

METHODOLOGICAL ASPECTS OF RATIONAL WARDROBE

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Abstract: *This work considers the problem of elaborating assortments of products in the context of rational consumption. The methodology of collecting a wardrobe and assortments of garments is based on the principles of satisfying the material and spiritual needs of consumers. The volume and the structure of rational wardrobe have been identified as determining indicators of the population's life level and cultural development level, these being important factors for development and design of new assortments of products. The methodology of formation of rational wardrobe may be applied in the elaboration of wearer group-targeted design, depending on the social indicators and behavior characteristics in relation with the consumption of garments. The experiments were aimed at applying the methodology of establishing a rational wardrobe for a definite group of wearers. The work determined the rational consumption norms for garments by assortment groups based in their usage term. A rational wardrobe has been proposed for women for the group of dresses and suits, containing 23 units of products for the wearer group of women aged 18-29.*

Keywords: *assortments of garments, rational wardrobe, the rational consumption norms for garments*

INTRODUCTION

Elaboration of technologies of developing assortments of garments in the context of design of garments intended for target groups of wearers represents an important problem for the specialists of light industry. The use of rational wardrobe concept in the design of new assortment collections may constitute a possible solution of the problem of rational consumption of products, including the garments, and rational use of material, power and other resources. The scope of study consists in the structuring of the methodology of establishing a rational wardrobe and applying it in the design of products intended for groups of wearers. The actuality of this study results from the modern modality of applying the available technologies of developing garments.

THEORETICAL ASPECTS

The wardrobe is a complex of interdependent functional products capable of satisfying certain needs in a certain period of time. The rational wardrobe is a collection of products to be owned by a person in order to satisfy his/her real needs for garments. The real needs represent the maximum demands of the person supported by the possibilities of national economy in the given time span. The volume and structure of rational wardrobe are important indicators since they characterize the level of life, cultural development, aesthetic preferences of population and play the role of main drivers of development and manufacturing of assortments of garments.

The assortment represents the multitude of products and the relationships between the various types of products in serial production of an enterprise, branch or a group of products. Pursuant to the constructive-typological approach, already at planning stage the assortment may be represented as an ensemble of consumption goods created based on the multilateral market analysis, study of certain consumer groups and manufacturers. The basic principles of this approach are reflected in the process of formation of assortment collections.

The process of elaborating the rational wardrobe and assortment is associated with the solution of problem –

determination of structure and optimum volume of products in the wardrobe bearing in mind the life environment, technical-scientific development and the level of people's requirements.

One may consider the process of formation of rational wardrobe as a hierarchical structure with four levels (figure 1):

- OP (object of design in ensemble) – the wardrobe or the assortment;
- GS (assortment groups) – outer wear, intermediary products, lingerie, headwear, etc;
- US (assortment units) – topcoats, dresses, trousers, etc. characterized by the quality indicators of products;
- ICPĪ – quality indicators of products.

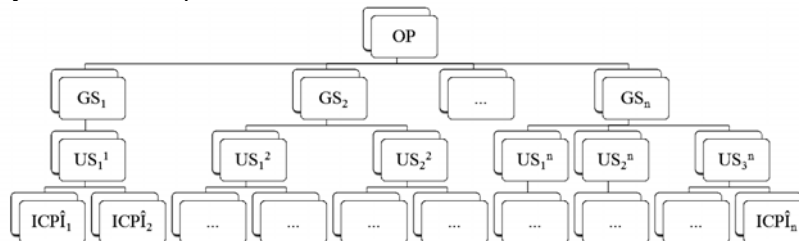


Figure 1: Hierarchical structure of the object of design: structure of wardrobe and assortment of products

Thus, the mathematical model of a rational wardrobe may be represented by the relationship (1):

$$OP \in GS_{1...k} \in US_{1...n}^m \in ICPV_{1...l}, \quad (1)$$

The structure of the assortment is established successively at all structural levels taking into consideration the trends of fashion, the preferences of various consumer groups and the technological capacities of manufacturers.

The solution of the problem of rational wardrobe has to take into account the fact that it will not be the same for the various groups of wearers obtained from their classification by income, age, etc. and consumer behavior (volume and structure of wardrobe, attitude to fashion, etc.).

The complex object for the formation of the assortment of products is the assorted collection of products. The collection of assortment appears as an ensemble of products of various types from the same assortment group, each element in particular representing an assortment entity. This concept is widely spread in case of optimization of industrial collections. For this purpose at the initial design stages of a new collection the manufacturers have to collect the information on consumer demands and their own technological possibilities.

One of the most representative indicators that may be used for assessing the costs of population are the consumption norms for various goods. In the process of analysis it is important to mark that the minimum consumption norms may deviate from the structure and real consumption volume of goods. Since the society of the Republic of Moldova is strongly differentiated from the income point of view, this fact directly affects the consumption of garments and depends on the well-being of each individual in particular. Also, consumption depends on the average per capita income and social-economic situation in the country.

The degree of satisfaction of people's needs for garments depends on the ensemble of factors, the most important being the development of industrial production (especially light industry); income growth; cultural development of population; number and structure of population (age, sex, occupation); anthropomorphological and psychological characteristics of individuals; climatic conditions, etc.

The improvement of life levels and cultural development imposes the diversification and growing quality of garments, increased consumption, extension and saturation of individual wardrobe. So, the personal wardrobe must comprise a sufficient number of products with various functional roles, with pleasant appearance, improved ergonomics and corresponding lifetime. For the better satisfaction of needs of various

consumer groups a correct analysis of requirements to the products is necessary at all stages of manufacturing process (design, manufacturing, sales).

The population size and its demographic composition affect the volume and the assortment structure of garments. The men-to-women-to-children ratio directly affects the volume and the assortment of garments necessary for the market. The age is another important aspect for the analysis of consumption of products. The persons of different ages may change their wardrobes in different ways.

According to the facts stated above, it is insufficient to aim at only one direction, say, the fashion trends in the respective season, but a complex analysis of preferences and needs of specific categories of wearers for whom the products are being conceived. This will require a study of anthropomorphological and psychological particularities of the considered social group.

The consumption of garments is in direct dependence with the wearer's preferences and habitudes. Also, another significant factor is the development of science and industry, in addition to the trends of fashion. So, cultural, social, personal and technical-scientific developments impose increased demands for garments. Therefore, appears a continuous and unlimited need for garments. At the same time, the permanently growing demands must never affect the reasonable limits of wardrobe and there appears the notion of rational consumption norms that in its turn results in the formation of rational wardrobe.

The rational consumption norms are in permanent modification and development process. This dynamic results from the action of numerous factors, including technical-scientific progress and innovation in various domains, social-economic and cultural factors. Namely the permanent changes in the rational consumption norms have a direct impact over the manufacturing process and determine its development directions.

The consumption of garments, like any other consumer durables, has a distinct particularity, and namely: use of product over a certain period, for example, one year, does not coincide with the acquisition in a particular period, in other words, over a particular period of time any person wears both the recently purchased products and the products purchased some time ago. The annual consumption of garments represents a part of its price that is attributed to wear and tear caused by its wearing during the year. Should the annual consumption of garments be smaller than the purchasing incidence, there will be an accumulation of products and a formation of wardrobe. In the contrary case, should the products be consumed faster than the new ones are purchased, the wardrobe volume will decrease.

The rational consumption norms represent the number of products that have to be purchased annually by each person in order to compensate the worn-out ones. For the rational consumption norms to be scientifically justified one must establish the rational wardrobe, in other words, determine the set of essential products necessary for an individual. In addition one shall consider the useful lifetime of products in the rational wardrobe.

The rational wardrobes and the norms of consumption of garments vary depending on the wearer's sex and age. These calculations are based on the per capita average. So, the wardrobe of a person has to contain the following number of products: topcoats – 4,5 units; suit-dresses – 23,34 units; lingerie group – 19,9 units; headgears – 3,4 units; scarves, headscarves – 3,49 units; ties– 2,2 units; gloves– 3,01 units; socks – 12 pairs.

In order to compensate the worn part of wardrobe each person has to purchase annually the following number of garments: topcoats – 1,2 units; suit-dresses – 9,24 units; lingerie group – 11,56 units; headgears – 1,33 units; scarves, headscarves – 1,32 units; gloves– 1,37 units; ties – 0,83 units; socks– 11 pairs.

The rational consumption norms are obtained based on the following economic lifetime of garments: topcoats – 3,75 years; suit-dresses – 2,53 years; lingerie – 1,72 years; headgears – 2,56 years; scarves, headscarves – 2,64 years; gloves– 2,2 years; ties– 2,65 years; socks– 1,09 years.

The rational consumption norms and the rational wardrobe are reconsidered and systematically updated due to instability.

EXPERIMENTAL STUDIES

The experimental studies included the application of methodology of forming a rational wardrobe for a definite group of wearers. The group of young wearers, women aged 18-29 years, adepts of casual style that may be referred to the category of “rational” consumers has been chosen, (approximately 25 % of young generation is part of this group). The consumers of this type formulate exactly their requirements to the products. In order to satisfy the preferences of this category of persons one needs a complete range of products at reasonable prices. The major aspects in the formation of wardrobe of a young person is the growing number of product units, replenishment of wardrobe depending on the trends of fashion and the personal external appearance, growing share of products for active rest, sports, options of interchangeably products of universal destination. For this group of wearers the resistance to wearing and durability of product are not important characteristics.

The rational consumption norms for garments by assortment groups have been adjusted based on the product lifetimes.

A rational wardrobe has been proposed for women with division into dress-suits including 23 units of basic products –blouses, dresses, skirts, trousers, jackets intended for the group of wearers – women aged 18-29 years (figure 2).

The proposed compositional - constructive solutions for the types of component products – blouses, dresses, skirts, trousers and jackets allow to combine products and establish a large number of combination variants and sets of products of various destinations.

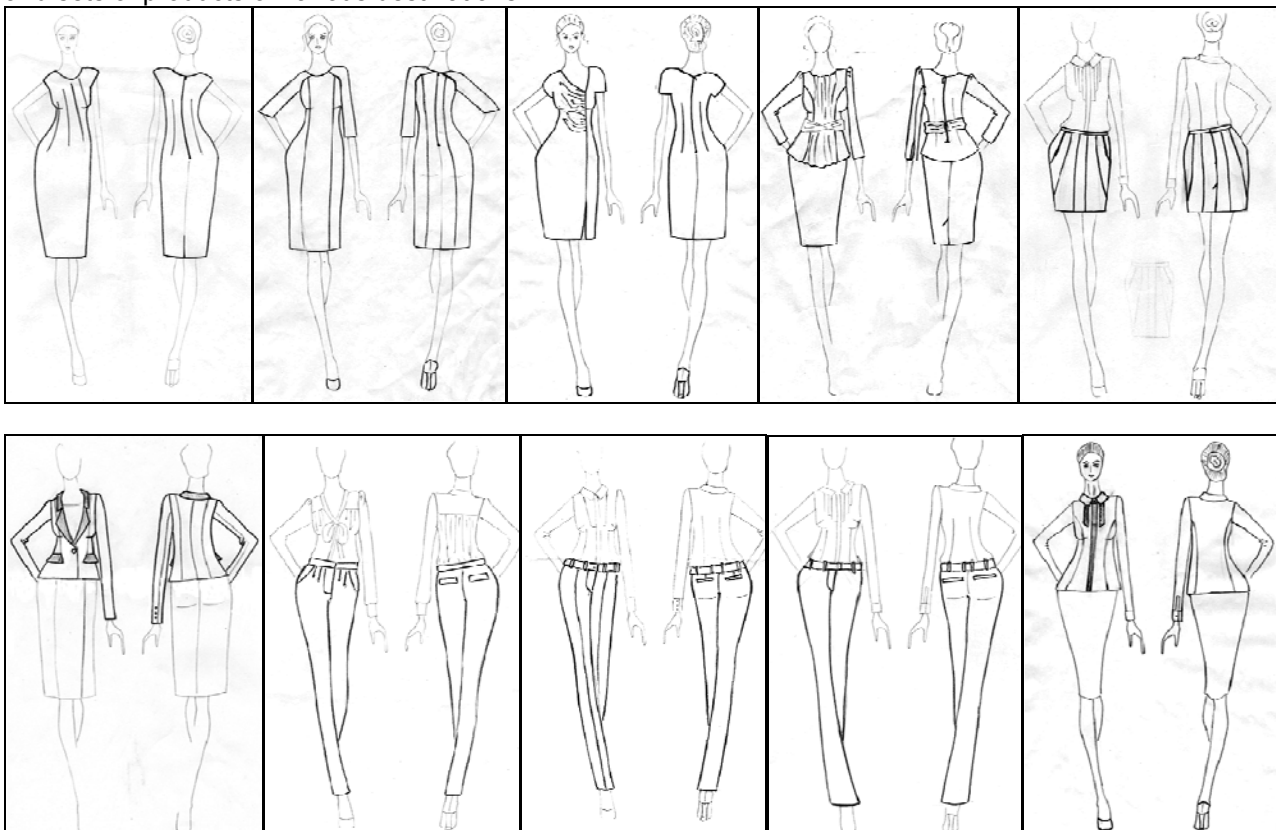


Figure 2: Sketches of product models elaborated in the rational wardrobe (fragment)

CONCLUSIONS

In the result of theoretical and experimental studies it was determined that the formation of a rational wardrobe of actual, quality, ergonomic and solicited products by the domestic manufacturers is possible. The elaboration of rational sets does not require additional costs for the constructive, technological or technical preparation, only a different approach to the conception and selection of new models is necessary. The

launching of products on internal market that may be purchased in separate units or several units, at the same time compatible and interchangeable will attract many more customers tending to minimize their costs for the formation of individual wardrobes.

REFERENCES (SELECTION):

- [1] Агапеев, Д.М. *Социально-психологические особенности формирования имиджа модного товара у молодежи*, Москва, 2006, 197 с.
- [2] Гусейнова, Т. *Товароведение швейных и трикотажных товаров*. Москва: Экономика, 1991, 287 с.
- [3] Гусейнов, Г.М., Ермилова, В.В., Ермилова, Д. Ю. *Композиция костюма*, Москва, 2004, 430 с.
- [4] Tutunaru, I., Balan, S., Irovan, M., Ceban, E. Technologies of designing new models of garments for youth. *Book of papers. „Technical textiles – present and future”*, Symposium, October, 21 – 22, 2011, Iaşi, Performantica, 2011, pp. 317-323.

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