Innovative Trends in Ethno-Costumology in the Modern Theater Process

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Abstract: This article examines the topicality of ethno-costumes in the context of the modern theatrical process. The aim of the study is to conduct a theoretical and methodological study of the problems of ethno-costumeology in the context of the modern theatrical process. The scientific and theoretical methodology of the research include the theoretical foundations of ethno-costumes, concepts of the modern theatrical process, methodological aspects of ethno-costumes, innovative directions of ethno-costumes, artistic principles of creating an ethnocostume. Scientific and theoretical methods were used: socio-cultural, historical, semiotic, ethnographic, formal-stylistic analysis, ekphrasis, attribution of an ethnic costume, observation, interpretation of an ethnic costume in the theatrical process. The practical methods: research of innovative technologies in the design of ethnic costumes in the context of the modern theatrical process, which make up various types of 3D modelling and visualization. The result of the study is: the application of the obtained scientifically grounded methodological foundations in the method of designing an ethnic costume in the production process of the Kazakh Drama Theater named after S. Seifullin in the city of Karaganda. The significance of the results is in the study and identification of methodological aspects in innovative areas of ethnocostumology within the framework of the modern theatrical process.

Key words: ethno-costumology, theatrical process, innovations in costume design, theatrical costume, ethnic costume.

Introduction

The problem of ethno-costumeology in the context of the modern theatrical process is determined by the reliability of the translation of traditional samples of ethnic culture with the synthesis of modern methodological approaches in visualizing the cultural characteristics of the national identity of personages. Consideration of the problem is conditioned by factors: socio-cultural development, historical and cultural, aesthetic, semiotic, scientific and pedagogical and theoretical and methodological foundations of teaching ethno-costumeology. The topicality of the research is the disclosure of innovative tendencies in methodological approaches when visualizing the cultural characteristics of the national identity of characters in the theatrical process. The references to relevant previous work are: scientific and theoretical foundations of the research include the theoretical foundations of ethno-costumes, the concept of the modern theatrical process, methodological aspects of ethnocostemology, innovative directions of ethno-costumes, artistic principles of creating an ethnocostume. The study aim is to develop and theoretically and methodologically substantiate ethnic costumes in the context of the modern theatrical process.

Methodology

The hypothesis of the research is in the development and theoretical and methodological substantiation of ethnic suits, will make it is possible to synthesize innovative methods in the practice of visualizing the cultural characteristics of the ethnic identity of the costumes of personage in the context of the modern theatrical process.

The following tasks were set for the research:

- to analyze and generalize the material on semantics, genesis, evolution, status hierarchy of ethnic costumes, their conceptual content, semiotic system and integration into modern theatrical process;
- to formulate and substantiate the concept of ethno-costumology; to develop a system of theoretical provisions on the essence, structure, functions of ethno-costume;
to investigate the specifics and determine the results of existing approaches to teaching ethnic costume at all levels of professional and pedagogical scenographic education;

- to define the role of ethno-costumology in the modern theatrical process.

The research question was put forward – what are the peculiarities of the innovative trends in ethno-costumology in the context of the modern theater process?

The qualitative content analysis of scientific literature was carried out in the research, as well as an empirical study was conducted using a survey of respondents. The prospective study of the participants covered many areas of costume design. Three groups of respondents took part in the survey: teaching researchers, industrial specialists, creative artists, all of which from different age groups (25-37, 38-50, 51-65) and different gender (male and female). Teaching researchers are define theoretical foundations of ethno-costumes and concepts of the modern theatrical process; industrial specialists reveal methodological aspects of ethno-costumology and innovative technologies in the design of ethnic costume; creative artists maintain the artistic principles in creating an ethnic costume. All survey questions are open-ended. The survey studied the explanation of research methods, scientific apparatus and methodological foundations of research, functions of a costume, factors, and innovative technologies of ethno-costumology.

Microsoft Excel data processing program was used for processing and analysis of the obtained data.

The research base consists of 110 costume specialists of different age groups from different fields of costume research (Table 1).

| Age   | Number (n) | Percent (%) |
|-------|------------|-------------|
| 23-35 | 14         | 12.7        |
| 36-50 | 90         | 81.8        |
| 51-65 | 6          | 5.5         |
| Total | 110        | 100.0       |

The largest number of respondents were of age 36 to 50, having an average length of work experience of 25 years. This shows that the majority of respondents have work experience with theory and practice of costumology and they have gained competencies of innovative trends in ethno-costumology in the context of the modern theater process.

**Theoretical and methodological foundations of the research**

*The theoretical foundations of ethno-costumology* are formed by socio-cultural, historical, semiotic and ethnographic factors. The study of the ethno costume in the context of the modern theatrical process is conditioned by the formal and stylistic analysis based on ekphrasis, attribution of the ethno costume, observation, interpretation of the ethno costume. Research of scientists' work (Battistini, 2005; Biraglia, Kadile, 2017; Bronwyn, 2000; Jane, Graham, 2001; Jill, 2013; Giorgi, Lockwood, Glynn, 2015; Guseynov, Yermilova, 2003; Kalēja-Gasparoviča, 2012; Koliyeva, Gobeyeva, Grkikyan, & Getmantseva, 2021; Makarevič, 2017; Mečņika, Hoerr, Krieviņš, Schwarz, 2014; Melaya, 2015; Mikheeva, 2009; Naidu, Chand, Southgate, 2014; Smith, 2013; Yefimova, 2012; Zhanguzhinova, 2018) on the theoretical foundations of ethno-costumes, it was possible to reveal that: an ethnic costume in the modern sense is presented as an artifact, a product of creative consciousness and activity, organically including elements of a traditional costume, filled with cultural meanings, symbols and images. The functional and semiotic polysemy of clothing represents a broad field of research, in which the ethnic symbolism of the costume is of particular interest. The complex processes taking place in the ethnic environment, and, as a consequence, in the costume complex of ethnic groups in the era of modern times, lead to a certain conceptual confusion that arises when describing the costume. The most commonly used in domestic science is the concept of "folk costume" used in scientific works (Bronwyn, 2000; Jill, 2013; Guseynov, Yermilova, 2003; Koliyeva, Gobeyeva, Grkikyan, & Getmantseva, 2021; Melaya, 2015; Mikheeva, 2009).
Based on the conducted research, it can be concluded, that the costume has the following functions: gender-age, social, class (group), professional, regional, ritual-religious and artistic-aesthetic.

The formation of new forms and types of ethnic costumes is due to a change in socio-cultural and traditional aspects based on the improvement of human activities. Melaya (2015) believes that the constant development of innovative technologies encourages costume designers to create innovative forms, apply new methods in the modelling and design of clothing, to meet consumer demand in a timely manner.

Thus, the study of the theories of various scientists made it possible to reveal that ethno-costumology is associated with the organization of human activity. In the context of the modern theatrical process, ethno-costumology reflects the reproductive activity of the semiotic image of a character - a copy of a certain ethnos. In the creative theatrical process, working with the innovative tendencies of the ethnic costume reveals productive activities aimed at obtaining an objectively new or subjectively new result (Arnkheym, 2012; Biraglia, Kadile, 2017; Chauhan, 2015; Jung, 2003; Kalēja-Gasparoviča, 2012; Kamali, Javdan, 2012; Makarević, 2017; Reynolds, Hart, Mickiewicz, 2014; Robert, 2004; Solso, 2003; Spencer, Kirchoff, White, 2008; Yin, 2009; Zulaikha, Brereton, 2011).

Research of scientists' works on the concepts of modern theatrical process: Chauhan (2015), Chua, Roth, Lemoine (2015), Culture… (2014), Florida (2003), Jane, Graham (2001), Jung (2003), Reynolds (2007), Zulaikha, Brereton (2011) made it possible to reveal that: there is an inextricable connection between the creative and organizational-economic problems of theatrical art [6, c.138].

The study of scientists' works on the concepts of the modern theatrical process made it possible to reveal the conditionality of factors: internal, external and scenographic dialectical concept. The innovative tendencies of the ethnocostume can be implemented by the methods of virtual art, minimalism, high-tech production, automated workplace (AWP). To integrate the concepts of the modern theatrical process, are need:

- modernization of the accumulated scientific knowledge about the concepts of the modern theatrical process;
- evolution of systems of scientific knowledge and information capacity of scientific theories with an increase in the degree of accuracy, validity of knowledge;
- increasing the methodological and methodic arsenal;
- synthesis of pluralism of object, practical, socio-cultural and ideological methodologies.
- growth of differentiation of modern scientific knowledge, scientific methods and concepts, interdisciplinary, problematic and complex research in the field of theatrical process.

Researching theories of Bronwyn (2000), Guseynov, Yermilova (2003), Zhanguzhinova (2018) on the methodological aspects of ethno-costumology, it was possible to identify a universal design methodology containing the following stages: understanding the research problem, analyzing, defining the principles and means of solving the problem, visualizing a formal image (design), detailing.

The methodological process of ethnocostimology can be divided into four main stages:

1. review and information;
2. theoretical and analytical - research part;
3. synergy and interaction;
4. design and communication - the practical part.

The study of the methodological aspects of ethno-costumology made it possible to identify:

1. four stages of the methodological process of ethno-costumology (overview and information; theoretical and analytical - research part; synergetic; design and communication - practical part);
2. methodological approaches (value, holistic, spatial and environmental);
3. methods in creating an ethnic costume.

Ideological and conceptual methods for solving the problem (brainstorming, brain siege, meetings of pirates);
4. heuristic methods (associations, analogies, guiding tasks, empathy);
5. design methods (free expression of function, neology, hyperbole, detailing, decomposition);
6. constructive and technological methods (bionic, innovative technologies, anthropotechnics, transformation, deconstruction, inversion).

Research of scientists' works on innovative technologies in the design of ethnic costume: allowed to identify the main directions in the design of clothing, including stage costume - sensory reflection, neurocommunication, 3D modeling and visualization technologies. The introduction of innovative techniques and technologies in the design of a stage costume, in particular an ethno costume, is based on research by scientists in the field of psychology, psychophysiology, marketing, management, artificial intelligence and innovative engineering, including aero and space research. The works of Chauhan (2015) and Jung (2003) are devoted to studies of European scientists in the field of neurocommunication. B. Schmitt, who considered the issue of neurocommunication and sensory reflection in the framework of empirical marketing. Griffits (2015) also studied sensory marketing within the framework of consumer emotion management technology. Adaptation of the transition from traditional clothing design ideas to innovative technologies is considered in the works: Biraglia, Kadile (2017); Chua, Roth, Lemoine (2015), Culture Label Agency... (2014), Florida (2003), Kalėja-Gasparovičė (2012), Koliyeva, Gobeyeva, Grkikyan, & Getmantseva, (2021), Mečņika, Hoerr, Krieviņš, Schwarz (2014), Melaya (2015), Naidu, Chand, Southgate (2014), Rae, (2007), Reynolds (2007), Reynolds, Hart, Mickiewicz (2014), Zulaikha, Brereton (2011).

The influence of the psychological aspects of the unconscious as a fundamental independent sphere of the mental life of a person and society were investigated in the works of Chauhan (2015), Jane, Graham (2001), Jung (2003), Kamali, Javdan (2012), Makarevičs (2017), Solso (2003). Research questions of "sensorics" accentuate the interest of scientists on the influence of psychological aspects of the unconscious on the perception of information by the five senses, through sight, hearing, taste, smell and touch. Research in the field of psychology and neurobiology has identified effective tools for influencing the viewer through visual perception, based on the Harvard model, according to which more than 90% of human mental activity, including emotions, occurs in the subconscious. Researchers in the field of visual arts V.P. Arnkheyem (2012), Gage (2000) identified two categories of visual perception: "perceptual", through which perception occurs, and "pictorial", through which the artist embodies his thought in the material of art. Thus, visual perception is in the formation of "perceptual concepts", just as artistic creativity is "the formation of adequate pictorial concepts".

A visual neurocommunication tool using the patented Zaltman metamorphic method - ZMET, is qualitative research in the field of innovative technologies, widespread in many areas of entertainment services. The development trend in the field of costumed performances (circus shows, festivals, carnivals, theatrical performances) in scenography of theatrical costume also has the Zaltman method - ZMET (Griffits, 2015; Koliyeva, Gobeyeva, Grkikyan, A.O. & Getmantseva, 2021; Melaya, 2015).

Along with visual neurocommunication tools, the color correction method is also widespread, to which the works of Kamali and Javdan (2012) are devoted. Color correction is one of the methods of qualitative research, which consists in the fact that according to the social parameters of a person, one can predict his reaction to various color combinations (Makarevičs, 2017; Mečņika, Hoerr, Krieviņš, Schwarz, 2014; Melaya, 2015; Rae, 2007). The sensory features of the meaningful artistic forms of the character's image on the stage, which include - word, sound, line, spot, color, are in the focus of attention of sections of scientific knowledge such as phenomenology, ontology, semiotics, semantics and pragmatics. Epistemological orientation in relation to color contributes to the disclosure of many answers to questions about the impact of color through the laws of metaphysics.

Thus, the study of visual instruments of neurocommunication and sensory reflection made it possible to identify a semiotic system of visualization of the character's image for ethno-costumology in the theatrical process.

The research of scientists' works contributed to the identification of innovative technologies in the design of ethnic costume: costume in the context of the modern theatrical process (Makarevičs, 2017; Mečņika, Hoerr, Krieviņš, Schwarz, 2014; Melaya, 2015; Rae, 2007), Pauline van Dongen in the field of 3D modelling and visualization technology: SLS - selective laser sintering; SLA - laser stereo lithography; PolyJet and PolyJetMatrix; MJM - technology based on multi-jet modelling using polymer material; FDM - Molten Filament Deposition Modelling. Ruff's 3D printed adaptive wearable
material has been widely used in the fashion industry, stage performances and various other performances.

Taking into consideration the different definitions and approaches to innovative technologies in the design of ethnic costume presented in the theoretical part of this study, this section explores the meaning of artistic principles in the creation of an ethnic costume and costume creation’ perspectives in theatre and cinema performances.

The fashion industry has influenced all areas of the visual arts. Innovative trends in 3D modelling in the context of the modern theatrical process are prevalent in theatrical productions. One notable example is the debut of costume designer Tomáš Dabert for Wolfgang Riehm's opera "Conquest of Mexico" for the Royal Theatre of Madrid in 3D. The artist's goal was to synthesize elements of the ethnic costume and innovative technologies. The artist's task was to refresh the classic stage production and create a 3D model and 3D print of the armour of Native Americans and Spanish conquistadors (Griffits, 2015).

The use of innovative trends in 3D modelling is widely spread in the context of modern film processes. With the rapid development of the film industry, the widespread use of 3D modelling of costumes for films has acquired particular relevance. The audience's orientation towards fantasy, spectacular films is growing and popularized by the commercialization of computer games, forming new popular ideals of superheros and images of characters. Costume designer Judianna Makovsky's goal in Marvel's Black Panther was to convey a costume that resembles something of a feline body. The task of the costume designer was to convey a certain ethnicity to the world - Wakanda. The Black Panther costume is a combination of a practical costume and visual effects, including weaving from a net similar to chain mail, made of the fictional metal "vibranium" (Griffits, 2015; Koliyeva, Gobeyeva, Grkikyan, & Getmantseva, 2021; Melaya, 2015; Naidu, Chand, Southgate, 2014).

Thus, research into innovative technologies in ethnic costume design has found application in all fields of visual arts, including theatrical stage costume design. Based on the studied material, it was possible to identify the main directions of 3D modeling and visualization: SLS - selective laser sintering; SLA - laser stereolithography; PolyJet and PolyJetMatrix; MJM - technology based on multi-jet modeling using polymer material; FDM - Molten Filament Deposition Modeling. Ruff found wide application of 3D-printed adaptive wearable material in the fashion industry, stage performances and in various other performances (Griffits, 2015; Koliyeva, Gobeyeva, Grkikyan, & Getmantseva, 2021; Melaya, 2015; Naidu, Chand, Southgate, 2014).

Researching theories Guseynov, Yermilova (2003), Ignatyev, Nikitin, Nikitin, & Reshetnikova, (2005) allowed to reveal the artistic principles in the creation of an ethnic costume.

Simple shapes are due to the ergonomic functions of the cut - straight-cut and oblique clothes, tunic-like, curved cut lines are consistent with the anatomical structure of the human figure (Melaya, 2015; Mikheyeva, 2009; Rae, 2007; Zhanguzhinova, 2018).

Research results and discussion

Due to the research, each element of embroidery and decoration has a semantic meaning, carries a semantic load and performs functions in a costume (15% teaching researchers refer to the gender-age, social, class (group); 30% industrial specialists apply to the professional, regional functions; 55% creative artists see connections with ritual-religious and artistic-aesthetic functions).

Thus, allowed to reveal that: ornamentation and decoration of the ethnic costume - harmonized with the shape and cut of both the details and the entire costume as a whole. The holistic approach to costume decoration is due to the system "man - environment - design" (Melaya, 2015; Mikheyeva, 2009; Rae, 2007; Chauhan, 2015; Jane, Graham, 2001, Jung, 2003; Kamali, Javdan, 2012; Makarevičs, 2017; Solso, 2003).

The methodological research reveal that 78% teaching researchers refer to value, holistic; 18% industrial specialists emphasize environmental; 4% creative artists spatial) approaches, which connected with the organization of human activity (reproductive and productive) and the costume'
functions of (gender-age, social, class (group) in 51-65 age; professional, regional in 36-50 age; ritual-religious and artistic-aesthetic in 23-35 age) groups of respondents.

The result of analysis define that: the compositional logic of the ethno costume is determined by the placement of the pattern on the product by the expediency and subordination of the general ideological and conceptual task (Melaya, 2015; Mikheyeva, 2009; Rae, 2007; Zhanguzhinova, 2018).

The research of the methods in creating an ethnic costume showed that 73% teaching researchers define ideological and conceptual methods for solving the problem (brainstorming, brain siege, meetings of pirates) and heuristic methods (associations, analogies, guiding tasks, empathy); 18% industrial specialists think that constructive and technological methods (bionic, innovative technologies, anthropotechnics, transformation, deconstruction, inversion) much effective; 9% creative artists indicate design methods (free expression of function, neology, hyperbole, detailing, decomposition). These allowed concluding that differentiation of color preferences in a costume depends on color gelstates and functions in a costume (gender-age, social, class (group) in 23-35 age; professional, regional in 51-65 age; ritual-religious and artistic-aesthetic in 36-50 age) groups of respondents.

The research allowed revealing, that: color solutions of the ethnic costume are determined by visual tools of neurocommunication and color correction methods (Arnkheym, 2012; Battistini, 2005; Gage, 2000; Kaleja-Gasparoviča, 2012).

Thus, the study of artistic principles in the creation of an ethno costume made it possible to identify simple forms, ornamentation and decoration of an ethno costume, the compositional logic of an ethno costume, color solutions of an ethnic costume in the innovative trends of ethno costumology in the context of the modern theatrical process.

As a result of the conducted research, the concept of research was formulated and substantiated: ethnocostumology is based on interdisciplinarity and synthesis of systemic components of the essence, structure, functions of ethnic / folk / national costume. Within the framework of the modern theatrical process, the task of the ethno-costume is to broadcast traditional samples of ethnic culture and synthesize modern methodological approaches in visualizing the cultural features of the national identity of the characters in the Scenography. The system of theoretical provisions on the essence, structure, and functions of an ethnocostume contains research methods, methodological foundations of research, costume functions, factors, directions in costume design, artistic principles, and the introduction of world experience in innovative areas of ethnocostumology.

Conclusion

The study of innovative trends in ethnocostumeology in the context of the modern theatrical process made it possible to determine the research methods: socio-cultural, historical, semiotic, ethnographic, formal-stylistic analysis, ekphrasis, ethnocostume attribution, observation, interpretation of an ethnocostume in the theatrical process.

And also to formulate the scientific apparatus and methodological foundations of the research, including: theoretical foundations of ethno-costumes, concepts of the modern theatrical process, methodological aspects of ethno-costumes, innovative technologies in designing an ethnic costume, artistic principles in creating an ethnic costume.

The study revealed that the costume has the following functions: gender-age, social, class (group), professional, regional, ritual-religious and artistic-aesthetic. The formation of an ethnic costume is associated with the organization of human activity (reproductive and productive).

The study of the works of scientists on the concepts of the modern theatrical process made it possible to identify the conditionality of factors: internal, external and scenographic dialectical concept.

Innovative trends in the creation of an ethnic costume can be implemented by methods: virtual art, minimalism, high-tech production, automated workplace (AWS). The methodological process of ethnocostimology can be divided into four main stages:

1. review and information;
2. theoretical and analytical - research part;
The research process of ethno-costumology includes methodological approaches: value approach, holistic approach, spatial-environmental approach.

On the basis of the theoretical study, the following methods were identified in creating an ethnic costume:

1. Ideological and conceptual methods for solving the problem: brainstorming, brain siege, meetings of pirates.
2. Heuristic methods: associations, analogies, leading tasks, empathy.
3. Design methods: free expression of function, neology, hyperbole, detailing, decomposition.
4. Constructive and technological methods: bionic method, innovative technologies, anthropotechnics, anthropotechnics, transformation, deconstruction, inversion).

The introduction of innovative technologies in the design of an ethnic costume made it possible to identify the main directions in the design of clothing, including a stage costume - sensory reflection, neurocommunication, 3D modeling and visualization technologies. On the basis of the study, it was possible to identify a semiotic system of visualization of the character's image, which includes the following components: word, sound, line, spot, color.

The revealed system served as the basis for the introduction of artistic principles in the creation of an ethno costume: simple forms, ornamentation and decoration of an ethno costume, compositional logic of an ethno costume, color solutions of an ethno costume in the innovative trends of ethno costumeology in the context of the modern theatrical process.

The implementation of the theoretical and methodological foundations of the study will make it possible to effectively implement in the practice of the modern theatrical process in Kazakhstan the world experience of innovative trends in ethno-costumology.

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