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THE ORIGINS OF GANCH COMPOSITIONS WITH OYNAVAND-O'UMA IN THE INTERIORS OF UZBEKISTAN AND GEORGIA

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Abstract

Ganch (fired clay ceramics with gypsum) has long been an integral part of the interior and exterior decoration for appropriate buildings to make them stand out. First of all, these are classy palaces, Buddhist traditional harem-type buildings in Western and Central Asia and other mosques, madrasas, mausoleums and minarets in some Oriental cultures associated with Islam. In particular, in the territories of Khorasan (now a part of modern Uzbekistan, was Iran, referred to as some kingdoms sort of the Bukhara emirate). The goal is to establish the origins of oynavand-o'uma, (stucco network decorations made of alumina with coloured powders and shiny pearl or mirror elements), which are genetically related to monuments in Uzbekistan and Georgia of the 5th/7th-19th centuries. The following methods were used in this study: analysis, generalisation and systematisation. The study highlighted that in the pre-Arabic period of the Iranian-speaking tribes of the Eftalites and Bukharhudates, who were simultaneously influenced by Buddhist and Greco-Byzantine cultures, the phenomenon of a local plastic canon was formed, which laid the foundation for the development of carved alabaster and plaster, which further developed without a figurative component during the Muslim era and spread to Asian lands until the time of the Turkic-Persian Oajar dynasty, reaching not only Uzbekistan and Tajikistan, but also Georgia. The study also discussed the specific features of art education in the context of preserving and developing the cultural heritage of the regions. The findings of this study can be used by specialists in the field of studying the evolution of the plastic canon of monumental and decorative art of certain Eastern countries, experts in the scientific restoration and reconstruction of oriental visions of the synthesis of painting with ganch and mirrors, as well as teachers of the history of oriental culture.

Keywords: Alabaster; Design education; Cultural heritage; Craftsmanship; Ornament

Introduction

Uzbekistan and Georgia have a rich historical connection and interaction between cultures. Ganch compositions with oynavand-o'uma in interiors reflect centuries-old cultural traditions and cultural heritage of these regions and therefore today it is important to preserve and reproduce such compositions as valuable aspects of culture. Until now, this scientific problem has not received enough attention, because the first monuments with plaster and

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plaster-ceramic decorations from these territories, which initially had shiny elements and then gradually were supplemented with pieces of gemstones and their analogues – mirror inserts – are currently difficult to study, as they are located primarily in Uzbekistan and Georgia. The problem of researching the origins of ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia is the need to investigate and understand the historical and cultural context of these compositions, their role in the architecture and art of these regions.

In her study, *M. Davydova* [1] emphasises that ganch (clay and plaster pottery) is one of the most extensive and widespread branches of folk art, present in many cultural environments and among different national groups. The scholar notes that despite this general prevalence, each geographical region has unique artistic features. According to the researcher, these features are due to a variety of factors, such as the availability of raw materials for pottery, the level of technological development, as well as the influence of cultural and traditional factors. The researcher emphasises that the diversity of the creative heritage of potters testifies to the richness and diversity of national culture and art. In this context, a detailed investigation of earthenware pottery, particularly in the context of Uzbekistan and Georgia, can reveal prominent features and aspects of this unique industry and shed light on its historical and cultural impact in these regions.

Scientists *T.M. Zinenko and A.V. Zinenko* [2] note that pottery is a significant art form, as it is encoded by the cultural heritage of the region where it was created. According to the researchers, the process of reconstructing pottery involves the study of three interrelated aspects: the analysis of historical and artistic contexts, as well as the study of technological aspects of shaping, decorating and roasting. As a result, scientists argue, it is possible to create original artworks that are striking in their depth and are intended to express specific genetic experience and hereditary memory. From this standpoint, an in-depth analysis of the specific features and characteristics of clay-plaster art in different regions, including Georgia and Uzbekistan, is necessary to better understand this important field and reveal its uniqueness.

Researcher *D.N. Sultanova* [3] emphasises that the design of Uzbekistan's premises has its origins in ancient times, similar to architecture. This design, according to the scientist, has common features with other types of fine art, such as painting and miniature and conveys artistic heritage. The scientist points out that interior design reflects the ideological views of the time and contributes to the creation of an emotional impression. According to the researcher, it is important that historical ornaments and other visual means were used to convey the ideology and political views of their time through interior design. The scientist emphasises that as time moved forward, the interior design became more expressive and monumental, using paintings and sculpture. It is worth carefully investigating the specific features of interior design in the tradition of Uzbekistan.

The study by A. Piwko [4] notes the influence of Islamic architecture on the interiors of Tbilisi and Batumi, within the framework of the Muslim heritage in Georgia. The researcher addresses the Islamic architectural elements and ornamentation reflected in the interiors of these cities, specifically, the scholar examines the different styles and characteristics of Islamic architecture in these regions and their influence on the layout and decor of the interiors. Analysing the Islamic architectural heritage in Tbilisi and Batumi, the researcher argues that this heritage is a vital part of Georgia's cultural heritage and played a prominent role in shaping the architectural face of these cities. The influence of Islamic architecture on interiors in Georgia should be investigated in greater detail.

Q. Nilufarkhan and A. Dildorakhan [5] point out the importance of art education in Uzbekistan in modern times and the role it plays in the preservation and development of the country's cultural heritage. The researchers point out that art lyceums and colleges that teach applied arts are important institutions that contribute to the training of highly skilled craftsmen,

as these educational institutions are located in different cities of Uzbekistan and are working to restore their former glory. It is worthwhile to investigate the specific features of art education and its impact on the development of applied arts in the region.

The purpose of this study was to determine the origin and development of the oynavand-o'uma, which have a genetic link with the heritage sites that existed on the territories of Uzbekistan and Georgia during the 5th/7th-19th centuries.

Experimental part

The study employed the analytical method, generalisation and systematisation. The application of methods of analysis, generalisation and systematisation in the study of the origins of ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia contributed to a detailed and systematic study of this topic.

The analytical method of research contributed to the coverage of the subject under study, as it helped to understand the object of research and consider it according to various aspects and criteria. The method of analysis helped to identify the key elements and characteristics of oynavand-o'uma ganch compositions in the interiors of both regions, which included an assessment of the visual, architectural, material and historical aspects of these compositions. This method also made it possible to investigate elements of ganch compositions in the interiors of Uzbekistan and Georgia. The analytical method used in the article helped to consider the impact of these compositions on interiors and their role in the cultural context of each region. The method of analysis helped to examine the elements of ganch compositions with oynavand-o'uma at various levels of detail, including embroidery, paintings, use of colours and other details, which contributed to a fuller coverage of the issue. The use of the analysis method helped to formulate objective conclusions about the origins of interior design in Uzbekistan and Georgia. The method of analysis was the key to a thorough study and coverage of the origins of ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia, helping to consider this topic from different perspectives and study its essence in depth.

The method of systematisation helped to reveal the specific features of the origins of ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia and helped to organise the information and results of this study into a logical and consistent structure. The systematisation method helped to highlight the connections between various elements of ganch compositions and oynavand-o'uma in the interiors of Uzbekistan and Georgia, which contributed to a more profound understanding of the topic and the identification of common or distinctive patterns. The systematisation method used in this study helped to build a logical sequence of analysis and conclusions, which made the study more accessible and understandable. The use of this method was important for the effective coverage of many aspects of the study, organisation of information and its logical and consistent presentation.

The use of the method of generalisation in this study contributed to the investigation of information and data obtained during the study. The use of the generalisation method in the research helped to identify common themes, styles and trends inherent in oynavand-o'uma ganch compositions in the interiors of Uzbekistan and Georgia. The method of generalisation helped to consider the issue from a general perspective, which contributed to the understanding of the profound connections between ganch compositions and the cultural characteristics of both regions. The use of the method of generalisation in the study contributed to highlighting the specific features of art education within the framework of the preservation and development of ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia. Specifically, the generalisation method helped to identify key issues related to the role of art education in preserving cultural heritage and promoting its development.

Results

Ganch, a traditional alumina ceramic with the addition of plaster, has always played a vital role in decorating both interior and exterior parts of buildings that required a special standout from the environment. This is especially true of exquisite palaces, traditional harem buildings in Buddhist structures in Western and Central Asia. Later, this material was used to build mosques, madrassas, mausoleums and minarets in various similar cultures associated with Islam, specifically in the territories of Khorezm (modern-day Uzbekistan).

During the post-antique era, new Roman technologies related to the use of special binders such as plaster, alabaster and concrete made an important contribution to the building traditions of eastern Oikoumena. These technologies found their application in the Indo-Persian principalities on the territory of modern Uzbekistan, where the outstanding monument of artistic culture, Varakhsha, was built. The modern ruins of this ancient settlement are located 30 kilometres west of Bukhara, in the present-day Zhondor district of the Bukhara region.

Varakhsha was the first residence of the rulers where ganch with signs of oynavando'uma appeared, which was used to decorate buildings. This relates to the period of pre-Arab domination of these territories, when several cultures developed. Firstly, the Eftalit dynasty, the Iranian-speaking tribes that united Sogdiana and Bactria and later the Bukharkhudat dynasty, whose emirs ruled these territories in the 5th–7th centuries after the collapse of the Turkic Khaganate into the Western and Eastern Khanates, spread the cultural characteristics of Indo-Persian and Arab cultures. This manifested itself in the use of ganch for decoration (Fig. 1).



Fig. 1. Plaster paintings in Varakhsha. Elephant hunting for lions, 6th-7th centuries A.D. Source: [6]

The earliest Iranian roots of plastic decorations made of plaster and ceramics with elements of coloured powder are known as "Sassanian pearls" from Varakhsha in the Bukhara Oasis. They date from around the 6th-8th centuries CE and later formed the basis for the development of Islamic art in the Seljukid, Timurid and other lands (Fig. 2).

When looking at oynavand-o'umas, it is worth noting the various types of these artistic products, including moulded mirrors glued to clay-plaster and ganch lace glued to mirrors (Fig. 3). These two types of oynavand-o'uma represent interesting artefacts that reflect different aspects of the skill and artistic creativity of the ancient masters.

The moulded mirrors, which were fixed to clay-plaster, testify to the use of well-known techniques in the production of oynavand-o'uma. Clay-plaster as a material for overlaying made it possible to create quite strong and detailed decorative images, which were complemented by mirrored glasses, creating a play of shimmering light. These items were probably used for practical and aesthetic purposes and were used to decorate the residences of the establishment and other elegant buildings.



Fig. 2. Turkic officials, scenes of receiving ambassadors, images of warriors and birds in the wall paintings of Afrasiabu, 7th-8th centuries A.D. Source: [7]



Fig. 3. Arshakuni Palace in Tbilisi, second half of the 19th century with later restorations. Examples of oynavando'uma: a) with carved ganch elements glued to mirror planes (with cypress motifs); b) and vice versa – mirror patterned elements on a clay-plaster base. Source: [8]

The ganch lace that was glued to the mirrors testifies to the prominent level of artistic skill and dexterity of the ganch lace artisans. Due to its shape and consistency, ganch allowed for the creation of exceptional and beautiful ornaments that decorated the surface of the mirror. These laces served both as decoration and as a type of decoration with a mystical connotation of a looking glass. The distinction between different types of oynavand-o'uma, their typology according to technology and methods of artistic influence now sheds light on the styles of ganchkorlik of the time and reveals the attitude of masters and customers associated with Persian Oikoumena towards attraction and aesthetics. Such an analysis now helps to restore the sources of inspiration for cultural heritage and the value of these objects in the context of the world history of culture and art.

Apart from the new perfect lines and spots inherent in the best monuments of fine art, oynavand-o'uma absorbed the synthesis of the achievements of previous eras in a new way.

Initially with pearl and later from the Middle Ages with mirror inclusions with clay-plaster lace, which over time was sometimes tinted with coloured powder paints. With the advent of modern times, alumina ornamental forms were actively used in mukarnas, geysons, ceiling decoration in the interiors of religious and civil buildings, as well as on the facades of palaces, emir's estates and rulers' residences in the private sector of Bukhara and Samarkand, historically associated with local traditions of such ensemble (including the 19th century). During this period, the expansion of artistic horizons and the redrawing of the map of Asia in the geopolitical arena of the world led to the artistic and creative assimilation of Persian (including from the territories of ethnic Iran, Uzbekistan and Tajikistan), Azerbaijani, Armenian and Georgian traditions. Many artists from Qazvin, Tehran, Tabriz, Baku, Sheki and Yerevan were invited to Georgia to work individually or as part of entire artistic groups. Thus, the phenomenon of symbiosis of clay-plaster stucco decors with multi-coloured tinted powder and then openwork mirror inserts (oynavand-o'uma) with a combination of West Asian and European (Italian, French) painting (Arshakuni Palace in Tbilisi, second half of the 19th century).

In the 20th century, the interest in oynavand-o'uma went beyond the activities of a few individual ganchkor masters, thanks to the revival of some techniques that are currently being developed in Uzbekistan (Samarkand, Bukhara) and in the training of specialists in neighbouring lands and in certain areas of Tajikistan by the same masters. In other words, the oynavand-o'uma refers to all of the countries listed, to which the artistic influence of Persian culture was extrapolated in previous centuries. Notably, the earliest Iranian roots of plastic decor made of plaster and ceramics (ganch) with elements of coloured powder are known as "Sassanian pearls" from Varakhsha in the Bukhara Oasis. They date from around the 6th to 8th centuries A.D. and later formed the basis for the development of Islamic art in the Seljukid, Timurid and other lands. Later, with the development of Islamic traditions in the region, figurative images of people and animals began to be replaced by geometric (girikhs) and vegetable (islimi), in which the symbolic order of things was transformed into abstracted forms of stucco ganch ornaments with colourful stretches of paint and shiny scaly elements that sparkled and received the already mentioned name "Sassanian pearls", which have a special synthetic sound.

Since the 12th century, the technique of highlighting moulded ganja muqarnas (the so-called "kirma") with pink and ocher paints has spread along the Great Silk Road in the present-day lands of Uzbekistan. In the Madohil patterns, plant shoots grew into geometric compositions, combining the feminine and masculine on a symbolic level, which from this period had to be depersonalised due to the prohibition of images of the figure in religious monuments [9]. Later, mirrored lace was added to the "knots" of girikhs in this area, as if framed in plastic forms of carved alabaster with slits, which made the ensembles look openwork and lightened illusory weightlessness. Iranian, Pakistani, Afghan and Indian influences were reflected in the common ideas of all Zoroastrians about the elements, the nature of human relations and the connection with the Almighty, which later became especially important in Islam.

To create ornaments, craftsmen used a special template known as "vulga" or "akhta", which contained a pattern on paper with punctures, allowing them to accurately reproduce the ornament even on large surfaces. It is worth noting the specific feature of the ornamental art of Uzbekistan's ganch masters, which lies in the use of decorative elements developed in this region and distributed throughout Central Asia and the Middle East. Examples of such elements are the "zanjira pardoz" (chain pattern), consisting of triangular inserts and the "girikh", which is a weave of lines with a geometric pattern. To make the filigree designs, the craftsmen used a tool called the suma kalam, which is usually used for copper carving but was also suitable for extremely fine ganch work.

Fragments of plastic ganch (clay plaster) decor from Varakhsha are now kept in various collections both inside and outside Uzbekistan. Specifically, in the collections of the State Museum of Art of Uzbekistan (Tashkent), the State Museum of History of Uzbekistan (Tashkent), as well as in many other collections, including those of the former USSR (primarily works from the State Museum of Oriental Art in Moscow). In the pre-Islamic period in the above-mentioned territories, decorations made of clay-plaster (a mixture of raw clay with plaster or alumina, sometimes with impurities of quartz, quartzite, marl – dolomite or limestone, roasted at a temperature of 160-250°C) were ornamental combinations of motifs of people, animals, birds, fish, grapes, pomegranate apples. At least according to various primary sources from Varakhsha, which are now stored not in the settlement itself, but are transferred to the expositions of many prominent museums, images of women and men, elephants and lions (executed in a manner similar to images in Buddhist, Hindu and Persian art), wild boar, deer, ram, wolf and fish are recorded. The study of frescoes and ganch monuments from the Red, Western Halls and the aivan of the palace of the settlement was made possible by their dismantling during the 1987-1991 expedition from the State Museum of Oriental Art, when more than 11 thousand fragments of works were collected.

Particular attention should be paid to the monuments of the Persian-Armenian-Byzantine Arshakid dynasty in Georgia in the second half of the 19th century, when the oynavand-o'uma with coloured powder acquired a new modern sound in synthesis with Italian and French alfresco paintings, which also included traditional Iranian house frescoes of matchmaking rooms (the so-called "biruni"), executed in a typically Propersian style derived from Iranian miniature painting. Furthermore, the outlined creative searches were in tune with the synchronous phenomena that were observed in the Uzbek environment at the time. Thus, according to Dilnoza Tulanova, the author of the chapter "The Art of Uzbekistan of the 19th and Early 20th Centuries" in the programme on the History of Art of Uzbekistan of Tashkent State Pedagogical University, published in Tashkent in 2020, it was in the second half of the 19th century that researchers saw an increase in the role of colouristic solutions to the decor of carved ganch in the country.

In general, the migration of Asian representatives of the establishment and workers' groups during the first half to the third quarter of the 19th century led to the emergence of the phenomenon of orders for oynavand-o'uma in some interiors of the Caucasus. Specifically, Georgia, where earlier traditions of decorating the shah's palaces of Erivan (Armenia), Sheki and Baku (Azerbaijan) were adopted, where in the previous century, as early as the Safavid period, ensembles of central halls and aivans of the shah's and Shirvanshah's palace buildings were decorated with mirrors in combination with paintings in the manner of Persian book miniatures. However, from the beginning of the 19th century, the ambitions of certain representatives of the establishment, primarily the dynasties of the famous royal families of Georgia associated with King David and others, resulted in the search for a new oriental synthesis in the estate of the Machabeli princes in the village of Garikula (Shida-Kartli region). Later, the introduction of mirror mosaic elements became a fashionable trend in decorating interiors and balconies, verandas in the representative palaces of the governor of the entire Caucasus in Tiflis (Vorontsov Palace) and the families of Persian-Armenian-Byzantine nobility (Arshakuni Palace in Tiflis), Persian nobility (Firouza Palace in Borjomi) and several other buildings, mostly in the last two cities listed, where the Romanov family, which ruled at the time, founded their palaces.

However, the mirror mosaic, combined with plastic details of mukarnas, gzims, elements of carved alabaster or plaster with powder (oynavand-o'uma), complemented by oriental (in the style of Persian miniature) and pro-European paintings such as flower bouquets a la Saxon pattern, were embodied only in the ensemble of the Arshakid Palace in Tiflis in the third quarter

of the 19th century. Where, apparently, the wealthy owner demanded that the unique beauties of the Persian region, which later became part of the country of Uzbekistan, be embodied in his house. Clearly, he either had the opportunity to travel before and observe them, or he hired competent decorators whose artels of Persian origin had been actively working on large development projects in Georgia since the mid-19th century [10]. It is worth noting the specific figurative, aesthetic and emotional range of decorations that have long been common in Uzbek society in the main ceremonial halls of a traditional noble house. In such buildings, the central façade and the mehmongkhon living rooms often played a massive role, some of which, created in the 19th century, are considered masterpieces of Uzbek national architectural and decorative art.

The specificity of the ceremonial receptions in these rooms was the extremely elegant decoration, as if on display. A typical example is the living room-mehmongkhona of the Polovtsev House in Tashkent (now the Museum of Applied Arts of Uzbekistan), decorated according to the best examples of folk art and architecture in the late 1920s and 1930s (albeit without mirrors) within the tradition of turning to an orientalist mix with inclusions of Far Eastern patterns and plastic solutions characteristic of the great European historical styles. And in this sense, in terms of colouristic and plastic attractions, it appealed to the tradition of synthetic ensembles with mirror and ganch lace oynavand-o'uma from the late 19th – early 20th-century Sitorai Mohi-Khosa Palace (the country residence of the Emir of Bukhara) in Bukhara (Fig. 4).

It combines decorative panels of carved ganch, tinted with bright tempera colours, in which no ornamental composition is repeated, with carved three-tiered ceilings decorated with bright, artistically perfect paintings, supported by traditional carved wooden polychrome columns.



Fig. 4. Interiors of a polychrome living room with gilded takcha niches in the building of the Museum of Applied Arts of Uzbekistan, Tashkent, 1927-1937. Source: [11]

Decorated with girikhs, the patterns of the exterior and interior of this building, made by the best craftsmen from all over Uzbekistan in Tashkent during the period of collectivisation, were intended to rethink the ancestral heritage of the local population and emphasise the importance of traditional ornamental techniques of Persian miniature painting in the everyday life of Uzbeks, which substantially influenced the development of new vectors of artistic culture in the region. The masters found new stylistic techniques that were later transformed and spread across the lands of Uzbekistan and the adjacent territories of Tajikistan. Thus, in the late 20th and early 21st centuries, with the support of the state for folk crafts, which had been taxed on a preferential basis since the country's independence, the art of the finest clay-plaster, the so-called gulganch, became widespread in Bukhara and Samarkand. Thus, the refracted light was reflected in myriads of mirror fragments and glossy planes, creating an effect of colourful diversity. This visual phenomenon aesthetically appeals to the kaleidoscopic patterns of medieval Gothic interiors in Europe, in the mystical space of which rainbow openwork and flickering light and shadow fluctuated supernaturally.

Today, to preserve and develop applied arts, attention is drawn to the importance of education. Art education plays a key role in the training of interior design professionals, as it helps to develop not only technical skills but also creative thinking. Education provides students with theoretical knowledge and the opportunity for practical improvement, which becomes the basis for their future career in interior design. Furthermore, it is important to develop creativity and innovative ideas among students so that they can create unique and functional interiors that meet modern requirements and the needs of society [12].

It is important to integrate innovative technologies into modern art education. In this context, the use of virtual reality (VR) is becoming a relevant and promising practice for teaching the art of design. The study compares the effectiveness of VR and conventional teaching methods, specifically, using evidence from basic design. The results show that VR can be a successful educational tool. It is also important to understand students' perceptions of such learning environments, as well as to identify the advantages and limitations of their use. The study also highlights the prospects for developing the use of VR to enhance students' creative potential and its impact on the quality of art education [13]. It is also important to introduce experimental learning through co-design with the public in the field of interior design pedagogy. This method of teaching promotes the active involvement of students in real projects and collaborative work with the public, giving them the opportunity to gain unique experience that improves their understanding and solution of real-world design problems. This pedagogical approach is of great importance for design education, as it promotes the development of creative thinking and practical skills of students [14].

The interiors of Uzbekistan and Georgia share a rich historical context and common features, but they also differ in their details and expression. Studying these interiors helps young people understand cultural diversity and the importance of cultural heritage in modern interior design.

Discussion

Understanding the mutual influence and interconnections between different cultures and peoples contributes to a more profound knowledge of the history and evolution of art and design. It is necessary to analyse the views of scholars and establish parallels and differences between their positions and the conclusions drawn in this study.

Researcher A. Mitrache [15] notes that ornamental art and architectural decoration have profound historical roots and play a significant role in creating expressive and unique architectural spaces. Ornamental art, according to the scientist, includes the use of various decorative elements, such as geometric patterns, floral motifs, reliefs and sculptures, to decorate buildings and interiors. The scientist states that interior decoration refers to the use of various design techniques to decorate buildings and premises, which can include stained glass, stucco, frescoes, ceilings with zodiac signs, windows with stained glass, as well as various architectural

details such as columns, arches, cornices. The researcher notes that ornamental art and architectural decoration influence the aesthetics and atmosphere of buildings and spaces, making them attractive and rich elements of art, they add identity, character to architectural objects and create a sense of beauty and sophistication. Comparing this study with the results on ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia, it can be noted that both aspects – ornamental art and architectural decoration – consider the importance of decorative elements in creating culturally rich and aesthetic architectural objects. Both studies emphasise the importance of these artistic aspects in the context of design and interior architecture.

F. Moussavi [16] argues that ornament in architecture can have a meaning and function that goes beyond decoration. The researcher addresses to various aspects of ornamentation, pointing out its role in creating architectural spaces, forming a visual impression and interacting with the perception of architecture. Compared to the findings of this study, it should be noted that this approach indicates that ornamentation can be more than just a decorative element and can have an important impact on the function and perception of architectural structures.

In his study, A. Picon [17] draws attention to the political aspect of ornament in architecture and its impact on the definition of subjectivity. According to the scientist, ornament in architecture can play various roles, including the political aspect, where it can define and emphasise certain political or ideological positions. The researcher argues that understanding how ornamentation affects subjectivity can be important for understanding how architectural elements shape perception and attitudes towards the world around us. Compared to the results of this study, it is worth noting that ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia have their own political and cultural connotations. The use of ganch and oynavand-o'uma in the architecture and interior design of both countries reflects the historical, cultural and ideological aspects that influence the perception and subjectivity of the premises.

C. Lin [18] emphasises the importance of wood as a natural material that plays a key role in the development of society. The scientist notes that the concepts of green design and environmental protection have a significant impact on modern society. According to the scientist, wood as a carrier of cultural values is a popular element in contemporary design. In his study, the researcher notes the philosophical significance and aesthetic appeal of wood. In comparison with the results of this study, ganch compositions in the interiors of Georgia and Uzbekistan are also an important part of the cultural traditions of both regions. They play a significant role in the creation of interiors and have their own unique features that reflect the cultural significance and identity of these places. Similar to wood, ganch compositions are also an important artistic element that is noted for its philosophical significance and aesthetic qualities in the interiors of these regions.

M. Edwards [19] notes the importance of using plaster and alabaster in interior design, similar to their use in ganch sculpture. Both materials, according to the scientist, can be of significant importance for creating various sculptural interior details and decor, thanks to their texture and modelling capabilities, as plaster and alabaster are known for their shape and ability to reproduce complex patterns and structures in detail. These materials, according to the researcher, can be used to make sculptures, reliefs, mouldings and other decorative elements in the interior, which contributes to the creation of artistically refined and aesthetic spaces. According to the results of this study, the use of plaster and alabaster in contemporary interior design can add artistic value to interiors and create a unique character.

D. Vijapur et al. [20] indicate that in the last two decades, there has been a significant transformation of educational models around the world to introduce a student-centred approach to learning and teaching. This transformation, according to scientists, is accompanied by many

changes in pedagogical practice, spatial design and configuration of classrooms, as well as the use of digital technologies. Scientists note that because of the transition to a student-centred pedagogical model, classrooms are becoming less like "static containers" and are turning into dynamic and interactive learning environments. In comparison with the results of this paper, it is worth noting that art education includes modern approaches to learning and teaching, considering the above changes in educational models. Modern learning environments, including spaces for arts education, should be adapted to new requirements and expectations, providing students with opportunities for more active and interactive learning. Such changes in art education contribute to the development of students' creative and analytical skills and prepare them for modern challenges in the field of art and design.

P. Whiting et al. [21] argue that there is a need to introduce a new pedagogical paradigm in the field of design. This paradigm, according to scientists, involves rethinking consumer models and design approaches to reduce waste and resource consumption. The researchers point out the importance of incorporating these principles into interior design curricula for future design professionals, which involves teaching students to create interiors and product design that are more environmentally sustainable and consume fewer resources, as well as promoting the principles of reuse and recycling of goods. According to the results of this study, the introduction of the study of traditions and culture, specifically, students' exploration of their cultural identity, including the art of oynavand-o'uma, will help to prepare professionals who will be able to reduce negative environmental impact and ensure more sustainable consumer practices.

M. Celadyn [22] notes that integrated practical classes in interior design play a vital role in ensuring environmental sustainability and sustainable development in the field of design. The researcher emphasises that resource consumption and environmental impact are important aspects of modern interior design. The scientist is convinced that it is necessary to teach students an integrated approach to design, where they consider not only aesthetic aspects but also environmental impact and user-friendliness, which means considering architectural and interior solutions and making changes to consider the sustainable use of resources, efficient use of energy and reduction of emissions. This approach to education contributes to the development of future professionals who are aware of the importance of sustainability and environmental practices in interior design, which is confirmed by the results of this study.

E. Storgaard et al. [23] are convinced of the importance of implementing neuroscience-based approaches in interior design education. Scientists emphasise that investigating the principles of neuroscience and their impact on user perception and comfort can improve interior design and make it more relevant to the needs and psychology of users. The researchers point out the importance of students learning how to understand the psychological aspects of interior design, including the impact of colours, shapes, textures, light and acoustics on emotions and the functionality of a space. Scientists [24-26] believe that incorporating neuroscientific knowledge into interior design curricula can help create deeper and more fulfilling interiors that meet the needs and promote the well-being of users. One should agree with the position of scientists, as an innovative approach to learning that combines interior design with psychology and neuroscience contributes to a smarter and more adaptive environment for people.

Comparing the opinions of scholars with the results of this study, it should be noted that ganch compositions with oynavand-o'uma in the interiors of Uzbekistan and Georgia are an essential element of the decorative art of these countries. Researchers argue that today the educational aspect of the artistic sphere is important for the development of the cultural heritage of these regions and emphasise the importance of studying, preserving and transmitting art traditions, including ganch compositions, for future generations.

Conclusions

This study shows that the openwork plastic decor made of plaster, carved alabaster and roasted ganch (clay-plaster), combined with lace patterns of mirror mosaics and coloured powder (oynavand-o'uma), has its roots and sources of inspiration in different artistic traditions and cultures. It reflects the influence of ancient art, where innovative technologies using binders were actively used, as well as elements of Buddhist, Hindu and Persian art. This openwork décor also reflects the influence of artistic canons and universal artistic traits of the Mongolian peoples, as well as the iconography of early Arab-Muslim and Turkic civilisations. The study points to the symbiosis of different artistic traditions, which is manifested in plaster paintings and relief sculptural carved elements.

An important stage in the development of this type of decor was the Timurid and Safavid eras in Central Asia when openwork patterns became a feature of the luxurious palaces and residences of the ruling dynasties. Later, these artistic traditions were transformed and acquired a new sacred meaning. Coloured powder, mirror elements and carved details became important components of this decor. In the 19th and 20th centuries, the classical oynavand-o'uma became popular among the rulers and elite in Uzbekistan. This art received a new impetus for revival, introducing elements of European styles and other innovations. It gradually spread to other territories, including Ukraine. The study covered the roots of oynavand-o'uma phenomenon, which can be traced back to the 5th/7th centuries in the Varakhshi ensemble near Bukhara (modern Uzbekistan). The article emphasises that this phenomenon was formed in the context of the interaction of Iranian-speaking tribes, such as the Eftalites and Bukharhudates, who were influenced by Buddhist and Greco-Byzantine cultures. This local plastic canon included carved alabaster and plaster, with a minor figurative component and laid the foundation for the further development of art in Asia, up to the Qajar era and spread to the lands of Uzbekistan, Tajikistan and Georgia. The article also analyses how art education interacts with the processes of preservation and development of cultural heritage in the regions, including the use of modern digital technologies.

Future researchers should pay attention to the study of the origins of openwork plastic decor made of plaster, carved alabaster and roasted ganch (clay-plaster) in the context of ancient art, the artistic canons of the Mongolian peoples, as well as the influence of Buddhist, Hindu and Persian art on contemporary interior art in Uzbekistan and Georgia.

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