MINISTRY OF CULTURE OF THE REPUBLIC OF MOLDOVA MINISTRY OF EDUCATION AND RESEARCH OF THE REPUBLIC OF MOLDOVA ACADEMY OF MUSIC, THEATRE AND FINE ARTS

By title of manuscript UDC: 730.02(043) 730.02(478)(043)

DOBROVOLSCHI OLEG

TRADITIONAL AND MODERN ART TECHNIQUES IN SCULPTURE

ABSTRACT OF DOCTORAL THESIS

SPECIALTY 651.03 – FINE AND DECORATIVE ARTS (professional doctorate)

CHIŞINĂU, 2024

The thesis was elaborated within the Doctoral School of Arts Studies and Culturology Academy of Music, Theatre, and Fine Arts

Scientific coordinator:

Hubenco Teodora, doctor of pedagogy, university lecturer, Academy of Music, Theatre, and Fine Arts

Membership of the Committee for the public defence of the doctoral thesis in Visual arts:

Committee Chairman:

Badrajan Svetlana, Doctor of Arts Studies, University Professor, Academy of Music, Theatre, and Fine Arts

Official referees:

Rocaciuc Victoria, Doctor of Arts, Research Lecturer, Institute of Cultural Heritage Marian Ana, Doctor of Art Studies, Senior Research Scientist, Institute of Cultural Heritage

Saviţkaia-Baraghin Iarîna, Doctor of Art and Culturology Studies, University Lecturer, Academy of Music, Theatre and Fine Arts

The defense will take place on May 16, 2024, at 14:00, in the meeting of the Committee for the defense of doctoral theses in arts, within the Academy of Music, Theatre, and Fine Arts (Chisinau, 31 August 1989, no. 137).

The thesis and the abstract can be consulted at the National Library of the Republic of Moldova (Chisinau, 78A, 31 August 1989), at the Library of the Academy of Music, Theatre, and Fine Arts (Chisinau, 111, Alexei Mateevici Street), on the ANACEC and https://amtap.md websites.

Secretary of the Thesis Committee: Bunea Diana, PhD in art studies and culturology, university lecturer	
Scientific supervisor: Hubenco Teodora, Doctor of Pedagogy, University Lecturer	
Author: Dobrovolschi Oleg	

© Dobrovolschi Oleg, 2024

TABLE OF CONTENTS

Conceptual research highlights	4
Thesis content	8
General conclusions and recommendations	22
Bibliography	25
List of the author's publications on the thesis subject	26
Annotation (Romanian, English)	28

CONCEPTUAL RESEARCH HIGHLIGHTS

Subject relevance. Like any other cultural phenomenon, sculpture, as an artistic manifestation, follows the path of previous generations, using their experience and adapting it to the needs of contemporary visual art. Traditional and modern techniques are inseparable in any of the sculptural works, forming a dialectical unity between visual expressions. Based on theoretical studies by Ghilde V. G. [2], Marian A. [6], Spînu C. [8], Stavilă T. [9], Perfilyev V. [13], Tarangul M. [10], we discover that tradition is a starting point for the art of sculpture to create original and authentic works.

Sculpture techniques are distinguished by constant evolution, influenced by changes in the improvement of materials, tools, and specific equipment. Therefore, contemporary art reflects the transformations in style, artistic expression, vision, and artistic sense of sculptors and the public. This is accomplished by the application of new materials, tools, methods, techniques, and procedures. These changes were enhanced by technological innovations and discoveries, as well as by the variety of processing techniques of traditional materials and new materials that appeared in the 20th and 21st centuries, which enriched the sculptural language and modes of expression.

Catalogues, publications, and other works provide fragmented evidence for the study of traditional and modern sculpture techniques. However, there is currently no comprehensive classification and analysis of the characteristics and features of traditional and modern materials and tools used in sculpture, as well as traditional and modern techniques for applying them in sculptural works, aspects that we have decided to fully clarify in the theoretical study of the given research and in the artistic project that demonstrates the author's exploration and valorization of the materials and techniques mentioned. Therefore:

The purpose of the research is to determine and describe the features and characteristics of traditional and modern technologies applied in sculpture; to desing the concept and to elaborate the artistic project — *Creation, between nature and the nature of the artistic form* based on the techniques researched.

Research objectives:

- 1. to determine traditional and modern materials in sculpture art.
- 2. to identify and describe systematize the tools and equipment used in sculpture.
- 3. to classify the traditional and modern techniques used in sculpture.
- 4. to describe the ways of placing sculptures in different places.
- 5. to establish the concept for the artistic project of the thesis.
- 6. to design and realize sculptural works according to specific technological stages.
- 7. to analyse the artistic aspects of the sculptures: material, technique, idea, message.

Novelty and scientific-practical originality: The work intends to complete a less studied segment in the art of sculpture, related to the part where traditional and modern sculptural techniques are described and characterized. Since sculptural techniques are closely related to the materials and tools used in the plastic solution of artistic problems, the types of sculptural materials have been studied and systematised; identified and described traditional and modern tools; different approaches to positioning sculptures in different places have been described.

The research, which focused on the essential concepts of traditional and modern sculpture, concluded with a practical component that aims to improve an original concept reinforced by the techniques used. Thus, **nine sculptural compositions** were created (a total of 27 works). All shapes have been transformed through technical simplification and stylistic processes, resulting in the visual expression of ideas through the following geometric shapes: cube, cone, sphere, cylinder, parallelepiped and pyramid. The technological processes used have generated to original three-dimensional forms that, as a result of theoretical research, harmoniously combine the traditional and the modern vision.

Theoretical and methodological basis. For a broader analysis and indepth knowledge of traditional techniques and new trends in modern technologies, as well as for the identification of materials that have been the used for the creation of the artistic concept, various sources on the given

topics were consulted, such as history of sculpture, materials of sculpture, technologies of processing materials, evolution of tools for sculpture, processes and principles of sculpture, traditional and modern techniques in sculpture, ways of positioning sculpture, etc.

Therefore, regarding the traditional and modern art techniques in sculpture and the artists who promoted/valued them in their work, the works signed by G. Buffye, N. Odnoralov, A. Radu, R. Wittkower, W. Zanini, A. Hvorostov, I. Sokolov, B. Zotov, L. Neagu. were consulted.

The construction of sculptures in different materials has a rich history, which is reflected in scientific research that provides us with valuable information on systematic processes in traditional and modern sculpture (A. Botez-Crainic, J. Grenier, A. Elsen, M. Kagan, H. Focillon, A. Ghildebrand, M. Zahar).

Information on the evolution of sculpting tools and working methods from ancient times to the present day is provided by E. Crispino, C. Giedion-Welcker, N. Vasilieva, M. Tarangul, R. Sorban, A. Nanu, M. Mihalache, M. Dumitraş, M. Deac, E. Costescu, M. Mihalache. The researches of A. Marian, T. Stavilă, L. Toma, C. Spînu, N. Vasilieva etc. are dedicated to the development of sculpture in the Republic of Moldova in various periods.

Dictionaries, encyclopaedias and electronic sources were used as information sources. The author's personal experience as a ceramic sculptor played an important role in achieving the proposed goal in regard to the artistic project.

The methodology of the research focused on various methods, such as: historical, observation and description, induction and deduction, analysis and synthesis, experimentation, etc. These methods helped the discovery and further systematization of materials, tools and sculptural techniques, the constantly changing technological processes and the accomplishment of the artistic project of the thesis.

The applied value of the work. The results provide valuable material for those interested in sculpture technology. The study reflects a complex view of traditional and modern art techniques in sculpture through the lens of new technological trends. The artistic project made of nine sculptural

compositions that address general-human issues and reflect a harmonious combination of traditional and modern techniques, will serve as a methodological support for students of Sculpture and Ceramics, professional sculptors and teachers in the field. In addition, the description of the technological processes used in the creation of the works and their artistic analysis will allow their further application in the creation of original sculptural works. The theoretical results will be useful for theoretical and practical courses in Sculpture and Ceramics.

Approval of research results. The doctoral thesis was carried out at the Doctoral School Study of Arts and Culturology of the Academy of Music, Theatre and Fine Arts, was discussed at the meetings of the Supervisory Committee.

The scientific results are reflected in: 6 articles, 2 abstracts, 1 art album, 4 personal exhibitions, and 29 group exhibitions. Attending the television show "Artelier" on July 24, 2021.

Thesis volume and structure: introduction, three chapters, general conclusions and recommendations, bibliography of 146 titles, annotation (romanian, english), 133 pages of basic text.

THESIS CONTENT

CHAPTER 1. PARTICULARITIES AND CHARACTERISTICS OF SCULPTURAL MATERIALS is dedicated to the analysis of the characteristics and peculiarities of traditional and contemporary materials applied in sculpture (clay, wood, stone, bronze, wax, etc.), which have evolved over time as they have been used in sculptural works. All these materials have unique particularities and possibilities of processing, expressing the beauty hidden in their very nature and essence, which plays a determining role in the plasticity of sculpture.

Considering the trends in sculpture at the end of the 20th and beginning of the 21st century, we can say that contemporary sculpture is not limited to traditional materials, but shows an openness to the use of any material, natural or synthetic, including air-filled polyethylene, suppressed rubber, expanded polystyrene, textile material and neon tubes in the achievement of an original artistic concept. Modern materials (*metal*, *steel*, *artificial materials*, *etc.*) applied in sculptors' designs have been classified into: *natural materials*, *sustainable materials*, *plastic materials*, *artificial materials*, *ephemeral materials*, *non-ephemeral materials*.

The complex analysis of the tools and equipment used in sculpting has led to the establishment of the skills and instruction of how to work with the simplest and most primitive tools for processing sculpting materials up to the most complex equipment. Therefore, traditional tools applied in the processing of natural materials (including those extracted from the earth), such as *roughers*, *thickeners*, *scrapers*, *knives*, *crochets*, are used for **clay sculptures**; *chisels*, *hammers*, *saws*, *abrasives* for **wood sculptures**; *sledgehammer*, *bucearda*, *spik*, *chisel*, *stone sculpting shoveller* for the **stone sculptures**. Whereas - *scissors*, *pliers*, *forge*, *anvil*, *vise*, *welding machines*, etc., are used to work **metal sculpting** (*bronze*, *cast iron*, *aluminium alloys*, *copper/aluminium/stainless steel sheet metal*, *etc.*) and sculptures made of **synthetic materials** (*fibreglass*, *polymer products*, *etc.*).

CHAPTER 2. TECHNOLOGIES FOR CREATING SCULPTURES focuses on describing and characterising traditional and modern sculptural

techniques that have developed throughout art history wilst the development of various tools for working with natural sculptural materials. At the same time, the concepts of *Technique*, *Artistic Technique* and *Technology* are explained. From the above we deduce that the art of sculpture expresses the creative diversity of sculptors through the use of traditional techniques in working clay, wood, stone, marble and bronze moulding. The basic *traditional techniques* applied in sculpting are: *carving* (by roughing) and *shaping* (by adding), which persist in round carving. The technique of direct stone carving can be found in monumental sculpture from all historical periods, especially in the great Gothic cathedrals of France, England, Germany and Italy in the Middle Ages. Later it is applied in the works of the great sculptors O. Rodin and C. Brâncuşi. The tradition of *bronze casting* has been known since Ancient times and has been practiced by sculptors from all historical periods.

In addition to the modern techniques used in sculpture, innovative technological developments that have been adapted to the sculpture field and applied with ease by contemporary artists are established and described. So, in addition to the basic materials that have predominated throughout history - wood, stone and bronze, contemporary sculptors are exploring and experimenting with new materials such as: steel, metals, artificial materials and plastics. The processing of each new material requires the appearance and development of new tools and techniques that need to be studied and then used in sculptural creativity. Among modern techniques, the most important and frequently applied in the sculpture making are *carving* (by removing or roughing), *moulding* (by shaping) and assembling (joining elements). At the same time, in recent years there has been an increasing mechanisation of artistic production, with the introduction of precise machines, robots, movements performed with the help of devices, experiments that arouse curiosity and interest. So, we can argue that materials, tools and new technologies applied in sculpture contribute to the invention, discovery and development of innovative technological processes, thereby producing new artistic values in creation.

At the beginning of the 20th century, in the field of universal sculpture, but also in the local area, important changes were made in terms of materials

and technologies. Sculpture is intensely associated with the experiences and results that ensure the development of an innovative artistic language, it is oriented in its current operational manifestations according to new modern technologies. The tendency to seek new solutions corresponding to technical and scientific progress in sculpture leads artists to create spatial constructions. Metal sculpture brought an innovation from the sphere of artistic creativity to the sphere of technological industry through the multiple mass-production of works of the same form, where uniqueness and handmade nature were no longer a necessary condition of artistic value. This meant that the sculptor had to become a technician, who needed to learn how to use modern tools and materials. Sculpture as an art relies both on the knowledge of simple technical basics with traditional and complex tools and on modern automated tools.

The way in which sculptures are placed in different areas is part of the technological process of making a sculpture, which must be taken into account when designing an artistic concept. In this respect, if we look at the different ways in which sculpture is presented and integrated in different fields, we see that these approaches directly reflect changes in the sculptor's artistic thinking.

Contemporary sculpture has evolved through technological innovations applied by artists who have implemented new ways of communicating and interacting with the public. From traditional plinth sculpture to sculpture integrated into the urban landscape, in architecture, the water environment or suspended sculpture we observe the path of the significant impact of the specific placement environment with the shape and size of the sculptural forms and the audience. Today's sculptures are present not only in exhibition spaces, not only in places specially designed for their location, but also in spaces in the immediate public surroundings. This was possible thanks to technological inventions in general, to new materials that were adapted to the field of sculpture, but also to the attitude of artists to the creative act.

CHAPTER 3. CONCEPTUALIZATION AND DEVELOPMENT OF ARTISTIC PROJECT IN SCULPTURE includes analysis of the Artistic

concept: Creativity, between nature and the nature of the art form, which consists of –9 sculptural compositions (27 works in total) – a concept that resulted from fundamental research of traditional and modern techniques in sculpture. All the shapes created were transformed expressively through technical processes of stylization, which led to the visual expression of the ideas through the following geometric shapes: cube, cone, sphere, cylinder, parallelepiped and pyramid. The technological processes applied and combined with traditional and contemporary materials in the process of creating sculptures have generated original three-dimensional forms in which the traditional and modern vision are harmoniously combined.

The process of designing and creating the sculptural works took place in several successive stages, which involved scientific documentation, research into the meaning of the decorative patterns, the particularities of the sculptural materials, specific tools and traditional and modern techniques. In the *first stage*, a multitude of sketches were made in which various geometric shapes were researched and explored, which were suitable for the artistic ideas and concept. The study carried out allowed original approaches to general-human topics, such as Family, Faith, Finite-Infinite, Cranes, etc.

The *next stage* was to turn the sketches into three-dimensional models, using recyclable materials that were easy to shape and experiment with: cardboard boxes, cylindrical rolls of cardboard, clay, etc.

The *third stage* of work involved the process of making sculptures in material - clay, chamotte and heterogeneous materials. This process involved several technical procedures and various materials, some of which were drawn from the technological background of the art of sculpture, technologies already known and used in professional experience, and others discovered through research and exploited during the execution of these nine sculptural compositions. The process of creating the artistic project involved technical procedures of shaping, transforming and multiplying the forms produced.

The experiments in this research have helped to develop new approaches to sculpture as an artistic manifestation, but also to discover new means of expression due to the successful symbiosis between material,

technique and tools. Aspects that helped to establish the conceptual-theoretical landmarks of technologies, plastic methods and artistic forms and that were the basis for the elaboration of sculptural compositions: *Spherical clover, Stopover, Cranes, Family, Three Graces, Thinkers, Prayers, King's Crown, Finite-Infinite.*

These nine sculptural compositions can be realised using other sustainable materials and on a different scale, which would allow them to be placed in different environments, creating a harmonious ambience between sculpture and nature, amplifying the artistic communication between creator-work - public. Their dimensions and sculptural techniques can be modified and adapted to the outdoor space where they will be placed. The burnt clay and chamotte from which the works are made can be replaced with materials resistant to natural factors and durable over time, such as Cosăuţi stone, marble, granite or metal.

Sculptural composition The Spherical Clover



Oleg Dobrovolschi. *The Spherical Clover*, 2021, chamotte, glaze. $15 \times 15 \times 12$ cm, $9 \times 10 \times 10$ cm, $15 \times 15 \times 15$ cm Photo credit - Oleg Dobrovolschi, 2021

The composition of **The Spherical Clover** is based on the principle of the geometric shape of the **sphere** and is composed of three pieces representing the clover itself at different times of the day. The largest piece - in the morning, the middle piece - in the middle of the day, the smallest - at night. In the piece Morning the compositional axes meet at a point inside, in the piece Midday - outside, and in the piece Night - in the middle.

The works have been made in crushed and hand-worked chamotte, allowing the trace left by the canvas on the surface of the form to be glimpsed, a texture that enhances the expressive plasticity of the work. Volumes are represented using edges, facets and surfaces.

In this work, contrast is achieved by using matt glaze as the texture for the outside of the work and glossy glaze for the interior surfaces.

Sculptural composition Stopover



Oleg Dobrovolschi. *Stopover*, 2020, clay, glaze, h 58 cm., h 48 cm., h 38 cm Photo credit – Oleg Dobrovolschi, 2021

The composition Stopover consists of three pieces, three birds whose forms expressively describe the state of rest, of relaxation. The sculptural forms reveal the theme through their state of static, they recreate a feeling of pause before flight: one is keeping a watchful eye, another is searching for food and the last is resting. The dynamics of the shapes composition the in amplified by the gestures of the movement of the bodies. resulting from the combination ofconical shapes of different sizes, from the dialogue between hollow-full, concave-convex.

Technologically, these forms are made of 8 mm thick *conical* strips of red clay that have been rolled and stretched on the surface of a canvas, which has left an imprint on the material. The strips have been glued together with barbotine, in a technique developed by the author. The barbotine, being fluid and acting as a binder between the conical forms joined by pressure, comes out, becoming an expressive detail that was not abandoned on purpose. In this regard, the joining of the parts becomes part of the plastic language of the whole work, giving the aspect of welding, naturally present in the technique of metals, but becoming a special achievement in the technique of ceramics.

The sculptural composition Cranes



Oleg Dobrovolschi. *Cranes*, 2023, clay, glaze, h 133 cm Photo credit – Oleg Dobrovolschi, 2023

sculpture Cranes has the appearance of a consisting of five column, modules, arranged in a spiral and with the basic shape of a cube. Viewed from a certain angle the work comes to suggest ascent, flight, launching and raising. Looking at the work from another angle, discover the descent. lowering and return to earthly space. The state of flight of the cranes is suggested by the use of full and empty, convex and concave. repetition and alternation as means of expression. The first cube at the bottom suggests the earth, the next module represents celestial space, embodied in the form of abstracted clouds. In order to express the idea of flight, of man's aspiration to perfection, clay, which is part of the chemical and material composition of the earth, was material. The meaning of flight is supported by the chromatic expression of the last step: glazing.

Sculptural composition Family



Oleg Dobrovolschi. *Family*, 2020, chamotte, glaze, h 80 cm, h 88 cm, h 80 cm. Photo credit – Oleg Dobrovolschi, 2021

The Family composition represents the relationship between generations. The symbolic forms reflect three generations of a family: husband-wife, parents-children, grandparents-parents-children. They present a cycle of human life, called metamorphosis. It is an abstract figurative composition, composed of a group of three pieces of **shamrock**, at the bases of which is the geometric shape - **cylinder**. The bodies of the pieces are made of half-cylinders, placed vertically to each other and at different heights. Each element in the shape of a circle and semicircle is the same diameter as the cylinder and has its own configuration of the part that is perceived as an integral shape.

An important structural landmark of the work was the use of the *Flower of Life* theme as a symbol, which was the basis of both the concept and the practical implementation. Colour has also been applied to better express the process of human evolution - from childhood to adulthood. *Red*, meaning love and passion, has given to the form that represent the couple. *Green*, which suggests life and hope, gives a chromatic resolution to the parent-child figure. *Blue*, symbolising life and wisdom, covers in colour the third group - grandparents-parents-children.

Sculptural composition Three Graces



Oleg Dobrovolschi. *Three Graces*, 2021, Shamrock, glaze. $16 \times 15 \times 30$ cm, $24 \times 15 \times 13$ cm, $31 \times 15 \times 16$ cm Photo credit - Oleg Dobrovolschi, 2021

The sculptural composition *Three Graces* addresses the mythological subject of the three daughters of Zeus (Goddess of Charm, Goddess of Beauty and Goddess of Creativity), who are represented by three abstract figures, at the basis of which lies the **spherical module.** The pieces are developed on three axes: horizontal, diagonal and vertical, representing the ideal of femininity in its various aspects.

The work was executed in **chamotte.** The oblique surfaces of the shapes keep fabric prints, applied as the last phase of its processing, which gives the shape a wrapping effect. Instead, the straight surfaces of the forms are left without any texture, to render the contrast between

inside and outside, as a projection of the harmony between the inside and outside of the human being. The skin-coloured glaze used for this work also contains a plastic element in the composition's synthesis, suggesting the female nude.

Sculptural composition Thinkers



Oleg Dobrovolschi. *Thinkers*, 2019, chamotte, glaze, h 37 cm, h 26 cm, h 17 cm Photo credit - Oleg Dobrovolschi, 2023

The sculpture **Thinkers** invites us to an exploration of the meaning of life, the nature of reality and man's place in the universe. The sculpture made of **chamotte** is composed of three pieces, with a **pyramid** as the basic geometric shape. The first work is made of a pyramid with a triangular base expressing a thinker. In a progressive way, the second work is made of a pyramid with a square base, including two triangular pyramids side by side, symmetrically arranged facing each other, each suggesting the figure of a thinker. With this repetition, the second figure represents two characters who are together at the moment of silence. The last, third piece, has the hexagonal base of a pyramid, which in turn is composed of three triangular pyramids. The latest one announces the presence at the moment of reflection of three people, three thinkers. The edges of the work depict the body parts of each character, captured in a physical posture of pausing, reflecting, meditating, thinking.

Sculptural composition The Pray



Oleg Dobrovolschi, *The Pray*, 2021, clay, glaze. H 42 cm, h 27 cm, h 22 cm, h 21 cm, h 18 cm, h 17 cm, h 12 cm Photo credit – Oleg Dobrovolschi, 2021

The composition The Pray is composed of seven representing pieces prayer of each day of the week. The first day of the week begins with the posture of kneeling down, acknowledging the need for filling, the cone representing this time the emptiness, the void within us. Slowly, moving from one day to the other, the outward expression of the characters expresses the spiritual state of request, the vertical opening of the cone emphasizing moment of prayer. Finally, the seventh day represents highest moment of the worship, when the figure of the character takes the form

of an hourglass, in which the two cones symbolise both emptiness and fullness, the need to receive and the need to give.

The **cone** was chosen as the basic shape, representing both the fullness and the emptiness of the human soul. The cones as three-dimensional shapes were created from strips of clay glued together with barbotine. Pieces of fabric have been applied to the surface of the sculptures, so that the resulting print gives the sculpture the effect of wrapping, avoiding the body of the person praying to be stripped.

Sculptural composition The King's Crown



Oleg Dobrovolschi, *King's Crown*, 2022. Clay, glaze, H 106 cm Photo credit – Oleg Dobrovolschi, 2022

The work The King's Crown consists of three modules, representing the social classes of a community: the people, the nobility and aristocracy (monarchy), the King. The basic shape is the parallelepiped.

The monumentality of the work, in the form of a column, is expressed through the combination of the three parts (modules) and is supported by a technical trick in the modelling of the clay, which suggests the materiality of a metal, contrasting the fragility of the clay with the hardness of the metal. Made by cutting the material in a circular direction on the two opposite edges of the parallelepiped, the resulting surfaces are transformed, changing direction, twisting. This process was repeated three times in decreasing order.

The King's feet, looking like wheels, express dynamics, forward motion, direction – all influenced by the life of the people he represents and leads.

Sculptural composition Finite-Infinite



Oleg Dobrovolschi. *Finite-Infinite*, 2020, unconventional materials, cable, wood, metal hose, h 100 cm, h 80 cm, h 60 cm Photo credit – Oleg Dobrovolschi, 2021

The composition **Finite-Infinite** with abstract character, is designed from a group of three pieces, made of unconventional materials: cables, metal hose, plaster and wood. The sculptures represent a figurative ensemble in the form of a vertical spiral communicating the idea of infinity and timelessness. As an inherent part of the composition, the idea of infinity is deliberately repeated throughout the structure of the work. It harmonises beautifully with the shape of the human genetic code, defining the uniqueness of every human being.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

The bibliographic research, analysis and scientific classification of the literature on the research topic allowed the following conclusions to be formulated:

- Analysing the trends in the development of sculptural techniques at the end of the 20th century and the beginning of the 21st century, we can state that contemporary sculpture is not limited to traditional materials (clay, wood, stone, granite, marble, etc.), but is open to the use of any material (natural or synthetic, including air-filled polyethylene, suppressed rubber, expanded polystyrene, textile material and neon tubes), which, separately or in combination, offer a wide range of possibilities for the achievement the artistic concept.
- With the discovery of new materials for sculpture, both the tools and the
 machinery for processing them evolved. In this context, we see the
 introduction of new sculptural materials in the development of
 techniques for processing three-dimensional forms, bringing them to
 another artistic level.
- While researching the tools used to process sculptural materials, it was found that they developed at the same time as sculptors discovered the materials. As a result of the way they are used, we can classify them into four categories: tools for *working with wood, stone, clay and metal*.
- The appearance in sculpture of new tools and technologies gives the sculptor the opportunity to experiment with new technological procedures, discoveries that amplify the semantic and expressive content of the volumetric forms created. Sculpture therefore relies both on knowledge of simple technical basics using mainly traditional tools and more complex techniques involving the use of modern tools and machinery.
- The traditional techniques applied in sculpture reflect the two basic techniques: carving (by roughing) and modelling (by adding), which persist in round sculpture.

- At the beginning of the 20th century, in the field of universal and local sculpture, important progress was made in the processing of materials and the use of technologies. Sculpture is connected with intense technical experiments and creative results that ensure the development of a new sculptural plastic language adapted to modern technologies.
- The use of metal in the making of a sculpture was made possible by the technical process of moulding the sculpture according to a model created by the artist. In this way, metal sculpture brought an innovation from the sphere of artistic creativity to the sphere of technological industrialization by mass production of several copies of works of the same form, where uniqueness and handmade product were no longer an absolute requirement for artistic value. In this context, we can consider that the application of new materials in sculpture, such as metal, cement and plastics, contributed to the development of sculptural techniques at a different artistic and technological level.
- Contemporary sculptures are found not only in exhibition spaces, not only in places specially designed for their placement, but also in spaces in the immediate environment of the public. This has been made possible by technological inventions in general and contemporary materials that have been adapted to the field of sculpture, but also by the artists' attitude to the creative act of experimenting and applying traditional and modern techniques of processing sculptural materials.

Therefore, the development of sculptural materials and the technological innovations applied in the realization of sculptures have made possible the diversity of placing the sculpture, the ways of placing and presenting sculpture – from the traditional sculpture with a plinth to the modern one integrated in the urban space, in architecture, in the aquatic environment or suspended. As a result, the artist's ways of communicating with the public have been diversified.

 Based on the fundamental concepts of traditional and modern sculpture, the practical component of the research seeks to make an original use of the techniques approached by producing nine sculptural compositions (27 works in total). All the created shapes were submitted to plastic transformations through technical stylization procedures, which led to the visual expression of the ideas through geometric shapes (*cube, cone, sphere, cylinder, parallelepiped, pyramid*) and various decorative motifs.

RECOMMENDATIONS

- Continuing research and experimentation on traditional and modern art techniques in sculpture in relation to new materials discovered and exploited by sculptors.
- Organizing master classes, ateliers and workshops with the aim of promoting and transmitting new sculptural techniques. These activities will contribute to the training of new generations of creative sculptors.
- Communication and further collaboration with sculptors from Moldova and abroad in order to discover new materials, tools, techniques, artistic approaches to modern technologies and their use in artistic creativity.
- Developing a methodological support for students of Ceramics and Sculpture, for teachers involved in the teaching process and professional sculptors, in order to systematize and implement new trends in the field of traditional and modern art techniques in sculpture.

BIBLIOGRAPHY

- 1. 1000 de sculpturi ale unor artiști de geniu. [trad.] Danubiu, Ioan, Oradea: Editura Aquila'93, 2007, 544 p.
- 2. Childe, V. G. Făurirea civilizației. [trad.] Florica-Eugenia Condurachi. București: Editura Științifică, 1966, 280 p.
- 3. Focillon, H. Viața formelor. [trad.] Laura Irodoiu Aslan. București: Editura Meridiane, 1977, 144 p.
- 4. Giedion-Welcker, C. Constantin Brâncuși. București: Editura Mediriane, 1981, 192 p.
- 5. Iovan, I. Semantica artelor vizuale, Vol. I. Timișoara: Editura Anthropos, 2011, Vol. 1, 2011, 300 p.
- 6. Marian, A. Compoziții tematice în sculptura moldovenească. Chișinău: Întreprinderea Editorial-Poligrafică Știința, 2018, 272 p.
- 7. Nanu, A. Pe scurt despre sculptură. București: Editura Meridiane, 1966, 96 p.
- 8. Spînu, C. Arta decorativă din Republica Moldova. Anii 1991-2021. Chişinău: Editura Epigraf, 2023, 488 p.
- 9. Stavilă, T. Statuetele de Tanagra și operele sculptorului basarabean Moissey Kogan. Chisinău: Institutul Patrimoniului Cultural, Arta. Seria arte vizuale, arte plastice, arhitectura. Vol. XXVIII, nr. 1, 2019, p. 42-47.
- 10. Tarangul, M. Fidias. București: Editura Meridiane, 1978, 120 p.
- 11. Wittkower, R. Sculptura, procedee și principii. București: Editura POLIROM, 2012, 200 p.
- 12. Одноралов, Н. В. Скульптура и скульптурные материалы: Учеб. пособие. 2-е издание. Москва: Издательство Изобразительное Искусство, 1982, 224 с.
- 13. Перфильев, В. И. Современная станковая скульптура. Новое в жизни, науке и технике. Серия искусство. Москва: Издательство Знание, 1979, 56 с.
- 14. Полякова, Н. И. Скульптура и пространство. Проблемы соотношения объёма и пространственной среды. Москва: Издательство Советский художник, 1982, 200 с.
- 15. Царинный, И. В. Постамент в городской монументальной скульптуре. Архитектура и дизайн, 15.10.2018 г., с. 22-30.

LIST OF THE AUTHOR'S PUBLICATIONS ON THE THESIS SUBJECT

2. Articles in scientific journals

2.1. Articles in journals from the National Register of Professional Journals

- Dobrovolschi O. Forma artistică în sculptura lui Oleg Dobrovolschi. În: Studiul Artelor și Culturologie: istorie, teorie, practică, nr.4 (41). Chișinău: Notograf Prim, 2021. pp. 213-217. Categoria B, ISSN 2345-1408, E-ISSN 2345-1831, coautor: Hubenco T. https://revista.amtap.md/wpcontent/files_mf/164863850138.Dobrovolschi Hubenco Forma artistica.pdf
- Dobrovolschi O. Importanţa soclului în sculptură. În: Studiul Artelor şi Culturologie: istorie, teorie, practică, nr.1 (42), Chişinău: Notograf Prim, 2022, pp. 115-119. Categoria B. ISSN 2345-1408, E-ISSN 2345-1831.

https://revista.amtap.md/wpcontent/files_mf/166238578720.Dobrovolschi Importanta soclului.pdf

2.2. Articles in renowned foreign journals

 Dobrovolschi O. Materie-Formă-Tehnică în sculptură. În: COLLOQUIA ARTIUM NR.1/2021, pp. 96-104, or. Oradea, România, ISSN: 2821-5117; ISSN-L: 2821-5117, coautor: Hubenco T. https://arte.uoradea.ro/en/colloquia-artium/archive/480-colloquia-artiumnr-1-2021

3. Articles in the scientific proceedings of conferences and other scientific events

3.1. International Scientific Conferences:

- Dobrovolschi O. Materiale moderne în sculptură. Conferința științifică internațională, Ediția a IX-a: Patrimoniul de ieri – implicații în dezvoltarea societății de mâine, vol. VI, 2024, Chişinău-Iași-Lviv. p. 254-259, ISSN 2558-894X.
- Dobrovolschi, O.; Hubenco, T. Materiale tradiționale aplicate în sculptură. Scientific Collection "InterConf". Nr. 195, April, 2024. Brussels. (p. 367-373), https://doi.org/10.51582/interconf.2024.195

3.2. National Conferences:

 Dobrovolschi O. Materialele specifice sculpturii şi modalitățile de prelucrare a acestora. Conferința ştiințifică națională a doctoranzilor şi conducătorilor de doctorat: Cultura şi arta: cercetare, valorificare, promovare. 9 decembrie 2022, Chişinău, AMTAP, 2023. pp.190-197. ISMN 979-0-3481-0105-7. ISBN 978-9975-3597-7-1 (PDF). https://ibn.idsi.md/sites/default/files/imag_file/189-197_3.pdf https://repository.amtap.md/items/6f58973e-89da-42e2-b32d-1200b7e1beee

4. Materials/theses presented at scientific meetings.

- 1. Dobrovolschi O. Materialele sculpturale caracteristici și particularitpți. Conferința științifică internațională, Ediția a IX-a: Patrimoniul de ieri implicații în dezvoltarea societății de mâine, 8-9 februarie 2024, Chișinău-Iași-Lviv. Rezumat p.154-155, ISSN 2558-894X.
- Dobrovolschi O. Valențele formelor în sculptură. Conferința științifică națională a doctoranzilor și conducătorilor de doctorat: Cultura și arta: cercetare, valorificare, promovare. 10 decembrie 2021, Chișinău, AMTAP, 2021. Rezumat pp.37-38, ISBN 978-9975-117-80-7. https://amtap.md/assets/pdf/Cultura%20%C8%99i%20arta%20conf%20d octoranzilor.pdf

5. Other specific works and achievements in different scientific fields

1. Dobrovolschi O. Izvoare: ceramică artistică. Monografie. Chișinău: Tipografia Bons Offices, 2023, 96 p.

6. National and international personal exhibitions

- 1. *Pe urmele naturii*, Muzeul Raional de Istorie și Etnografie din Telenești, 06.06 15.09.2021.
- 2. *Memorie și creație*, Biblioteca "Transilvania" din Chișinău, 29.08 30.09.2021.
- 3. *Izvoare*, Galeria Turnul Croitorilor Centrul de Cultură Urbană, Cluj Napoca, Romania, 16.05 29.05.2022.
- 4. *Între Cer și Pământ*, Muzeul Național de Artă al Moldovei, Chișinău, 27.01 26.02.2023.

7. Group exhibitions

1. Entry in 29 national and international group exhibitions.

8. Other activities

1. Taking part in the TV show "Artelier" on 24 July 2021.

ADNOTARE

Dobrovolschi Oleg, *Tehnici de artă tradiționale și moderne în sculptură*, teză de doctor în arte, specialitatea 651.03 Arte vizuale; Arte plastice și decorative, Chișinău, 2024.

Structura tezei include: introducere, trei capitole, concluzii generale și recomandări, bibliografie din 146 de surse, adnotare (română, engleză), glosar de termeni, 133 pagini de text de bază.

Cuvinte-cheie: sculptură, materiale sculpturale, tehnici tradiționale, tehnici moderne, ustensile, modelare, cioplire, formă tridimensională, soclu.

Domeniul de studiu: arte vizuale, arte plastice si decorative.

Scopul cercetării: determinarea și caracterizarea particularităților și însușirilor tehnologiilor tradiționale și moderne aplicate în sculptură; conceptualizarea și elaborarea unui proiect artistic *Creația, între natură și natura formei artistice* în baza tehnicilor cercetate.

Obiectivele cercetării: stabilirea materialelor tradiționale și moderne în arta sculpturii; identificarea și caracterizarea ustensilelor și utilajelor aplicate în realizarea sculpturilor; sistematizarea tehnicilor tradiționale și moderne utilizate în sculptură; caracterizarea modurilor de amplasare a sculpturilor în diverse spații; stabilirea conceptului pentru proiectul artistic al tezei; proiectarea și realizarea lucrărilor sculpturale conform etapelor tehnologice specifice; analiza artistică a sculpturilor realizate: material, tehnică, idee, mesai.

Noutatea și originalitatea conceptului artistic: prezentarea în cadrul unei expoziții a 9 compoziții sculpturale (în total 27 de lucrări) realizate în tehnici tradiționale și moderne bazate pe un concept original, fondat pe repere științifice și tehnologice. Inspirate din motive geometrice, vegetale, zoomorfe și antropomorfe, lucrările au fost supuse unor transformări de stilizare prin procedee tehnice având la bază forme geometrice: cubul, conul, sfera, cilindrul, paralelipipedul și piramida. Procesele tehnologice aplicate au generat forme tridimensionale originale în care se îmbină armonios viziunea tradițională cu cea modernă, ca rezultat al cercetării teoretice.

Noutatea și originalitatea științifică rezidă în: stabilirea și caracterizarea tehnicilor tradiționale și moderne în sculptură; analiza și sistematizarea tipurilor de materiale sculpturale; identificarea și descrierea ustensilelor și utilajelor aplicate în tehnologia sculpturii; abordarea modalităților de amplasare a sculpturilor în spațiu.

Valoarea aplicativă a lucrării. Rezultatele cercetării prezintă un material valoros pentru cei interesați de tehnologia sculpturii. Studiul reflectă o viziune complexă asupra tehnicilor de artă tradiționale și moderne în sculptură prin prisma noilor tendințe tehnologice. Proiectul artistic reflectă o simbioză armonioasă a materialelor și tehnicilor tradiționale și moderne, care poate servi ca suport metodologic pentru studenții de la specialitățile Sculptură și Ceramică, pentru sculptorii profesioniști și cadrele didactice din domeniu.

Implementarea rezultatelor științifice. Rezultatele științifice au fost prezentate în comunicări la conferințe științifice naționale și internaționale din anii 2019-2023 și în 5 publicații științifice și 2 rezumate. Au fost organizate 3 expoziții personale în Republica Moldova și una în România. Autorul tezei a participat la 29 de expoziții de grup din țară și peste hotare. A paricipat la o emisiune televizată "Artelier", prezentându-și creația.

ANNOTATION

Dobrovolschi Oleg, *Traditional and Modern Art Techniques in Sculpture,* Doctor of Arts thesis, specialty 651.03 Visual arts; Plastic and Decorative arts, Chisinau, 2024.

The volume and structure of the thesis includes: introduction, three chapters, general conclusions and recommendations, bibliography from 146 sources, annotation (Romanian, English), glossary of terms, 133 pages of basic text.

Keywords: sculpture, sculptural materials, traditional techniques, modern techniques, utensils, modeling, carving, three-dimensional form, socle.

Field of study: visual arts, plastic and decorative arts.

The purpose of the research: the determination and characterization of the particularities and features of traditional and modern technologies applied in sculpture; the conceptualization and elaboration of an artistic project *Creation*, between nature and the nature of the artistic form based on the researched techniques.

Research objectives: establishing traditional and modern materials in the art of sculpture; identification and characterization of the utensils and equipment used in the creation of sculptures; systematization of traditional and modern techniques used in sculpture; characterization of the ways of placing sculptures in various spaces; determination of the concept for the artistic project of the thesis; projection and making of sculptural works according to specific technological stages; the artistic analysis of the sculptures made: material, technique, idea, symbol.

The novelty and originality of the artistic concept: the presentation in an exhibition of 9 sculptural compositions (in total 27 works) made in traditional and modern techniques based on an original concept, founded on scientific and technological milestones. Inspired by geometric, vegetal, zoomorphic and anthropomorphic motifs, the works were subjected to stylization transformations through technical processes based on geometric shapes: the cube, the cone, the sphere, the cylinder, the parallelepiped and the pyramid. The applied technological processes have generated original three-dimensional forms in which the traditional vision is harmoniously combined with the modern one, as a result of theoretical research.

Scientific novelty and originality reside in the establishment and characterization of traditional and modern techniques in sculpture; analysis and systematization of types of sculptural materials; identification and description of tools and machines/instruments applied in sculpture technology; adressing ways of placing the sculptures in space.

The applicative value of the work. The results of the research present valuable material for those interested in the technology of sculpture. The study reflects a complex view of traditional and modern art techniques in sculpture through the lens of new technological trends. The artistic project reflects a harmonious symbiosis of traditional and modern materials and techniques, which can serve as methodological support for students from the specialties of Sculpture and Ceramics, for professional sculptors and teachers in the field.

Implementation of scientific results. The scientific results were presented in communications at national and international scientific conferences from 2019-2023 and in 6 scientific papers and 2 summaries. 3 personal exhibitions were organized in the Republic of Moldova and one in Romania. The author of the thesis participated in 29 group exhibitions in the country and abroad. He participates in a television show "Artelier" presenting his creation.

DOBROVOLSCHI OLEG

TRADITIONAL AND MODERN ART TECHNIQUES IN SCULPTURE

SPECIALTY 651.03 FINE AND DECORATIVE ARTS (CREATIVITY)

Professional doctorate ABSTRACT OF DOCTOR OF ARTS THESIS

Approved for printing: Paper size 60x84 1/16

ofset. Type ofset. Print run 50 copies.

Print runs: 1,5 Order no. XX

Printing house XXXX

Inspired by geometric, vegetal, zoomorphic and anthropomorphic motifs.

Bucharest Street, XX, Chisinau, MD-200