % and 15 %, respectively). Patterns and colours of skirts were reviewed in reference [4], and the similar tendencies of these distributions were established.

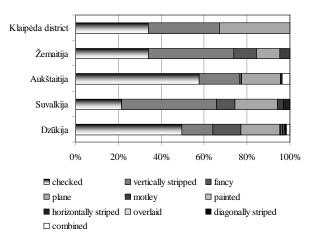


Fig. 14. Distribution of pattern according to weaves

From the analysis of skirts colours according to regions (Fig. 15) it can be seen that the colour spectrum of all weaves is very various.

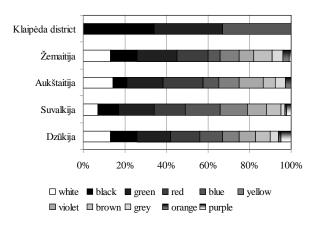


Fig. 15. Distribution of colours according to weaves

The most popular colours are green, red, black and blue, the least popular are grey, orange and purple. Variety of colours is the least in skirts of Klaipėda district. There are found just three colours – black, green and red. 10 different colours were obtained in Aukštaitija. 11 colours in similar amounts were found in all others regions.

CONCLUSIONS

1. It was determined, that fabrics of plain weave are the most widespread in all regions, less popular are

- combined and twill weaves fabircs. Other weaves are spread different in different regions.
- 2. The reconstructions of fabrics of similar weaves can be weaved according to the plans of weave of fabrics analysed.
- 3. It was established that the biggest amount of colours were used in simple plain and twill skirts.
- 4. Checked, vertically striped and plane skirts are widespread and dominate in all regions.
- 5. Green, red, black and blue colours are the most widespread, and grey, orange and purple are the least used in all regions of Lithuania.

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