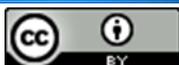

Voloshina, L. A. (2023). Chaos and harmony in nature and art as the origin of beauty. *Culture and Arts in the Context of World Cultural Heritage. Klironomy*, 2 (8), pp. 7-22. Ostrava: Tuculart Edition, European Institute for Innovation Development.

Волошина, Л. Ю. Хаос и гармония в природе и искусстве как первоначала красоты // Culture and Arts in the Context of World Cultural Heritage. *Klironomy*. – 2023. – № 2 (8). – С. 7-22. Ostrava: Tuculart Edition, European Institute for Innovation Development. (на англ.)

DOI: 10.47451/art2023-05-02

The paper will be published in Crossref, ICI Copernicus, BASE, Zenodo, OpenAIRE, LORY, HSLU, J-Gate, ASCI, Academic Resource Index ResearchBib, ISI International Scientific Indexing, ADL, JournalsPedia, Mendeley, eLibrary, and WebArchive databases.



Liudmila A. Voloshina, Candidate of Philosophical Sciences (PhD), Institute of Practical Psychology “IMATON”. St. Petersburg, Russia.

Chaos and harmony in nature and art as the origin of beauty

Abstract: The relevance of the topic “beauty” is inexhaustible. In this article, it is considered as the unity of two opposites – chaos and harmony. This unity is the basis on which art is built, as an activity inextricably linked with beauty. The study subject was these two concepts, and the study object is the entire aesthetic thought from ancient times, considering beauty as a combination of chaos and harmony. The study purpose was to show how this idea of the unity of two opposites, embedded in the structure of the universe, is the main driving force of any creative activity. Human culture is considered at the same time as a process aimed at harmonizing chaos, and art as an opportunity to give this process expressive forms. In the study, along with the philosophical and aesthetic methodology, methods of other sciences such as hermeneutical, axiological, existential-phenomenological, semiotic, and psychological were applied. When writing the study, there were used a wide range of sources: works of ancient thinkers Hesiod, the pre-Socratics, Plato, Pythagoras, Aristotle, Russian aesthetic and psychological thought of A.F. Losev, V.S. Solovyov, N.A. Berdyaev, Yu.N. Lotman, Yu.B. Borev, L.S. Vygotsky, works of Russian and foreign scientists, including A.V. Voloshinov, Yu.V. Taboyakova, B. Mandelbrot, H.-O. Paytgen, P.H. Richter, N.T. Rymar, G.P. Menchikov, studies in the field of ornament art of V.V. Ivanov, V.N. Toporov, V. Gruzdev, K. Buher, and T.V. Kolchev. The author concludes that the unity of chaos and harmony is represented in art as a natural reality in which opportunity and action are combined. In this strange dyad is the basis of what we call creativity. And all this is contained in the universe, as a certain formula by which the beauty of the world and the beauty of art are built.

Keywords: chaos, harmony, archetype, ornament, beauty, fractal, myth, artistic image, symbol.

Людмила Александровна Волошина, кандидат философских наук, Институт практической психологии «ИМАТОН». Санкт-Петербург, Россия.

Хаос и гармония в природе и искусстве как первоначала красоты

Аннотация: Актуальность темы «красота» неисчерпаема. В данной статье она рассматривается как единство двух противоположностей – хаоса и гармонии. Это единство и есть та основа, на которой создается искусство, как деятельность, неразрывно связанная с красотой. Предметом исследования выступают именно эти два понятия, а объектом служит вся эстетическая мысль с древнейших времён, рассматривающая красоту, как совокупность хаоса и гармонии. Данное исследование, опирающееся на столь богатое теоретическое наследие, ставит целью показать, как эта, заложенная в структуру

мироздания идея о единстве двух противоположностей, является основной движущей силой любой творческой деятельности. Человеческая культура, рассматривается при этом как процесс, направленный на гармонизацию хаоса, а искусство, как возможность придать этому процессу выразительные формы. В исследовании наряду с философско-эстетической методологией были применены методы и других наук: герменевтические, аксиологические, экзистенциально-феноменологические, семиотические, психологические. При написании исследования использовался широкий круг источников: труды античных мыслителей Гесиода, досократиков, Платона, Пифагора, Аристотеля, русская эстетическая и психологическая мысль в лице А. Ф. Лосева, В. С. Соловьёва, Н. А. Бердяева, Ю.Н. Лотмана, Ю. Б. Борева, А. С. Выготского, работы русских и иностранных учёных, в том числе, А. В. Волошинова, Ю. В. Таболяковой, Б. Мандельброта, Х.-О. Пайтгена, П.Х. Рихтера, Н.Т. Рымаря, Г. П. Меньчикова, исследования в области искусства орнамента В. В. Иванова, В. Н. Топорова, В. Груздева, К. Бюхера и Т.В. Колчева. Автор делает выводы, что единство хаоса и гармонии представлено в искусстве как естественная данность, в которой соединены: возможность и действие. В этой странной диаде – основа того, что мы называем творчеством. И всё это содержится в мироздании, как определённая формула, по которой выстраивается красота мира и красота искусства.

Ключевые слова: хаос, гармония, архетип, орнамент, красота, фрактал, миф, художественный образ, символ.

Introduction

The theme of beauty has a rich history of comprehension, starting from antiquity, when beauty began to be considered as an objective property of the universe. Numerous volumes reflecting the diversity of human thought of all times and peoples are filled with discussions about beauty in the world and art. And yet, this study turns to this topic again. The author had to repeatedly talk about beauty in art, about what forms it can take, passing through the crucible of creativity. Where does the art form come from, what is the understanding of beauty connected with, where does this representation come from in our consciousness, and does it relate only to the conscious area? A number of questions marked the beginning of this article, which generally considers beauty as a phenomenon of perception. The key point in this ongoing conversation was the theme of the unity of chaos and harmony as the fundamental principle of the existence of beauty in the universe.

The relevance of the topic is seen in the fact that this principle is the basis of art as an activity inextricably linked with beauty. Consequently, these two concepts are the study subject. The study object is the entire aesthetic thought from ancient times, considering beauty as a combination of chaos and harmony.

The study, based on such a rich theoretical heritage, has purpose to show how this idea of the unity of two opposites, embedded in the structure of the universe, is the main driving force of any creative activity. To present human culture as a process aimed at harmonizing chaos, and art as an opportunity to give this process expressive forms.

In the study, the author set the following tasks:

- describe the formation of the idea of the unity of chaos and harmony in philosophical thought;
- characterize the process of forming the idea of deterministic chaos in scientific consciousness, using the example of the fractality of being;
- analyze these concepts in the space of myth – chaos and archetype, rhythms of ornament as opposition to chaos;

- analyze chaos as an elemental energy that has found its expressiveness in the art of words and images;
- draw conclusions about the representation of the unity of chaos and harmony.

In the study, along with the philosophical and aesthetic methodology, methods of other sciences such as hermeneutical, axiological, existential-phenomenological, semiotic, and psychological were applied.

The selection of sources is related to the main study tasks. First of all, these are the works of ancient thinkers. In Hesiod, the pre-Socratics, and later in Plato, chaos was thought of as the origin in which the element prevails over order (*Losev, 2000b*). Ancient thought did not immediately discover the beginnings of harmony in chaos. The researcher of ancient Greek philosophy A.F. Losev in his “Dialectics of Artistic Form” already writes about the relationship of chaos and harmony (*Losev, 2010*). And this idea of the unity of two opposite states has been developed and confirmed in Russian philosophical thought (Losev, Solovyov, Berdyaev). In numerous works of Russian and foreign thinkers, this unity is interpreted as a dynamic force that informs the world of the fullness of being. And just as ancient thought once opened the world of ideas behind the world of formulas, so in the modern scientific space there is a place for reasoning about beauty as an eternally existing idea. So deterministic chaos was discovered, which was correlated by scientists with the fractality of being (*Mandelbrot, 2010; Menchikov, 2008; Paytgen & Richter, 1993; Voloshinov & Taboyakova, 2017*). Chaos, as something spontaneous and inexplicable, gradually acquired its appearance in cultural archetypes. The first myths, ancient magical rituals have preserved for us this story of the “pacification” of chaos by human culture (*Sherkova, 2019; Lugovskoy, 2015*). This process of harmonizing chaos in the images of culture has been preserved to this day in the art of ornament, in the structure of which a person’s sense of rhythm is embedded. Rhythm acts as an ordering in the ornament. Its possibilities as a rhythmically organized space are still the subject of research in various sciences (*Bobrov, 2015; Bücher, 1923; Kolcheva, 2004; Lugovskoy, 2015*).

The element of chaos, its freedom in art has always been interpreted from the position of an irrational, sensual beginning. Art is impossible without this ineffable part of it. Both aestheticians and artists themselves see this unity of chaos and harmony as a necessary combination of the spontaneous and rational in art. (*Broitman, 1996; Gruzdev, 2013; Ivanov & Toporov, 1974, Rymar, 2016*).

Ancient thought and the formation of concepts. Chaos and harmony as properties of beauty

The archetypes of harmony and chaos are the fundamental principles of the world. It is difficult to talk about chaos as a sensually significant and at the same time deep archetypal sensation. Consciousness seeks to explain the archetypal by throwing a bridge to the real world. The first arguments about chaos are found in ancient thinkers. This idea is connected with the mythical consciousness of the ancient Greeks. Most often, it was understood as the primary state of the world, a formless space that gives rise to all living things. In Hesiod’s “Theogony”, chaos was thought of as the first potency: “First of all, Chaos originated in the universe” (*Gesiod, 2020*). Chaos appears to him both as a physical (empty space of the world) and as a mythological (generating Erebus and Night) concept. As with Homer, so with Hesiod, it is a disharmonious element that has not yet found divine ordering.

In the philosophy of the pre-Socratics, chaos as the beginning of all existence was identified with the primary elements of the universe: water, or the monad from which everything originates. In Aristophanes' cosmogony, chaos is an ancient mythological character who, in alliance with Eros, generates world life (*Losev, 2000a*). Later, towards the end of the classical period, two concepts were formed in Greece that define the concept of "chaos": as an empty or filled space and as a life-giving principle. The first concept was developed by Plato and Aristotle. Plato understood chaos as "all-accepting nature", i.e., pure matter. According to Plato, this is "that invisible and intangible principle devoid of any physical qualities, which is obtained after the exclusion of all its real properties from the physical body, something that cannot even be called by any name, because every name of an object always attributes to it one or another property. This is pure matter, the very fact of the existence of the body, independent of any of its real properties. Chaos is not a body, but the principle of the continuous formation of the body" (*Losev, 2000a, p. 438*).

A.F. Losev wrote that "ancient chaos was forever seething with restless tendencies to generate a well-ordered cosmos from itself; and on the other hand, the cosmos, despite all its design, always had a tendency to turn into a chaotic state again" (*Losev, 2000a, p. 559*). Subsequently, this idea of the relationship between chaos and the cosmos will be understood aesthetically, as the principles of nature and art passing into each other, as the possibility of harmony arising from the elemental principle. "And contemplating this artistic cosmos, there is no way to distract either from the dark unconscious depths of chaos that creates all this brilliant, sunny imagery, or from conscious dimensionality, orderliness and harmony, without which chaos itself would remain either completely unknown or unfruitful" (*Losev, 2000a, p. 612*). V. Solovyov believed that "chaos, i.e., ugliness itself is a necessary background for any earthly beauty, and the aesthetic value of such phenomena as a stormy sea depends precisely on the fact that chaos is moving under them". There is reason to assume that V. Solovyov's concept of "aesthetic value" is not just a synonym for beauty, but a designation of a complex relationship of aesthetically "positive" and the "negative" principles of value existence with the dominance of the "positive", while preserving the trinity of Truth, Goodness and Beauty (*Solovyov, 2017*).

Thus, the idea of the unity of chaos and harmony as a creative force, laid down in antiquity, served as the foundation on which the idea of beauty was subsequently formed.

Deterministic chaos. Fractality – as a property of being

In the 20th century, chaos for the first time moves from the field of philosophy and literature into the field of science. Synergetics tried to use mathematical equations to describe the act of self-organization in complex systems, and later began to consider the reverse processes of the emergence of chaos from outer space. This previously unseen kind of chaos, which occurs where, according to mathematical equations, there should be a strict deterministic order, was called deterministic chaos (*Voloshinov & Taboyakova, 2017*). Chaos in this case is represented as something with a very complex structure. This is not a lack of order at all, but a different order, of a higher level. Deterministic chaos is correlated with the fractality of being. Fractality means variability, the same at all levels of being. Chaos generates fractals, and the phase trajectory of fractals also has self-similarity. A fractal is a structure consisting of parts that are in a certain sense similar (homothetic) to the whole. In fact, the processes that generate such structures have been studied in mathematics and physics for quite a long time. These are normal feedback processes. Almost all

natural phenomena have a fractal structure and, apparently, fractal properties, therefore, we can talk about the fractality of being as one of its main properties (*Menchikov, 2008*). Fractality implies symmetry and asymmetry as two necessary parts of unity. In fact, there are no exact symmetries in nature, even in the solar system, the trajectories of the planets do not represent an ideal circle, but are ellipses.

In other words, a fragment of a fractal identical to the integral form is reproduced at each subsequent level of a smaller scale, forming a kind of “nested” structure. Natural fractals are, for example, coastlines, mountains, trees with their branching crowns and leaves, snowflakes, the human circulatory system, etc. The fractal turned out to be a visual and operable visualization of the idea of infinite becoming, incompleteness, processality and immanently “programmed” dynamics of all socio-cultural phenomena. A fractal, indeed, “is not a finite form (no one has ever seen a fractal, just like the number π), but there is a law of construction of this form”, “the gene of form formation”, as the Russian mathematician and philosopher A.V. Voloshinov calls it (*Voloshinov, 2000*).

Benoit B. Mandelbrot in 1980 discovered a set that now bears his name. This is not just a bizarre figure that seems beautiful to someone, but ugly to someone; this set embodies the principle of transition from order to chaos. Benoit Mandelbrot, who created the art of fractal, writes that fractal structures have been known to mankind since ancient times, but they were described only through art (*Mandelbrot, 2010, p. 189*). Hokusai’s “Big Wave” served as a prototype of the graphical fractal wave generated by B. Mandelbrot (*Figure 1*). The spiral itself is a fractal in which each new turn copies the previous ones, but on a new scale. The direct relationship between the world order of the micro- and macrocosm and the shape of the spiral testifies to the fractal structure of the Universe. The Earth itself is the carrier of a huge number of small open systems – plants, animals, insects, amphibians, humans. And these systems are constantly interacting with each other.

The fractal theory has become widespread in the art world and not only. Modern postmodern architecture is looking for new forms that would combine this principle of unity of symmetry and asymmetry, randomness and harmony. German publicist and philosopher G. Eilenberger wrote: “Our sense of beauty arises under the influence of harmony of order and disorder in natural objects – clouds, trees, mountain ridges or ice crystals. Their outlines are dynamic processes frozen in physical forms... science and aesthetics agree on what exactly is lost in technical objects compared to natural ones: the luxury of some irregularity, disorder and unpredictability. Understanding this can greatly help us in giving a human face to the technology on which our survival depends more and more” (*Paitgen & Richter, 1993, p. 159*).

Such a phenomenon in architecture as parametrisation understands space as a dynamic structure formed by energy rather than form, hence the desire to create open structures that tend to self-organization. The entry of architecture into the digital stage not only gives it boundless experimental possibilities, but at the same time forces it to reconsider the philosophical and anthropological foundations of architecture. Currently, two major problems in architecture have been identified, and new theories related to this. The first problem is related to the need to rethink the fundamental archetypes of shaping so that they do not lose their viability when faced with the computational sphere. The second group of problems is related to the need to revise architecture as a human habitation space. In the 21st century, this is the space of the city. (*Dobritsyna, 2020*). This new life in architecture is caused not only by the advent of the era of digitalization, but in general,

by the discoveries that have taken place in science. The turn to a new rationality is associated with changes in the picture of the world. Firstly, the general principle of the development of any system is stated – evolutionism. It is built on the idea of self-organization - continuous transitions from instability to a sudden order.

Modern science increasingly considers instability or dynamic chaos as a model of creativity. Cause-and-effect relationships do not work in the new model. Randomness is of great importance. Natural science theorists claim that the world is like a living self-developing organism, and most of the systems that make up it are described by nonlinear equations. Linear systems are only a special case. This idea has found application in the metamodern culture.

Harmonization of chaos in the images of culture. Ancient archetypes and their symbols

The combination of chaos and harmony in culture is reflected in the arts of different times and peoples. Culture is the main harmonizing force. The inexplicable frightening spontaneity of chaos was initially opposed by ritual. He was called to pacify the elements, restore world order with the help of magical actions and images (*Sberkova, 2019*). For the mythological consciousness, any act of creation requires overcoming some kind of chaos. This chaos in the ideas of ancient man had to take the visible form of some chthonic monster. One of the most common in art is the dragon. The image of the dragon is found in the ancient cultures of Mesopotamia, Egypt, Greece, India, China, Japan, on the territory of South and Central America. The dragon in ancient mythology must be defeated as the embodiment of darkness, darkness, death. It appears in different cultures as a universal archetype associated with the concept of chaos.

In the Old Testament, the dragon itself is mentioned in a negative context (Deuteronomy 32:33, the Book of Nehemiah 2:13, Psalms 43:20 and 90:13, the Book of Jeremiah 51:34). In the New Testament tradition, there is a complete identification of the dragon with the devil, which is clearly seen in the example of the text of the Apocalypse (Revelation 12:3,4,7,9,13,16,17; Revelation 13:2,3,11; Revelation 16:13; 20:2). The dragon is an ontological evil that must be destroyed in order for the time of “a new heaven and a new earth” to come. St. George became the most recognizable winner over the dragon in Christian culture. At the same time, it is important to emphasize that the universal image of the dragon is important not in itself, but as an element of a cosmogonic myth, the purpose of which is the transformation of chaos into space. For the mythological consciousness, the theme of the destruction of the world's darkness – hydra, dragon, darkness – is an integral part of the process of cosmogony. The foundations of the universe are born and created from the destroyed chaos dragon. In other words, the described plot of “victory over chaos” can be characterized as follows: the creation of the new occurs through overcoming, sacrificing a certain entity, often (but not necessarily) having hostile properties towards the subject and object of creation (*Sberkova, 2019*).

The symbol of the World Tree is also associated with the archetype of chaos. It is believed that already in the Paleolithic the first ideas about the vertically oriented, ternary structure of the structure of the cosmos appeared. Ancient philosophy distinguished two degrees of chaos organization: non-existence – anti-organization, and super-existence – super-organization. The first corresponds to the “bottom”, the passive Aristotelian matter, the second corresponds to the “top”, the form, and the middle world appears as a marriage of matter and form, generating everything real. In “this world” there are objects closer to the “bottom”, which means that they are

“unshaped”, unformed and those that are more complex, correct, i.e., close to the patterns of super-existence (the hierarchy of things, as a rule, is determined by their aesthetic assessment) (Lugovskoy, 2015). The image of the World Tree is an attempt to order chaos, to find each layer of the universe its place. At the same time, this image represents unity, in which a place is given to a person and his culture. It is known about the existence of a conductor between the worlds and the mythology associated with this representation. The crown of the World Tree reaches the heavens, and the roots reach the underworld. Deities live in the crown, and demonic and chthonic creatures live at the roots of the tree.

Thus, culture initially represented the main harmonizing force. The first rituals were aimed at harmonizing chaos. The mythical consciousness created the first images that still live in art, preserving the ancient ideas of chaos and harmony.

Ornament as an attempt to organize chaos. Rhythms of ornament and modern man

In an effort to harmonize the chaos in the images of culture, a person created the most important meanings for himself at that time. Many of which are lost today, and the symbols associated with the chaos archetype still live in art. They no longer possess the power that they were originally endowed with, but their effect is undeniable. Otherwise, how to explain their persistence in culture, the relentless attention from artists who often unconsciously fill their works with these images. The vertical system of the world order is found, for example, in the paintings of Russian spinning wheels, where it is very stable and corresponds to certain ideas about the three-level universe. Here we also find a rich symbolism, which is associated with solar signs, signs of earth and water, which have always occupied a stable place in the paintings (Figure 2).

The ornament, with its orderliness and ritual symbolism, opposes the chaos of the surrounding natural world, filled with unclear, inexplicable and often dangerous phenomena. The ordering value of the ornament is connected with the law of rhythm. The simplest ornamental system – rhombic ornament – has been known since Paleolithic antiquity. It reflected the desire of man to separate himself from the natural world with the help of order, which was opposed to chaos. The ornament is a visual embodiment of the biological and natural rhythms in which a person lives. Like music, ornament is a carrier of rhythm, its visual expression through graphics. The original connection of the ornament with music is indicated by the finds of the oldest musical instruments of the Paleolithic era, covered with ornaments or rhythmically organized groups of notches (Bücher, 1923). Hence also the connection of ornament, as well as music, with geometry and mathematics. The combination of geometry and art in the ornament testifies to the first ideas of a person about regularity. In rhombuses, crosses, squares, dots, there is, first of all, repeatability in certain numbers. Counting, rhythm help to feel and explain the structure of the world. So, the following images are explained by numbers: 3 is the image of the divine Trinity, three spheres of living space (heaven, earth, the underworld), time (past, present, future). The number 4 is an image of integrity (4 cardinal directions, 4 elements, 4 seasons). The symbol of harmony was the number 7 (7 colours of the spectrum, 7 notes in music, 7 days a week). In the ornament, we can see how the task of ordering and reflecting how this or that epoch understood the world was solved.

The rhythm was perceived by the ancient man, like his whole life, from the point of view of the cosmos. Rhythm, like the cosmos, is harmonious (combining all possible multiplicity and opposites), spiritual, intelligent and perfect. In the theory of rhythm, even in the ancient period,

the following provisions were formed, which were continued in the future. “1) The very word “rhythm” and the definition of the term “rhythm” arose. 2) A theoretical understanding of the unity of the multiplicity of rhythm in all spheres of human activity was carried out. 3) The concepts of “rhythm”, “meter” or “beat” were differentiated, but no stable word usage of these definitions was developed. 4) Ideas about the artificiality of the beat or meter and the naturalness of the rhythm began to form” (*Kolcheva, 2004, p. 27*). Today, there are more than 100 different biorhythms of human life activity itself. Only two biorhythms are considered the most studied today – the rhythms of sleep and wakefulness. Ornament is simultaneously considered as a phenomenon of culture, art and a natural consequence of human observation. The whole nature is filled with rhythms, which was revealed to our ancestor as a book that he constantly read. The first ornamental motifs were undoubtedly seen in nature itself. With their lines and shapes, they refer us to the images visible to all. The ornament in its varieties can be finite (circle) and infinite (meander), but any of its variations have one property that was also noticed in ancient times – the effect on the human psyche. Artist-bone cutter N.D. Butorin wrote about the ornament that through it “it is possible to convey tragedy and elegy, strong movement and peace, storm and fragile snow-covered forest, that is, to fill the work with rhythmic beauty and poetic content” (*Butorin, 2011*).

The appearance of the ornament has its own prerequisites. And they are connected with a person’s worldview of a certain time and place. Ornament researcher V.V. Bobrov writes about the existence of a connection between the development of decorative and applied art and the rhythm of life. “The measured rhythm of a stationary lifestyle (fishing, fishing and hunting lifestyle, early stages of productive forms of economy) and the dynamic rhythm of a mobile lifestyle (hunting, nomadic lifestyle) demonstrate different trends in the development of ornamental art” (*Bobrov, 2015, p. 10*). There is no doubt that there are other concepts of ornament research. It is clear that at the primitive stage of the development of human culture, this was the most natural form of expressing a person’s idea of himself in the space of the universe. And there is no doubt that it was also an aesthetic form associated with a sensual sense of the natural world.

Consequently, in the art of ornament, we see this opposition to chaos by orderliness and ritual symbolism. The ordering value of the ornament is connected with the law of rhythm. Counting, rhythm help to feel and explain the structure of the world. Ornament in traditional art is a reflection of this attempt of a person to protect himself, to harmonize the surrounding world, often inexplicable and frightening.

Chaos as a feeling expressed in an artistic form

The building of culture is built on the foundation of instincts, natural primordial tendencies, culture seems to “pacify” chaos in itself. Chaos is disturbing, but ambivalent, can be both dangerous and good, two vectors of power stand out in it, his, and the whole reality of those who create from him – Eros and Thanatos, Life and Death. Any reduction, damage, dismemberment, simplification is Thanatos, and any elevation, excess, accession, growth is Eros. The struggle of organisms, species, cultures is the antagonism of individual Eros. Culture differs from chaos by the presence of the concept of a measure that contributes to the restriction and curbing of individualistic aspirations, subordination to their sacral norms as a collective will (*Lagovskoy, 2015*). Chaos, which we resist so strenuously, really has an inner meaning and beauty. When we perceive it as a stream of energy, it allows us to turn to our own universe. Such an understanding of chaos as an energy

capable of both creating and destroying is directly related to art, in which this energy is still an unformed, boiling, full of potency content of the poetic soul. “Poets talk a lot about these secret depths of mysterious sources of inspiration, and they speak for a reason. There is a great truth here. We will never understand either the artist or the art form if we do not take into account the whole spontaneous nature of these unconscious depths and begin to rationalize them” (*Losev, 1997*).

The romantics gave the ancient chaos another, perhaps the deepest meaning, presenting it as freedom. They believed that such properties of ancient chaos as infinity, eternal motion, fluidity and variability lead to universal freedom, because everything finite and definite is “unfreedom”. The members of the Jena circle of Romantics – Schelling, the Schlegel brothers, Novalis – saw this “chaotic” freedom of the spirit in the synthesis of the whole culture. About the secret of creativity as the secret of freedom wrote N. Berdyaev: “Creativity is only possible out of bottomless freedom, because only out of bottomless freedom is it possible to create a new, non-existent. From something, from being, it is impossible to create a new non-existent, only expiration, birth, redistribution is possible” (*Berdyaev, 1993, p. 117*). He associated such creativity with the biblical myth of the creation of the world. And of course, this implies meonic freedom, which is not determined by anything. This creative process is primary, when a person responds to God's call, when a symphony sounds to a person, and an artistic image has not yet found its expression. In art, the creative fire cools down (*Berdyaev, 1993, p. 119*).

The feeling of such freedom has fed many artists not only brushes, but also words. A wonderful example of the synthesis of art, poetry and philosophy is given by the work of the Russian romantic and philosopher Fyodor Tyutchev. The theme of primordial chaos deeply worried the poet:

“Oh, don't sing these terrible songs
About the ancient chaos, about the beloved!
How greedy is the world of the soul of the night
He listens to the story of his beloved!
From the mortal he tears his chest,
He longs to merge with the infinite!..
Oh, do not wake up the storms that have fallen asleep –
Under them, chaos is moving!..”

F.I. Tyutchev “What are You Howling about, the Night Wind?”

Tyutchev keenly felt both the “antique” properties of chaos as a deadly destructive force and life-giving principle, and the romantic properties of chaos as an alluring freedom, to which the poet's soul was torn.

Painting fully informs us of such admiration for this chaos, which has found its expressiveness in works of fine art. It is human nature to admire natural phenomena that reveal to us feelings of inexpressible and all-destroying power. We observe with fear and delight how majestic the natural element is in its free and violent manifestation. At such moments, the archetypes of chaos may sound in us, generated by: thunderclaps; clouds growing like a magical kingdom; giant waves thundering and crashing against rocks. All this gives a feeling of strength, unconquered freedom. And these strong feelings, combined with a special picturesqueness, acquire imagery in the works of artists. We see a lot of such works by marinists who sing of the sea element (*Figure 3*). The interest in such a topic also confirms that chaos and harmony coexist in nature as two states close

to each other, which also get along in man as a natural being. Interestingly, the perception of such art is quite aesthetically pleasing sensations. Standing in front of Aivazovsky's painting, we admire the beauty of the elements, without experiencing horror and even fear. The art world presents us with this visible chaos at the apogee of its destruction. However, it also contains something that regulates this element, endowing it with the beauty of an artistic image.

In the painting of the marinists, the chaotic is present not only as a transfer of sensations from natural phenomena that are stunning with their unlimited will. Here, the concept of chaos can be correlated with the water itself, depicted by artists, which has been understood since antiquity as the primary element. In the art of the 19th century, and even more so, of the 20th century, such a mythological memory is already being lost. But the archetype of water continues to affect a person, continuing its life in works of art. K.G. Jung interpreted water as a symbol of the collective unconscious and as a symbol of the vital force of the soul. Water is associated not only with the creation, rebirth and renewal of the macrocosm and microcosm, but also with the death of the world. Such a dual idea of water as an image that combines both life-giving and mortal principles is connected precisely with the ancient understanding of it as the primary element, which contains both the elemental power of destruction and the desire for harmonization. Such an idea of water is reflected in religious rituals and, of course, in folklore. Researchers of the culture of the Russian North V.N. Toporov and V.V. Ivanov correlate with the name of the god of the Hair – the host of the chthonic world, such concepts as “wave”, “will” (*Ivanov & Toporov, 1974*). Based on numerous etymological searches devoted to the analysis of Indo-European “verbs of dying” (*mer-, *mor, vel-), it can be assumed “that the words “sea” and “will” formed from them denote the same “sea” reality of the dead kingdom. However, if the “sea” is associated with the image of death as “disappearance”, “devastation”, “departure” beyond the horizons – limits of life (“eternal death”), then the “will” fixes the inverse properties of death associated with the ideas of “appearance” (epiphany), “filling”, “return” from the realms of death “eternal life” (*Mythology of the sea and the ship, 2015*). The ship is represented here as a mediator between the worlds of the living and the dead (*Ivanov & Toporov, 1974*). In folk folklore, such an idea of water as a dual, incomprehensible phenomenon combining life and death is reflected in the narratives of living and dead water. All these seemingly distant connections are directly related to this topic. It is in art that the archetypal continues its life in numerous stable symbols that refer a person in his sensations to the primary experience that underlies all psychic phenomena.

In addition to the image of the water space as an element, as the personification of divine energy, the water surface is also interesting, so to speak, by itself. This is a favorite motif in the Russian landscape, but you cannot associate this love only with the abundance of water sources in Russia. In Russia, the space of water is comprehensive in the cultural and historical sense of the word. Here, of course, there is also this inexplicable, often unconscious attraction to the image of waters. All significant life events of a Russian person, numerous rituals and holidays, stable beliefs are connected with water. Existing in myths, water acquires many meanings. One of them considers water as a support on which the earth rests. As an example of such water, which is simultaneously understood by us as a river, and at the same time represents something impenetrably dense, hidden, we can cite the landscapes of the Soviet artist Arseny Semenov (*Figure 4*). Of course, here we can talk about the peculiarities of the picturesque manner, as the art historian S.V. Ivanov writes that by the mid-1960s generalized colour solutions appeared in his works, excessive fragmentation

disappeared. The artist uses local color more often, achieving more decorative painting. It is impossible not to agree with this, but any appeal to a local color is associated with a folk tradition, where the local colour is taken as given by nature, as endowed with a certain symbolism and meaning. In the waters of A. Semenov there are no reflecting clouds, trees growing along the banks and buildings standing along the river. He has other works in which all this is present. However, in such an image of a river, which resembles some kind of dense impenetrable substance enclosed in itself, it is this primitive nature that is felt, from which life then came out.

The element depicted in the painting has already received in the artist's mind what it should acquire in the process of creativity. The act of creation, which for the first time embodied their chaos, a harmonious universe, is repeated every time consciously (and unconsciously) in human creativity. Chaos in painting, we most often see correlated with this primordial chaos of creation. So, in the I. Aivazovsky's painting "Chaos. Creation of the World", the cloud repeats its outlines of God the Father (*Figure 5*). And wherever we turn to this topic, chaos will be visibly present. Chaos and cosmos have been inseparable in our consciousness since ancient times. In the first half of the 20th century, this topic received a new meaning in the art of Russian cosmism. And although science gave life to this direction, namely, discoveries in the field of space exploration, the theme of the Creation of the World remained on the canvases of the painters. N. Berdyaev called the first stage of creativity, when the artistic image had not yet found its embodiment, a "symphony" (*Berdyaev, 1993, p. 119*). And really, what can you call a painting that should convey to us the primordial sounds, the so-called "music of the spheres"? The artist M. Churlenis depicts these symphonies, each of which sounds with its own color, rhythm. This is how the world sounded when the first life was born in it (*Figure 6*). And this sonority of painting once again confirms that it has a musical element, its own sounding rhythms: colors, lines, spots. There is a space in it that opens up the sound, makes it extended, flying away.

In talking about chaos and harmony, it is impossible not to mention the work of the artist P. Filonov, whose painting makes it possible to see this idea of the origin of the world. On his canvases, processes take place in countless tiny fragments, in which we see a new essence pulsating and growing right before our eyes (*Figure 7*). His paintings, a space densely filled with picturesque vibrations, resemble a living organism. We are presented with reality, as if given under a microscope. The main thing for "analytical art" is organics. The painting is filled with plant and animal power, the canvas seems to be permeated with blood vessels carrying red – arterial and blue-venous blood. Decomposing the world into atoms, Filonov creates a new myth by resorting to image analysis. The basis of Filonov's pictorial works is the careful drawing of "microparticles". The world of his paintings consists of complementary opposites, which are necessary for everything that exists. Chaos and harmony coexist here as invisible and visible. And you can see how sometimes chaos takes over in the picture.

The unity of chaos and harmony lies ahead of us not only in the plot and the manner of the image. Turning to the traditional arts, one can notice another feature of this interaction. In the hands of the artist, the natural material, which is the primary basis for him, gradually acquires the necessary artistic form. There is a long and rather difficult process of interaction of the master with the natural unformed material, which at that moment represents something unclear, filled with the chaotic energy of nature. "In a work of art there is always some contradiction, some internal discrepancy between the material and the form, that the author chooses, as if on purpose, a difficult,

resisting material, one that resists with its properties all the efforts of the author to say what he wants to say. And the more irresistible, stubborn and hostile the material itself, the more it seems to be more suitable for the author” (*Vygotsky, 1987, p. 26*). Similar words can characterize the relationship of the artist of folk art with natural material. Traces of this struggle can be seen firsthand when the master intentionally leaves part of the artwork unprocessed. Then we see this natural texture in its pristine beauty of the material itself. This technique is often found in sculpture. Rough, untreated rock further highlights the beauty and elegance of the finished product.

Such overcoming of the material was known, apparently, to the artists of the Paleolithic era. “In rock art, the relief of the walls and ceiling often became part of the drawing: a silicon ledge represented a buffalo eye, and a trace of calcite represented the trunk of a mammoth. Following the relief, the image sometimes went inside the rock to reappear on the other side. The stone surface acted as a veil behind which the otherworldly worlds are hidden. The primitive artist did not create according to a pre-conceived plan on a comfortable, smooth surface. He seemed to “extract” the image from the random chaos of lines and shapes, being in a special state of “vision” (*Gruzdev, 2013*). The material that an artist of traditional art has to deal with is a kind of primordial matter that has certain properties that the artist needs to agree with when choosing the necessary technique. “For a real poet-creator, for a real artist, the idea is initially connected with the material of art, especially when it comes to the visual arts”. Therefore, we can agree with the statement that “the material is the primary element of the form, in the creative process it can be at the beginning of the realization of the artist’s idea” (*Broitman, 1996, pp. 29-37*).

Very interesting in connection with the theme of overcoming matter in art is the idea of the frame in which the painting is clothed. N.T. Rymar writes, e.g., that the material in this case “acts as an “otherworldly” element of the artistic image, it is on the other side of the depicted object, which allows the idealistic tradition in aesthetics (including M. Bakhtin) to talk about overcoming the material in art, that the material is not included in the aesthetic object, performs only official functions” (*Rymar, 2016*). The frame appears here as something opposite to the orderliness of the picture, its harmony. Of course, it can also become a work of art, decorated in a certain way. But if we talk about the frame as an object, the purpose of which is to delimit the ideal space of the painting from the wall, then it will be here as something neutral, not decorated. First of all, a frame is a material that does not depict anything. And in this there is a certain closeness of it to chaos, as the primary basis.

Thus, the unity of chaos and harmony appears in art as a natural given, in which opportunity and action are combined. The whole natural world, filled with this strange unity, is undoubtedly the result of the interaction of two incompatibilities. Here disorder and orderliness, freedom and will, the elements and overcoming are combined. This dyad is the basis of what we call creativity. And all this is contained in the universe, as a certain formula by which the beauty of the world and the beauty of art are built.

Discussion

1. How to talk about the unity of chaos and harmony in abstract art? Is there beauty in abstract art?
2. “Our sense of beauty arises under the influence of harmony of order and disorder in natural objects – clouds, trees, mountain ridges or ice crystals. Their outlines are dynamic processes

frozen in physical forms...science and aesthetics agree on what exactly is lost in technical objects compared to natural ones: the luxury of some irregularity, disorder, and unpredictability” (*Païtgen & Richter, 1993*) – “for” and “against”.

3. Chaos and harmony in art and their impact on the human psyche.

Conclusion

The idea of the unity of chaos and harmony as creative energy, laid down in antiquity, served as the foundation on which the idea of beauty was subsequently formed. Chaos, initially understood as unformed, inexpressible, spontaneous, gradually begins to gain additional meaning – as something containing potency. Chaos strives for harmony. This idea, which originated in the depths of philosophical thought, has found confirmation in the scientific world. Modern science increasingly considers instability or dynamic chaos as a model of creativity. The theorists of natural sciences claim that the world is like a living self-developing organism, and the proof of this was the discovery of a fractal.

The entire human culture, since primitive times, can be considered as a phenomenon designed to harmonize chaos. The mythical consciousness created the first images that still live in art, preserving the ancient ideas of chaos and harmony. In the art of ornament, we see this opposition to chaos by order and ritual symbolism. Ornament in traditional art is a reflection of this attempt of a person to protect himself, to harmonize the surrounding world, often inexplicable and frightening.

The universe is filled with the unity of chaos and harmony. And in this unity of opposites lies the creative energy that drives all the arts. It is in art that we can visibly observe how chaos is opposed by a person’s desire to create. Thus, we can talk about two worlds – the natural (being) and the artificial (creatively created by man). And summing up, it can be argued that both of them develop according to the laws of beauty, where chaos and harmony are its main content.

References:

- Aristotel. (1983). *Essays: In 4 volumes. Volume 4* (Translated from Ancient Greek). Moscow: Mysl. (In Russian)
- Balandin, R. K. (n.d.). Vernadsky: life, thought, immortality. (In Russian) <https://biography.wikireading.ru/199354>
- Berdyayev, N. A. (1993). *About the appointment of a person*. Moscow: Republic. (In Russian)
- Bobrov, V. V. (2015). Trends in the development of ornament and rhythms of life (reflecting on primitive art ...). *Bulletin of Kemerovo State University*, 1(61), 3, pp. 6-12. (In Russian)
- Broitman, S. N. (1996). Out-of-life active position. *Discourse. Communicative Strategies of Culture and Education*. Moscow, pp. 29-37. (In Russian)
- Butorin, N. D. (2011). *Life in your favorite business*. Arkhangelsk. (In Russian)
- Bücher, K. (1923). *Work and rhythm*. Moscow: New Moscow. (In Russian)
- Gesiod. (2020, August 12). Theogony. (In Russian) <https://rustih.ru/gesiod-teogoniya-o-proisxozhdenii-bogov/>

- Gruzdev, V. N. (2013, June 19). The art of painting as a psychotechnology. (In Russian) <http://www.gruzdev.com/vladimir-gruzdev-teksty-iskusstvo-zhivopisi-kak-psihotehnologija.htm>
- Dobritsyna, I. A. (2020, March 25). New problems of architecture in the era of digital culture. <https://cyberleninka.ru/article/n/novye-problemy-arhitektury-v-epohu-tsifrovoy-kultury>
- Ivanov, V. V., & Toporov, V. N. (1974). *Research in the field of Slavic antiquities. Lexical and phraseological issues of text reconstruction*. Moscow: Nauka. (In Russian)
- Kepler, I. (2012, May 31). About hexagonal snowflakes. (In Russian) <http://scilib-physics.narod.ru/Kepler/snowflakes.htm#1>
- Kolcheva, T. V. (2004). *Rhythm as a cultural problem*. [PhD Dissertation in Cultural Studies, State Academy of Slavic Culture]. Moscow. (In Russian)
- Losev, A. F. (1997). *Chaos and structure*. Moscow: Mysl. (In Russian)
- Losev, A. F. (2000a). *The history of ancient aesthetics. Volume 1: Early Classics*. Moscow, Kharkiv. (In Russian)
- Losev, A. F. (2000b). *The history of ancient aesthetics. Volume 4: Aristotle and the Late Classics*. Moscow. (In Russian)
- Losev, A. F. (2010). *Dialectics of art form*. Moscow. (In Russian)
- Lotman, Y. M. (1996). *Inside the thinking worlds. Man – text – semiosphere – history*. Moscow: Languages of Russian Culture. (In Russian)
- Lugovskoy, G. (2015). *About the nature of the sacred. To the origins of spiritual experience*. Moscow. (In Russian)
- Mandelbrot, B. (2010). *Fractal geometry of nature*. Moscow, Izhevsk. (In Russian)
- Menchikov, G. P. (2008). Fractality is a universal property of being. *Scientific Notes of Kazan State University: Humanities*, 150, 4, pp. 80-86. (In Russian)
- Mythology of the sea and the ship. (2015, July, 30). (In Russian) <https://helpiks.org/4-37616.html>
- Paytgen, H.-O., & Richter, P. H. (1993). *The beauty of fractals*. Moscow. (In Russian)
- Rymar, N. T. (2016). *Poetics of the border in literature: aesthetic and pathological aspects of the border as a phenomenon of artistic language*. Siedlce. (In Russian)
- Sherkova, T. A. (2019). Chaos and Cosmos: Analysis of panels from Tomb 100 in Hierakonpole in the context of archaeological and iconographic research. *Egypt and Neighboring Countries*, 3, pp. 82-105. (In Russian)
- Solovyov, V. S. (1991). *Philosophy of art and literary criticism*. Moscow: Iskusstvo. (In Russian)
- Solovyov, V. S. (2017). *Beauty is in nature*. Moscow: Orthodox Fiction. (In Russian)
- Stolovich, L. N. (1994). *Beauty, goodness, truth*. Moscow: Respublika. (In Russian)
- Tetior, A. N. (2018). Objective perception of beauty by a person (beauty is not a “terrible thing”, not a “function of superconsciousness”). *Science of Europe*, 24, pp. 49-56. (In Russian)
- Voloshinov, A. V. (2000). *Mathematics and art*. Moscow. (In Russian)
- Voloshinov, A. V., & Taboyakova, Yu. V. (2017). Transformation of the concept of “Chaos” in the history of culture. *Society: Philosophy, History, Culture*, 7, pp. 120-123. (In Russian) <https://doi.org/10.24158/fik.2017.7.28>
- Vygotsky, L. S. (1987). *Psychology of art*. Moscow: Pedagogy. (In Russian)

Appendix

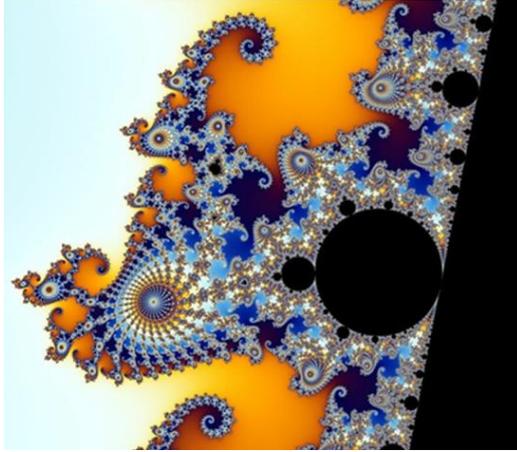


Figure 1. Mandelbrot Fractal



Figure 2. Mezen spinning wheel (fragment)



Figure 3. W. Turner. "A snowstorm. Hannibal's army crossing the Alps"



Figure 4. A.N. Semenov. In Staraya Ladoga



Figure 5. I. Aivazovsky. Chaos. Creation of the world

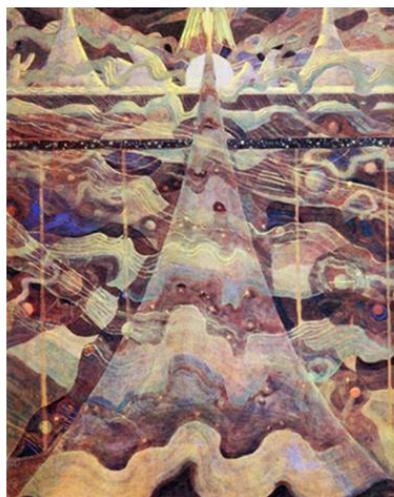


Figure 6. M. Churlenis. Sonata of the Stars



Figure 7. P. Filonov. Flowers of the world's heyday