

21. Institute of Cultural Studies of the Academy of Arts of Ukraine (2009). International documents: conventions, charter, recommendations on issues of cultural property protection. Pam'jatkoznavstvo: pravova okhorona kuljturnykh nadbanj. Kyjiv. 220–360 [in Ukrainian].
22. Murian I. (1996). Art history and art history. Ontological tasks. Voprosy iskusstvoznaniya. 2. 560–568 [in Russian].
23. Myagkikh S. (2016). Artistic reflection in postmodern discourse. N. Yu. Danchenkova (Eds.), *Sovremennye problemy iskusstvoznaniya : vzglyad molodykh*. Moskva. 12–16 [in Russian].
24. About export, import and return of cultural property: Law of Ukraine dated (September 21, 1999). No. 1068-XIV Retrieved from <http://zakon2.rada.gov.ua/laws/show/1068-14> [in Ukrainian].
25. On Approval of the Instruction on the Procedure for Determining the Estimated and Insurance Value of Memorials of the Museum Fund of Ukraine: order of the Ministry of Culture of Ukraine № 325 (1998). Retrieved from <http://zakon.rada.gov.ua/laws/show/z0496-98> [in Ukrainian].
26. On Approval of the Procedure for Conducting State Examination of Cultural Values and Fees for its Implementation: Order of the Cabinet of Ministers of Ukraine (August 26, 2003) No. 1343 Retrieved from <http://zakon3.rada.gov.ua/laws/show/1343-2003-%D0%BF> [in Ukrainian].
27. On Museums and Museum Affairs: Law of Ukraine (June 29, 1995) No. 249/95-BP Retrieved from <http://zakon3.rada.gov.ua/laws/show/249/95-%D0%B2%D1%80> [in Ukrainian].
28. On the Protection of the Cultural Heritage: The Law of Ukraine (June 08, 2000) Retrieved from <http://zakon5.rada.gov.ua/laws/show/1805-14> [in Ukrainian].
29. On valuation of property, property rights and professional appraisal activity in Ukraine: Law of Ukraine (July 12, 2001) No. 2658-III Retrieved from <http://zakon.rada.gov.ua/laws/show/2658-14> [in Ukrainian].
30. On Forensic Examination: Law of Ukraine (February 25, 1994) No. 4038-XII Retrieved from <http://zakon2.rada.gov.ua/laws/show/ru/4038-12> [in Ukrainian].
31. The Council of Europe Framework Convention on the Importance of Cultural Heritage for Society (2005). Retrieved from http://zakon5.rada.gov.ua/laws/show/994_719 [in Ukrainian].
32. Rjabchikova F. D. (2015). Interpretation of "subject matter of museum value" and "museum object" as cultural values in Ukrainian legislation: museological analysis. *Praci Centru pam'jatkoznavstva : zb. nauk. pr.* Kyjiv. 28. 36–46 [in Ukrainian].
33. Sydor-Ghibelynda O. (2012). An addition to the dictionary of terms of contemporary art. *Suchasne mystectvo*. 8. 304–308 [in Ukrainian].
34. Sydor-Ghibelynda O. (2013). An addition to the dictionary of terms of contemporary art. *Suchasne mystectvo*. 9. 135–142 [in Ukrainian].
35. Sivers V. A., Platonov B. O. & Kravchenko N. I. (Eds.) (2011). *Dictionary of Terms of Art Expert*. Kyjiv : NAKKIM [in Ukrainian].
36. Tamoykin M. Yu. & Tamoykin D. M. (2005). Examination of the value of a collectible: a universal method for determining the estimated market value of any collectible (TPP method). Vilnyus : TamoiKin Inc. (Canada).
37. Civil Code of Ukraine: Doc. 435-IV (January 16, 2003) Retrieved from <http://zakon.rada.gov.ua/laws/show/435-15> [in Ukrainian].
38. Shman S. Ju. (2013). *Cultural Aspects of State Examination of Cultural Values in Contemporary Ukraine : candidate's thesis*. Kyjiv : NAKKIM [in Ukrainian].

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HOMO PARVUS MUNDUS EST: IMAGINATION AS A TOOL OF KNOWLEDGE AND FORMATION OF THE WORLD

The purpose of the article is to identify the essence of the concept of imagination as a tool for knowledge and creation of the world. **Methodology.** The choice of research strategies in the disclosure of the research objectives determined the application of a systematic and integrated approach, as well as comparative and heuristic methods, due to the active development of related scientific disciplines. In this context, we also use the prognostic aspect of the research, involves the formation of new value models and symbols, reflecting the cultural and artistic forms of modern civilization. The use of these research methods contributed to obtaining the own theoretical results. **The scientific novelty** of the research lies in the formulation and development of a certain topic that has not received comprehensive and objective coverage in the scientific dimension and is being studied for the first time. It is validated the idea that the results of understanding the essence of imagination can serve as an essential component in the study of contemporary cultural achievements, as well as in the knowledge of the facets of human consciousness, concentrated in the field of neuroscience discoveries of modernity. **Conclusions.** The development of human culture presented various forms of human influence on the formation of the world. Separating imagination as a literal tool in this process determines the ability to change the world. It is accentuated that it is

precisely the imagination that fully reflects the internal mechanisms of human brain, activating human activity, aimed at the knowledge and creation of the world.

Key words: imagination; consciousness; neuroaesthetics; neuro art; interdisciplinary research.

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Homo parvus mundus est¹: уява як інструмент пізнання і творення світу

Мета дослідження полягає у виявленні сутності поняття уяви як інструменту пізнання і творення світу. **Методи** дослідження. Вибір дослідницьких стратегій у розкритті мети дослідження визначив застосування системного та комплексного підходів, а також порівняльного і евристичного методів, зумовлених активним розвитком суміжних наукових дисциплін. В цьому контексті використовуємо також прогностичний аспект дослідження, що передбачає формування нових ціннісних моделей і символів, що відображають культурно-мистецькі форми сучасної цивілізації. Використання вказаних методів дослідження сприяло отриманню власних теоретичних результатів. **Наукова новизна** одержаних результатів полягає у постановці і розробці актуальної теми, яка в науковому вимірі не отримала всебічного й об'єктивного висвітлення та досліджується вперше. Обґрунтовано ідею, яка полягає у тому, що результати осмислення сутності уяви можуть слугувати важливою складовою у дослідженні сучасних культурно-мистецьких здобутків, а також у пізнанні граней людської свідомості, зосереджених в ділянці нейронаукових відкриттів сьогодення. **Висновки.** Розвиток культури людства задемонстрував різні форми впливу людини на формування світу. Виокремлення уяви як буквального інструментарію в цьому процесі визначає здатність змінювати світ. Заакцентовано, що саме уява найповніше відображає внутрішні механізми людського мозку, що активують діяльність людини, спрямовану на пізнання і творення світу.

Ключові слова: уява; свідомість; нейроестетика; нейроистецтво; міждисциплінарні дослідження.

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Homo parvus mundus est: воображение как инструмент познания и образования мира

Цель исследования заключается в выявлении сущности понятия воображения как инструмента познания и созидания мира. **Методы** исследования. Выбор исследовательских стратегий в раскрытии цели исследования определил применение системного и комплексного подходов, а также сравнительного и эвристического методов, обусловленных активным развитием смежных научных дисциплин. В этом контексте используем также прогностический аспект исследования, предполагающий формирование новых ценностных моделей и символов, отражающих культурно-художественные формы современной цивилизации. Использование указанных методов исследования способствовало получению собственных теоретических результатов. **Научная новизна** исследования заключается в постановке и разработке актуальной темы, которая в научном измерении не получила всестороннего и объективного освещения и исследуется впервые. Обосновано идею, которая заключается в том, что результаты осмысления сущности воображения могут служить важной составляющей в исследовании современных культурных достижений, а также в познании граней человеческого сознания, сосредоточенных в области нейронаучных открытий современности. **Выводы.** Развитие культуры человечества представило различные формы воздействия человека на формирование мира. Выделение воображения как буквального инструмента в этом процессе определяет способность изменять мир. Заакцентировано, что именно воображение полностью отражает внутренние механизмы человеческого мозга, активирующие деятельность человека, направленную на познание и созидание мира.

Ключевые слова: воображение; сознание; нейроэстетика; нейроискусство; междисциплинарные исследования.

Relevance of the research. Over the centuries, the great minds of humankind have been trying to explain the essence of human existence, because our presence in the world is marked not only by persistent adaptation to biological conditions with an increased chance of survival, but forms of knowledge and creation of the same universe. The mentioned issue explains the uniqueness of homo sapience, endowed with irrational consciousness and thinking, the ability to exercise free choice and moral responsibility for consequences. These qualities determined the essence of man in religion, philosophy, science, and art, which collectively reflects the various forms of manifestation of the invisible part of the human soul - imagination.

The identification of imagination with the invisible force that determines the world entirely correlates with the efforts of a person to find the way to knowledge of him/herself. For millennia, this problem has been considered from a theological or philosophical point of view, and the long-standing response to the Old Testament statement was: «Then the LORD God formed a man^[a] from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being» (Old Testament, 2:7). Likewise, poetry reacted, so convincingly declaring the greatness of man, in particular, in "Metamorphoses" Ovid:

*Man was born—
either that creator of things, the source
of a better world, made him from god's seed,
or the Earth, newly formed and divided
only recently from lofty aether
still held seeds related to the heavens,
which Prometheus, Iapetus' son, mixed
with river water and made an image
of the gods who rule all things.
Other creatures
keep their heads bent and gaze upon the ground,
but he gave man a face which could look up
and ordered him to gaze into the sky*

*and, standing erect, raise his countenance
towards the stars. (Book 1) [4].*

A vivid image of "sparkle in the sky" reveals the high bar of human appointment - to become a small world in the vast Universe, while humanity turned its gaze into the opposite direction. It manifested itself at the moment of its immersion in the virtual universe, created and infinitely progressing thanks to the technical innovations designed in the realm of imagination through the potential of irrational thinking and creative insight. Consequently, the concept of "imagination" as the symbolic toolkit of neural structures of the human brain, which activates innovative ideas, appears in the center of attention. And in the last twenty years of research into scientific circulation, such definitions as "neuroesthetics," "neuroscience," "neuro-history" or "neurohuman art" are increasingly penetrating [6, 8, 11].

It is worth noting that modern researchers of genetic codes were divided into two camps - adherents of physiological or anatomical features of a person. A similar parallel can also be traced to the human ability to experiment at the level of human imagination. Both in one, and in the second case, the content and form can change, so in such a way a person receives specific levers of influence on reality. The mentioned issue is manifested through simple schemes, the first of which demonstrates the functioning of human organisms at the gene level [2]:

DNA - RNA – WHEAT

or

GEN encodes the MESSAGE to create the FUNCTION

In this way, the message-information as an intermediary is located between the physical level of the gene and the function-consequence. Similarly, one can display the connection of the elements in the plane of human thinking associated with creativity:

IRRITANT - IMAGINATION – FORM

With the help of this scheme, we observe the co-operation of the "stimulus" that instills "imagination" as a way of producing new content, the reflection of which stimulates the emergence of more and more new artistic forms.

It is important to note that the scheme mentioned above is coherent with even deeper comprehension associated with the most valuable gift man possesses - the freedom of choice, which is specified by Stephen Cowie: "There is a time gap between stimulus and reaction to it. In this gap, we have the freedom and the right to choose our reaction. From this choice our development and our happiness depends "[1, p. 80]. In this way, the freedom of choice poses an intermediate stage between the determinism of external circumstances and the probable reaction to them:

STIMULATION - FREEDOM OF CHOICE - REACTION

The realization of one's own freedom not only changes one's person and his belief in the own capabilities but also makes him responsible for the own actions, develops his inner strength and potential.

If we compare all the schemes on the same plane, we get three options for understanding the human capabilities of the most important central intermediary, which is characterized by the variability and function of the coordinator between the two sides of the cause and effect relationship:

GEN	MESSAGE	FUNCTION
IRRITANT	IMAGINATION	FORM
STIMULATION	FREEDOM OF CHOICE	REACTION

- Thus, a gene with a complex mechanism of internal molecular bonds (DNA, RNA) at the biological level, an stimulus embodied in the neural chains of the brain (neuro-instruments) and the stimulus as external factors of human life (living conditions, education, etc.), together form the basis the structure of human functioning in society. Instead, a person endowed with the ability to create and choose, designs the own parvus mundus - the surrounding space and the own reality. In this way, it finds itself in a symbolic mirror - in opposition to the open-ended planes of time-space, which are in constant interaction within the limits of the own reflection. This happens through the prism of the functioning of consciousness, producing the figurative-semantic image of the world, or even the ideal cultural space, in which the deepest levels of human being are intersected. One of the ways to know these processes is to get acquainted with the essence of neurotic art, which is based on the ability to reflect and reflect the world around us through imagination [9]. Hence, let's note the most important signs of imagination that are:

- the mechanism of communication among stimuli of public demand and expected result;
- an intellectual game tool, the essence of which manifests itself in the skill of metaphorical constructing of creative concepts;
- a form of subjective reaction to the world, reflected by artistic means;
- a method of knowledge and change of personality of a person.

In this context, imagination appears to be the most productive motivator of human self-development and the achievement of integrity.

Throughout the long existence of the human species, the imagination demonstrates the particular forms of functioning and purpose, appears as a symbolic carrier of information migrating from one system of

signs to another in the infinite spaces of human consciousness. Hence, such interest in neural measurements of the possibilities of rational thinking is reflected in the co-operation of the following factors:

1. Historical - a person relies on experience, preserved in the subconscious of humankind. Thus, there is a separate scientific direction of *neuroarthistory*, proposed and presented in the studies of John Onians's history of art [12, 13]. The scientist notes the shortcomings of the European-centered limitation of the history of art and points to the need to expand the prospect of a world dimension with simultaneous deepening during the birth of man as an individual. The scientist believes that the neuroscience of art can combine the latest proposals of the humanistic sciences, such as bioghumanistics, posthumanism, humanistic non-anthropocentric, and so on. He notes the crucial importance of the development of technology to deepen knowledge of the human brain: computed tomography (CT), positron emission tomography (PET), magnetic resonance imaging (MRI), and functional magnetic resonance, which allows you to control neuronal activity, detect the principles of their development and the formation of links between them. The researcher determines the key to his theory of the phenomenon of *plasticity*, which is interpreted as a permanent transformation of the brain in the process of learning and adaptation, and on this basis formulates the concept of *neuroplasticity* - the ability of the brain to change and create new neural bonds in accordance with the changing environment and stimuli that acquire various forms of stimulation (images, sound, color, movement) [10].

J. Onians's historical approach is based on the conviction that from the time of the ancient times the artists were interested in the mechanisms of perception of beauty, so the axis of evolution was the belief in the unconscious knowledge that the artist owns in the context and influence of the unconscious experience. In this way, neuroscience offers not only a new thinking model, which summarizes the elements that make up the concept of subjectivity, but is also a convenient tool/mediator, through which one can study this subjectivity. Onians is a supporter of an individualistic approach to the development of art history since he believes that the subjective nature of the individual contributes to the formation of the neural network. And by this experience, reconstructed even after thousands of years, one can find the causes of the unconscious inspiration of the creators. Therefore, at the first place in the neuroscientist art the researcher puts such basic concepts as *experience* and *subjectivity*. The first is the active action of stimuli that form the neural structure of the human brain, and the second - perception, comprehension and persuasion.

2. Intellectual - based on the personal approach of the artist to the reflection in the works of art of the own ideological principles. Said feature is particularly characteristic of art of XX-XXI centuries deliberately is focused on finding new forms of ideological and artistic beliefs, manifested in numerous variety of different creative fields: Secession, Art Nouveau, Symbolism, Impressionism, Fauvism, Cubism, Dadaism, Expressionism, Futurism, Imagism, Tachism, Orphism, Surrealism, Constructivism, Abstractionism, Pop Art, Op-Art, Primitivism and others. All of them were united by at least one important feature - the rejection of external similarity to life realities, so the following forms of thinking were metaphorical, associative, fantastic imagery, sensuality, abstraction, which are collectively associated with the interpretive potential of human intelligence in the process of experimentation with "flows of consciousness", which entirely fits into the modern prediction of the future [9].

3. *Aesthetic* - reveals the peculiarities of human awareness of various forms of beauty that are demonstrated in different time periods. Instead, a new science of *neuroaesthetic* attempts to formulate the general laws of a person's sense of aesthetic pleasure. Neuroscientist Semir Zeki, who focuses on forms of perception of images of visual information, is based on the study of neural states recorded at the time of the survival or creation of works of art [5, 14]. Methods and techniques of empirical sciences serve as a narrative and explanation of aesthetic experience, and *neuroaesthetics* is interpreted as an interdisciplinary science with the involvement of researchers in the field of philosophy, psychology, history of art and neurology, with the participation of a visual examination of the cerebral cortex. In this way, the relationship between neural structures and processes shaping aesthetic perception is studied. Subsequently, on this basis, Semirev Zeki and Vilayanur Ramachandran constructed the corresponding theories [3]. Thus, neuroaesthetics became a department of experimental aesthetics - an interdisciplinary form of cooperation between cognitive science, psychology, philosophy, and neurology, which studies the structure and functioning of the nervous system. And in the year 2008, the Association of Neuroesthesiology, which belongs to the Charité University Medicine in Berlin, was founded in Berlin. Its aim was to cooperate with scientists and artists to study art and its perception.

Zeki formulates two fundamental principles of visual perception: constancy and abstraction. The first is based on the ability of the brain, despite the changes that occur when processing visual stimuli (distance, illumination, viewing angle, etc.) to store information about the permanent and essential features of the object. Instead, the law of abstraction testifies to the ability of the brain to hierarchical coordination, applied to individual numerical elements, the effective processing of visual stimuli, and the ability to snatch abstract concepts from individual images. The role of imagination in such communication is essential since it not only contributes to the comprehension of multi-valued artistic works, but also allows to add creatively directly non-reciprocal works, which will enable you to get a sense of satisfaction.

4. *Emotional-empathic* - associated with the discovery of Giacomo Rizzolatti mirror *neurons* in 1990 [10]. Mirror neurons are a particular type of motor cells that are excited, when performing or observing a

specific action. In this way, along with the ability to inherit, there is a specific emotional state that John Onians called *empathic* intuition. The researcher draws attention to the visual and unconscious experience that can be understood by knowing the mechanisms of perception and reaction - *empathy*, as a new way of expressing and, above all, the experience of works of art [7]. These persuasions of J. Onians renewed interest in the subjective element of emotion in the context of the history of art, and at the present stage, *empathy* is a category current not only in the neuro historiography of art, but most disciplines with the prefix of the neuro. Emotions seem especially crucial for artistic perception, as they bring the interpreter closer to the described work of art on an entirely different level than merely a methodological discourse or historical context. The mentioned issue reflects the main content of empathy - the ability of a person to deep sympathy, to the comprehension of being through supreme emotional enlightenment.

The mentioned structure in the context of the neuroscience approach to the worldview is mostly *heuristic*, and research in this area does not abolish the values of the art itself and does not weaken the sensations of passion for artistic creativity and communication with art. On the contrary, the imagination enhances emotional vulnerability, perceives the inner personal world, awakens the potential qualities of a person and prompts action. In a certain way, imagination is an authoritative source of energy hidden in the depths of human consciousness, closely related to the inexhaustible cosmos, in which *homo parvus mundus est*.

Conclusion. The concept of "imagination" appears as a critical tool for the knowledge of human possibilities and the formation of ideological models that can change the world. Also, if not long ago the slogan of the XX century was: *who owns information, the one holds the world*, then the XXI century requires, first of all, the ability to evaluate, structure and use the flow of data directed to the deepest corners of human consciousness. Therefore, the best way to develop such skills is to imagine, so: who manages the imagination, the one has the world!

Notes

- ¹ Людина – це малий світ (мікрокосм), переклад Андрія Содомори.

Література

1. Кові С. Восьма звичка. Від ефективності до величі. Харків, 2017. 486 с.
2. Мукерджи С. Ген. Надзвичайна історія. Харків, 2017. 686 с.
3. Рамачандран В. Мозг розповідає: Що робить нас людьми. Москва, 2015. 422 с.
4. Овідій Назон, Публій. Метаморфози / переклад Андрій Содомора. Київ, 1985. 304 с.
5. Bremer J. Neuroestetyka: czy przyszłość estetyki leży w neuroauce? // Estetyka i Krytyka. Warszawa, 2013. № 1. P. 9–28.
6. Chatterjee A. The Aesthetic Brain: How We Evolved to Desire Beauty and Enjoy Art. Oxford, 2014. 160 p.
7. Freedberg D, Gallese V. Motion, emotion and empathy in esthetic experience // Trends in Cognitive Science. Phaidon, 2007, № 11. P. 197–202.
8. Gombrich E. H. Art and Illusion: A Study in the Psychology of Pictorial Representation. Phaidon, 1977. 444 p.
9. Karpov V., Syrotynska N. Neuroart in the context of creativity // Вісник Національної академії культури і мистецтва: наук. журнал. Київ: Міленіум, 2018. № 1. С. 21–36.
10. Kędziora Ł. Niezauważona i rewolucyjna neurohistoria sztuki // Acta Universitatis Nicolai Copernici. Toruń, 2014. S. 223–252.
11. Mallgrave H. F. The Architect's Brain: Neuroscience, Creativity, and Architecture. Wiley-Blackwell, 2011. 268 p.
12. Onians J. European Art: A Neuroarthistory. Yale, 2018.
13. Onians J. Neuroarthistory: From Aristotle and Pliny to Baxandall and Zeki. Yale, 2007.
14. Zeki S. Inner Vision: An Exploration of Art and the Brain. Oxford, 1999. Toruń 2014, s. 223-252.

References

1. Kovi, S. (2017). Eighth habit. From efficiency to grandeur. Kharkiv [in Ukrainian].
2. Мукерджи, С. (2017). Gene. An extraordinary story, Kharkiv [in Ukrainian].
3. Ramachandran, V. (2015). Brain recounts: What makes us human, Moscow [in Russian].
4. Овідій, Назон, Публій, (1985). Methamorphozy, Kyiv [in Ukrainian].
5. Bremer, J. (2013). Neuroestetyka: czy przyszłość estetyki leży w neuroauce, Estetyka i Krytyka, № 1, Warszawa, 9–28 [in Polish].
6. Chatterjee, A. (2014). The Aesthetic Brain: How We Evolved to Desire Beauty and Enjoy Art, Oxford [in English].
7. Freedberg, D. Gallese V. Motion, emotion and empathy in esthetic experience // Trends in Cognitive Science, 11, Phaidon, 2007, 197–202 [in English].
8. Gombrich, E.H. (1977). Art and Illusion: A Study in the Psychology of Pictorial Representation, Phaidon, 1977, [in English].
9. Karpov, V., Syrotynska, N. Neuroart in the context of creativity // Bulletin of the National Academy of Culture and Arts, 1, 21 – 36. Kyiv [in English].
10. Kędziora, Ł. (2014) Niezauważona i rewolucyjna neurohistoria sztuki, sztuki // Acta Universitatis Nicolai Copernici, 45, Toruń, 223–252 [in Polish].
11. Mallgrave, H.F. (2011). The Architect's Brain: Neuroscience, Creativity, and Architecture, Wiley-Blackwell [in English].
12. Onians, J. (2017). European Art: A Neuroarthistory. Yale [in English].
13. Onians, J. (2007). Neuroarthistory: From Aristotle and Pliny to Baxandall and Zeki, Yale, 2007 [in English].
14. Zeki, S. (1999). Inner Vision: An Exploration of Art and the Brain., Oxford [in English]

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