The pole nomads’ architecture as a structural component of modern ethnic design (on the example of Kalmykia)

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Abstract. The article analyzes the formation of the modern ethnic design structure under the influence of certain ethno-cultural components. The ethnic direction development in contemporary environmental design is considered as an indicator of the various cultural zones’ uniqueness preservation, with the subcultural identity components’ inclusion in its structure, which allow preserving individuality in the cultural globalization space.

The creative environment of ethno-design contributed to the definition of the traditional “pole architecture” of nomads as a creative source for the Lagan tourist base design during the pre-project analysis. Based on the example of our own design - project, design means analysis of the ethnic design structure’s components.

The article provides a comparative analysis of this area development in the Russian practice of environmental design. The article defines Russian ethno-design as a new scientific direction, examines the fundamental principles of designing regional cultural and tourist sites of ethno-design in the unique ethnic traditions’ context. The formation of ethnic design structure under the influence of nomadic architecture traditions is analyzed. The creative position of ethnic design in the world today is determined by transforming the cultural images of the past in a new context. The importance of ethnic design in shaping the region’s image for ethno-tourism is considered.

Introduction
The problem of globalization in the modern world assumes particular relevance, manifested in the assimilation processes and even in the disappearance of small nations, when the national way of life undergoes changes, and the national language is lost.

The problem of violating the harmonious interaction of local (traditional) cultures and modern universal world culture turned into a planetary problem in the XXI century. Technological civilization erases the boundaries between different cultures and alienates man from both its traditions and the history of its people. The depersonalization or Americanization of many cultures occurs, and as a result, we are witnessing the creation of type less works with no “roots” in design and architecture.

But at the same time, there is a tendency actualization to search for self-identification in both art and ethnic design in everyday cultural practices. “As a result, the boundaries of the semi-sphere of everyday life are largely blurred, its space is saturated with many diverse cultural signs, which leads to the cultural status acquisition by everyday life. Life, previously opposed to culture, now becomes a part of it” V. Leleko notes [1].

In the twentieth century, a special ethnic direction was formed in design with various manifestations in practice. The ethnic direction in environmental design is a special category of artistic
thinking associated with national characteristics, with folk art, with the way of people’s life in harmony with nature. In the scientific studies, it is noted that the value-cultural matrix as a component of the national model includes traditions and cultural patterns, which are the core of protective value [2]. In the process of design and practical activity, ethno-images acquire a rebirth and a new understanding, being included in the modern cultural space.

Russian ethno-design as a scientific direction is based on the history of a multinational state, an important indicator of which is the degree of folk culture study. Thus, a new approach is being laid to the ethno-design objects’ modern organization, as one of the design and creative activity types, which is created using the ethnocultural motifs, where artifacts become the basis for the modern objects’ design in ethnic style.

The presentation of traditions in the modern world is carried out by ethnic design, as a very relevant direction in design, in a situation of cultural globalization. “Without the national features’ manifestation in design objects, it remains faceless and gray, but not national design is needed, but the national culture characteristic features’ refraction in the design of a particular region,” R.Kh. Chabbarov notes in his research [3]. Regional features are most successfully implemented in ethnic objects and small architectural forms - these are tourist centers, mini-hotels and other cultural objects in the regions. Thus, the modern material culture of the region is formed, the unique cultural identity of the people is preserved, thereby supporting the positive national image of the region attractive for tourism.

Various aspects of the ethnic design development can be considered as a modern culture phenomenon. The trend of a large merger in various disciplines is a nowadays reality - there is a unification in the ethnic design of various zones of intellectual activity, such as synergy, economics, ethnography. Ethno-design organically grows from the spiritual and material substances of a certain ethnic group. The images are created from the palette of traditional national colors.

It is possible to connect the aesthetic, technical and functional properties with the elements of ethno-architecture and ethno-culture in ethnic design. The creative approach invariably leads to a change in the project activities’ methodology, expands the field of the creative ideas’ implementation and makes it possible to get highly aesthetic assessments of the ethno-design objects’ results.

Materials and methods

Using the design and implementation of an ethnographic object in Lagani as an example, the author analyzes the new image creation in ethno-design, when the “Pole architecture” acquires the new functions while maintaining its ethnocultural code. The transformation of the constructive architectural elements’ function of the Kalmyk yurt into the dominant decorative elements of the modern interior is taking place. The basic elements assembled into a specific structure embody the designer’s intention and are able to form the semantics of ethnic design as a means of visual communication. To develop the design solutions from the historical sources, architectural details, constructive solutions, silhouette and shape, examples of decorative design of the traditional nomadic dwelling are borrowed, which corresponds to the method of historical analogy. Between the parts of the created object there is a certain set of relations that carries the message of the people’s cultural code. In the design decisions’ implementation, the combinations of new technologies, compositional means, methods of working with traditional artistic techniques and qualities inherent in the cultural heritage of this people are required.

Studying the ethnic trends in design, it is necessary to define the concepts of “pole architecture” and the structural component. The mobile architecture of nomadic herders is considered in the works of Batyreva S.G. “... as a specific phenomenon in the world history of architecture, which largely determined the “nomadic style” of the Kalmyk folk decorative and applied art, formed in the aggregate of traditional artistic crafts that provided economic activity and the existence of nomads of the 19th – early 20th centuries” [4].

The ethnographic research method has proved to be the most effective in working with historical sources and in the process of designing the new ethno-objects. Being one of the elements of ethnic
culture, architecture expresses the idea of the people in the universe. Growing up from the spiritual and material substances of a certain ethnic group, architecture becomes one of its main components.

According to the studies, the birth of a traditional Kalmyk dwelling (yurt) is due to a shortage of wood in steppe. The design of the collapsible nature of the yurt has a classification in shape - round and material - pole. The nomads called the pole a thin tree trunk with a diameter of 10-12 cm. In the studies of Melnikova L.V. the yurt design is a large number of collapsible elements divided into groups according to their functional purpose: support poles - hold the smoke box above the ground, vault poles - hold the felt bag, short poles are assembled in the form of a lattice and are opened in the form of an “accordion”, forming the yurt’s walls. Thanks to these studies, the term “pole architecture” of nomads was introduced [5]. According to the Kalmyk tradition, in the horizontal layout of the dwelling, vertical movement begins vertically on the right and is carried out in a circle. The Kalmyk geometric ornament in the design of the yurt, is represented by a variety of circular motifs, as in traditional folk applied art. The idea of a circle is embodied in the home of nomads in a spherical shape. The yurt space organization is carried out by the archetypal form of the circle in the understanding of the ideal order. In the traditional ideas of the Kalmyk people about the space, the circle is the basis of shaping. The patrimonial sacred center is considered to be the center in the Kalmyk yurt center - in a circle a harmonious arrangement of all structural components is ensured. The ritual unification of a house micro-space, in the nomadic view, likens it to the Cosmos. The method of historical reconstruction in nomadic architecture provides a key to understanding the cultural code and the strategy for mastering the nomad world, which has been embodied in folk arts and crafts, reflecting the worldview of the people and the characteristics of their figurative ethnic thinking. This idea is concentrated in the space of the yurt by the expressive means of the “pole architecture”. “Thus, the long-term existence of a frame dwelling becomes understandable, because it is based not only on a functional action (convenience, comfort in use), but also on the spiritual side associated with determining a person’s place in the space surrounding him” [6].

Such an interconnection of the pole elements, their mutual arrangement in the yurt design, represents a structure that forms a certain shape of the object in accordance with its function. The collapsible nature and belt fastener of the parts is crucial for the Kalmyk yurt construction. In the process of designing the tourist base “Lagan”, the basic structural elements, vault poles and supporting poles supporting the smoke box, became the fundamental elements built into the structure of the object and form the semantics of this object’s ethno-design. In the interiors of the hotel, they became the dominant of compositional solutions, while not losing their traditional manufacturing methods and the decorative component of each element.

In the context of general cultural processes, the ethnic theme is being updated, the role of ethnic trends in the contemporary design of the environment is increasing. Ethno-design is updated in the process of acquiring the new functions, broadcasting the traditions of the deep layer of the cultural core of a particular ethnic group. In his studies, Savelyeva I.N. notes: “As part of the traditional culture, ethnic trends become interesting to modern society and in the traditional context they are also interesting as a special configuration of the relationship between man and nature. Theorists and designers see the ethnic theme in the framework of ethnic design as one of the codes for establishing a connection between man and nature in the “new virtual nature” formation situation [7].

Creative comprehension of ethnic themes by various designers is embodied in the projects of different orientations. The interest in cultural differences and ethnic identity is being revived by the designers in the designed objects, presenting various ethnic images in new contexts.

The designers’ task of the tourist base “Lagan” was not the nomadic historical dwellings’ reconstruction, but the transfer in interior solutions of a new object of the worldview of Kalmyk nomads, transmitting the harmony of man and nature. The relationship between architecture and nature is reflected in the choice of building structures [8]. Studying Kalmyk culture allowed the designers to place the ethnographic images in new contexts. Being one of the elements of ethniculture, the pole architecture has become the dominant element in the ethnic design structure of the interiors in the Lagan tourist base project. It was possible to recreate a special ethnic mood in the
interior through updating the traditional ways of creating individual constructive elements of pole architecture, traditional color combinations and decor. One of the central elements of the yurt’s construction - a smoke chamber, in the form of a large circle, became the dominant of composition and decorative solutions for the dining room interior, as well as the supporting poles, which are the massive structures and complex decorative carved elements, took a worthy place in the structure of the compositional solution for the hotel’s interior. Returning to a new interior solution, they remain intact for subsequent readings - transformations, where cultural codes can find a new contextualization. The application of the associations method in the process of working on the project made it possible to achieve a unified style solution to the interiors of residential premises. Wall decoration was developed on the basis of an associative approach to traditional color combinations in Kalmyk culture and the color of Kalmyk nature. Folk ornaments are reflected in the decorative solutions of mosaic compositions in combination with ceramic and majolica tiles. “The symbolic depiction of the path is an ornament (a hammer meander and its variations) characteristic of Kalmyk folk art, which has the meaning of a “step”, i.e. a segment of the path mastered in the movement (vital activity) of a person, society. Its dynamic diverse transformation can be found in a semicircular, triangular, rectangular, hexagonal meander, rainbow polychrome of Kalmyk embroidery that adorns women’s clothing and a soft living environment” [9].

The latest technologies of multilayer decorative plasters, capable of conveying the effect of the Caspian sand steppe and the saturated sky of Kalmykia, were widely used to cover the walls of the hotel premises. The interpenetration and close interconnection of various aspects (design, art, technology), based on the property of the materials used and the operating conditions, contributed to the creation of a harmonious solution to the object from the inside. The summarizing effect of these factors’ ‘interaction in the ethno-design objects’ design is determined by the synergy method.

The furniture in the Mongolian style can be considered the characteristic features of the Kalmyk nomads’ ethnic style manifestation in the interior of the tourist ethnographic object “Lagan” (Mongols are considered to be the ancestors of the Kalmyks), decorative elements with traditional ornament, wolf skins on the walls, textiles with traditional ornament and color schemes combined with the search for the new constructive and functional solutions of the environment for a modern tourist base or hotel.

**Discussions and Results**

Design, being one of the most sought-after types of contemporary art, develops not along one general direction, but in several parallel directions – ethno-design remains one of the successfully developing directions. The trend of the merging of a large number of disciplines, which are a zone of intellectual activity, is observed today in ethnic design - this is economics, sociology, synergy, politics.

Ethno-objects in cultural life and in the field of tourism increase interest in the region and its prestige [10]. Today they attract a large social contingent, which perceives the ethno-design objects as works of modern art that transmit the cultural code of the people.

The historical experience of the Kalmyk people’s adaptation to the landscape of the Caspian steppe and a specific climate represents its cultural heritage. The complex concept of “nomadic culture” is a combination of prevailing ethnic traditions of Kalmyks. The features of the ethnic worldview are formed under the influence of the natural and cultural landscape and, specifically, the sensory orientation system of a representative of a particular ethnic group.

The practical design project of the Lagan Tourist Complex is the creation of a modern facility based on the traditional dwelling of nomads. The main idea of the project was a demonstration of the elements’ synthesis of the traditional “pole architecture” and the modern environment, as a way to solve the problem of the ethno-design object’s structure. The designers were faced with the task of translating the authentic culture of the Kalmyk ethnic group into the ethnic design language with the expressive means of the traditional “pole architecture”. The rational use of traditional materials, the dimensions of structural elements and the decoration inherent in the Kalmyk yurt were synthesized in the interiors of the hotel. The ultramodern materials and technologies that have come from various
areas of design and architecture make it possible to implement a new design system in ethnic design, and the rapidly developing computer technologies are developing innovative methods of design modeling. At the same time, the meaning of the project work done is interesting not only to the designers, but also interesting and understandable to the indigenous population and visiting tourists. The interest in creating new images in ethnographic projects has a fruitful effect on the experimental design ideas’ development, and also makes it possible to find the new solutions in the environmental ethno-design objects’ organization.

The way of understanding traditional culture in ethnic design is the algorithm of its modern design activity. The artistic design environment is presented as the interaction of man and culture. The proprietary algorithm of project activities was developed based on the accepted design concept. Based on the implemented work, in the project of the tourist complex “Lagan”, it can be stated that the object performs various functions: individualizing and aesthetic, innovative and traditional, utilitarian and economic - inherent in modern ethnic design. The continuity of the historical past, present and future is shown in the object’s structural components new functions formation context, developed in the design scheme - aspects of design synthesis. A specific set of design aspects of this project was derived on the basis of a design analysis of traditions in nomad architecture, as the interaction of various functions [11]. These are the functions of semiotics and comfort, unique designs and forms, traditional technologies and environmental materials of a creative source - the traditional dwelling of Kalmyk nomads; innovative and commercial functions are laid down as the idea and the design solution form of this ethno-object. The selection of the leading functions of the design synthesis was carried out according to a certain principle: from the source - the uniqueness of the “pole architecture”, from modern analogues - the economy of tourist facilities. The landmark of the design project for the creation of an ethnographic tourist site provided the increased tourist demand for this complex in Kalmykia and proved to be competitive with one of the most famous foreign tourist complexes in Mongolia - “Three Camels” in the Gobi Desert, “Silver Coast”, “Land of the Earth” tourist complex.

The implementation of the “Lagan” ethno-project has shown the ethno-integrating and ethno-differentiating role of the foundations and traditions’ interaction of the folk architecture, culture and modern ethno-design. [12]

Summary
1. Innovation through tradition in ethnic design rehabilitates cultural images of the past, transforming them in a new context.
   2. Elements of the so-called “pole architecture” become the fundamental structural component of the interior stylistic decision in ethnic design.
   3. Ethnic design is updating the traditional methods of creating decorative and structural elements of the Kalmyk yurt, which are involved in the formation of a special ethnic mood in the interiors of the Lagan project.
   4. The actual way of presenting traditions in modern culture is the ethnic direction in design, as a manifestation of cultural solidarity in the globalization situation for a person of XXI century.
   5. The key role of ethnic design as a cultural phenomenon of our time is evident in the projects where traditions and modernity interact - the tourist base “Lagan”.

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