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MEANS OF FORMATION OF MODERN ROUND SCULPTURE

Abstract. The paper describes the main means of forming a circular sculpture that formed during the twentieth century. The questions of mutual space and sculpture sculpture.

Keywords: sculpture , means forming , surface, volume and space.

Statement of the problem. The development of science during the twentieth century has greatly expanded the possibilities of man. The rapid globalization of social life, changing the value of thinking requires the use of modern sculpture new themes, styles and technologies. Rethinking methods for formation shape both in sculpture and in architecture, design leads to the use of new media. Formative possibilities sculptures are quite large, as it is possible to use technological advances of our time. Greatly expanded the range of materials used.

Active development of sculpture in the round nowadays promote regular triennial exhibition of Ukrainian sculpture, exhibition Sculpture Exhibition, the practice of sculpture symposiums.

The relevance of the study of sculpture in the round due to its great potential , activation of sculptural activity of artists from different regions of Ukraine and the lack of knowledge of the means of forming same sculpture.




Analysis of recent research and publications. The problems of the psychology of art , composition and visual perception, optical impression and perception of form analysis in the writings of R. Arnheim, A. Hildebrand [1, 4]. The relationship of the material volume and space describes N.I.Polyakova [6]. V.Havrylov his scholarly work investigates the spatial- plastic and structural features of twentieth century sculpture. [3] Evolutionary stages of the Ukrainian school of twentieth century in the context of the world of fine art analyzed M. Protas [7]. The study of dynamic properties of sculpture and shaping them in their work considers A.E.Maksymenko [5].

The purpose of the article - to explore the means of formation of modern sculpture in the round.

The main part. Scientific discoveries of the twentieth century greatly complicated the understanding of the real world and led to a rethinking of artistic tradition. In the visual arts consequence of global transformations was the refusal of basic schemes naturalistic forms, anthropomorphic canons. The desire to express the speed of a new era led to the creation of new spatial concepts changed attitude towards art space. Change the value of artistic thinking radically transforms and sculpture.

Impact of new concepts and trends shaping for various kinds of artistic activities, including architecture and design has become one of the main features of twentieth century sculpture. In sculpture, the transition from imitation realistic forms of the human body to create an active form of plastic, which was the purpose of expressing an emotional image and idea of the artist. Figurative means sharply away from nature, a synthesis of naturalistic sculpture, simplify it for geometric shapes. Wide application becomes fragmented vision of objects. The use of fixed assets formation reinvented, and new methods and ways of creation of sculptural forms. Significant role in the shaping of modern sculpture in the round is played spatial volume.

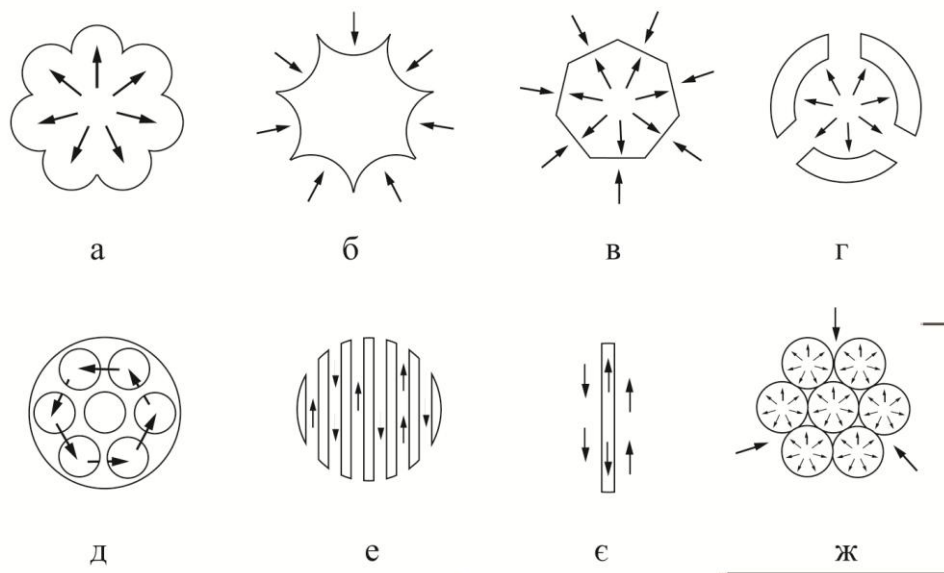
Throughout its history, the sculpture is perceived as volume, growing, evolving and distributed in space. The main means of formative convex shape is spherical and cylindrical, smooth flowing shape. Convex shape, dominated sculpture in the round and gives it a natural and similarities to living nature (*III.1*). Volume sculpting, growing from the middle and gradually grasps space. Rounded, protruding, plastic form in any part of its surface gives a sense of resiliency, a sense of inner energy that is directed outward (*III.2*). It equally fills the speakers (in terms of geometry - with positive curvature) of the surface of the plastic volume. Accordingly, the space under the influence of forces like retreats, conforms sculpture. Sculpture operates as an independent optical image, it fills the space, but it is to some extent isolated from the environment.

		
A. Maillol "Venus with beads» 1910	O.Arhypenko "The woman zachisuye hair" 1915	J. Lipshits "The figure that stands" 1916
convex	concave	flat

Ill.1. Types of formative surfaces sculptures

The opposite convex shaped steel concave surface. They have always existed, but played a role in shaping the contracting sculpture. Burying sculpture seen as contours and openings - like spaces, empty space between the main volumes. Concave surface of the sculpture, as equal forms began to be used only in the early twentieth century. Introduction contra volume (concave plane) associated with the works of Ukrainian sculptor Alexander Archipenko ("Woman combing hair", 1915, "female form", 1914). In his sculptures he used contra volume, where according to original shape is convex. This provokes a concentration in the inner space of sculpture. Void becomes a kind of center of the composition.

Also active application contra volume seen in the works of Henry Moore (*Ill.3*). Especially in his work sculptural forms begin to form hollow volumes. Hollow spaces provided and sculpture original records. R. Arheym wrote Moore sculpture 'Empty volumes look as if they are full -packed air "[1, s.233], it gives the impression of volume density enhancement. The space begins to affect the sculptural form, into the middle and forms a concave surface, becoming an integral part of the figure (Fig. 2b). The use of modern sculpture concave surfaces enables indivisible and perfect combination of parts with one another and with the outside space.



III.2. The interaction of volume and space

One of the innovations of the psychology of creativity in the twentieth century, which required the viewer the ability to see the depth of the image of the work, was the graphic draw terrain contours and details of the composition forms that do not viewed volume. "These works reflected the tendency of plastic transition from the Renaissance scheme of thought and rodenivsko - rossovskoyidribnosti through cubist analyticity to conceptual sculpture "linear sculpture" constructive thinking, which required a system vision ..." [6, p. 44]. In this case the volume is filled with geometric body. The sculpture is formed by means of flat, rhythmic surfaces. They emphasize the distinct architecture of sculpture, creating decorative effects and enhance emotional stress. Although sculptural volume is still largely associated with the human figure, flat faces provide a shape similarity to the machine, thus reflecting technological progress. In contrast to the concave and convex surfaces, clearly felt the struggle of volume and space plane interacts with the space somewhat differently (III.2c). Edges are cut if the space between the ribs pulling an imaginary inner frame. Sculptural geometrical shape crashed in space. This stylized, concise and concentrated form expresses the inner tension content sculpture.

In modern sculpture of a shaping means, associated with the plane is cut (a term proposed by the author Grischuk I.A.). Section shaping not only flat sculpture, but also volume, which together account for some planes separated by a full general sculptural form. The interaction with the space of the sculptural volume is quite ambiguous, and the perception of its different depending on the perspective of the observer (III. 2).

The incision used in sculpture, spatial volume which form the set of planes - sections (III.3). Typically, these are located in parallel planes. The interaction with the





space of this type of sculpture is high, but not space affects the very shape and form dictates the direction of motion of the space around and within it. The volume of its planes crashed into the environment and obey space that interacts. Depending on the density of the planes that form the total volume, and the observation point changes and visual perception.

Flat sculptures are also produced means "cut." This sculpture is made up of one or more planes are not cooperating with the space and with the surrounding background. This sculpture is usually seen frontally and to identify its shape applied tonal contrast of light on dark or dark on a light background.

Anti-form are spatial pause sculpture was once perceived as the gaps between the main volume. This is the area bounded by sculptural volumes. The application enables you to transfer anti-form activity and magnetization interior space to reflect his dynamism and struggle with the material volume. Configuration of the internal spatial volume force directed from the middle to the outside (*Ill.2d*). Examples of application anti-form sculpture is a work of Alexander Archipenko "Big Dance", 1912 (*Ill.3*), R. Bellingham "Three time", 1919, "Flower", 1972. Anti-form often can be found in sculptural groups or in combination with other types of interaction volume and space. Objects such sculptural groups organized around internal space, facing each other. In Fig. 3 Kinds of spatial volume.

High spatial activity characterized by openwork. Consider the generally accepted definition of openwork in shaping overall. "Openwork - spatial volume, a relatively small depth. Outlined contour plastic form, it most resembles the effect of graphics and has a special urgency figurative expression "[5, p 86]. Jig sculpture maximum interacts with airspace lets it inside (*Ill.2d*). This sculpture usually requires a small amount of material and is not massive. The frame is filled with air, depending on the amount of material used and the density of its location has a certain degree of transparency. This gives it a relative weightlessness.

Individual means the formation of sculptural forms are directly means of composition. These include: proportioning, scale, stylization, harmony, unity and subordination (submission). They are a prerequisite of harmonious compositions, have the form of static or dynamic.

			
G. Moore "Ukutana mother and child" 1983	O.Arhypenko "Great Dance" 1912	J. Plensa "House of Knowledge" 2010	T.Kvesytadze "Love" 2003
contra volume	anti-form	openwork	section

Ill.3 Types of spatial volume

Also formative tools include sculptural plastic material and machinery processing. Modern sculpture using a diverse set of materials. Each has its own characteristics, and depending on the processing technique can get different results. B. Whipper notes that " more flexible and less obedient materials: soft rock leads to smoother surfaces and sharp edges, strong - encouraging to rounding, clay usually occurs somewhat vague form" [2, p 26]. In turn, contemporary sculpture using materials such as metal, glass, plastic, wood, paper and more.

Finding specific spatial- visual effects, completely different visual sensations in the genre of sculpture artists by experiment, find new ways of shaping sculptural volume. The artists used clay, wood, metal or stone to create objects that would be constant as possible.

But many contemporary sculptors took the opposite approach, using objects from the real world as a raw material for his art. Marble and bronze replaced the damaged parts of the car, broken furniture, household items. The subject, being completely independent object, became material for sculpture (Fig. 2zh). These independent units, formative elements having its own characteristic form, in combination create a sculptural piece volume.

The feature of this sculpture is its visual perception at different distances. It is perceived as a complex inseparable from a distance. Approaching sculpture formative elements can be identified and taken as a single unit. The interaction of this sculpture with the space depends on the amount of sculpture in general and the density of the composite objects. Configuration interaction forces with the space in this sculpture

can be determined, estimating the shape as a whole or each element separately formative. All components interact with the space according to your specifications form. From the density of formative elements depends on the activity of the penetration of air space in sculpture. But, as a sculptural form made up of individual particles, it cannot be completely consistent, dense because of the infiltration area is very common.

In a separate group of sculptural materials include ice, sand, sugar, etc. These materials are short-lived and used to create temporary works of art.

Conclusions. Formative tools of modern sculpture in the round are determined by the types used surfaces to be reunited with some surrounding area, mass composition, technology development and material used.

In modern sculpture in the round can distinguish the following types of formative surfaces: convex, concave and plane.

As an important means of shaping sculptural forms is the space in sculpture separated these types of spatial volume as active contra volume, anti-form, openwork and cut.

Regardless of the type of planes that form the sculpture is in the form of appropriate spatial activity. The interaction of form and space can be regarded as a configuration of forces.

Prospects for further research. It is supposed to take place in the direction of in-depth study of domestic and international experience with sculpture organize in the interior of the medium , and the main trends of its creation.

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Аннотація

Кузнецова І.А., Кащенко А.В., Грищук І.А. Средства формирования современной круглой скульптуры. В статье описаны основные средства формирования круглой скульптуры, что формировалась на протяжении ХХ столетия. Освещены вопросы взаимного влияния пространства и скульптурной пластики.
Ключевые слова: скульптура, средства формирования, поверхность, объем, пространство.

Анотація

Кузнецова І.О., Кащенко А.В., Грищук І.А. Засоби формування сучасної круглої скульптури. У статті описані основні засоби формування круглої скульптури, що формувалася протягом ХХ сторіччя. Висвітлено питання взаємного впливу простору і скульптурної пластики.
Ключові слова: скульптура, засоби формування, поверхня, обсяг, простір.