



The Architectural and Artistic Strategy of Ecologization as a Mental-Spatial Way of Realizing the Sustainable Development Goals

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Abstract: The article presents the development of “Architectural and artistic strategy of ecologization”, which is considered as a mental-spatial way of realizing the goals of sustainable development and ecologization of the educational process. An important component of this strategy is the actualization of anthropocosmic consciousness, which forms the perception of the earthly world as a home, and also promotes consideration of the human dwelling as a special world. Viewing the earthly world as a home is a psychological and sociocultural prerequisite for ecologization and the formation of the ecophilic man of the future – Homo ecologicus. “physical education teachers strategy of ecologization” is developed and implemented on the example of ecologization and aestheticization of the health-preserving competence of teachers in the conditions of postgraduate education. Using the example of “Architectural and artistic strategy of ecologization”, we represent the humanistically oriented idea of soft ecologization, which consists in the primary and dominant application of humanitarian (psychological, artistic, social, pedagogical) methods and technologies as system-organizing and determining factors in the development of ecophilic consciousness. When analyzing the results of training of teachers in the conditions of postgraduate education using “Architectural and artistic strategy of ecologization”, the positive dynamics of their educational achievements was determined.


1 INTRODUCTION

By nature, human is creative, Homo Creator (Latin). A special creative and at the same time systematic and multidimensional way of adapting a person to the world and life is his “own” “new nature” – a culture in the system of which architecture is one of the central phenomena. Culture is a specifically human, meaningful, aestheticized way of interaction between Homo Sapiens and nature, which is variable and effective. The architectural tradition, being one of the determining and system-organizing spheres in culture and life, including everyday life, contains powerful integrative, representative and worldview potentials in which the cosmogonic ideas of a certain group of people, a people or a specific artist are condensed. In this study, the indicated tradition is interpreted broadly and includes architecture

as a high art, science and highly complex practice, as well as the perception and reinterpretation of architecture by the dominant culture and personality as a special spatial “cosmogonic-ethical-value-sense system” that is present in the everyday life of a person in her life world (Lebenswelt in German) (according to E. Husserl) (Lobo, 2022). In this context, from the standpoint of anthropology and cultural studies, the ecological value understanding of architecture is relevant not only and not so much as a science or a professional field, but first of all as an attributive human phenomenon (anthropological phenomenon), which is embedded in their nature.

Architecture in the anthropocultural sense at the level of everyday life is a purely pragmatic solution to the problem of housing. In turn, the creation of housing is revealed as archetypal (essentially as an innate species ability) (Erazo Andrade et al., 2022) defined activity, the essence of which is a priori assigned to a person by his nature. Accordingly, do-

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mestic housing, which is a manifestation of the “architectural dimension” of human nature, as well as the specifics of human cultures, are considered as one of the prerequisites for the development of aesthetic consciousness and ethics, which is realized by understanding the complexity, multidimensionality, hierarchy, spatiality, and systematicity of the surrounding world (Cosmos), which is earthly.

Relevant in the aspect of realization of the goals of sustainable development (Guerra et al., 2022) and ecologization of education (Yevtuch et al., 2021b; Su and Zhao, 2023; Corpuz et al., 2022) and the socio-cultural sphere in general is that architecture and aesthetics, which is connected with it (more precisely, inseparable), reveal the ways to the formation of human anthropocosmic consciousness. In such a high and at the same time anthropologically specific (in the sense of the corresponding essence of human as a species and human as an individual) consciousness, Cosmos (Ancient Greek: *Κοσμος* – in the sense of a harmonious and aesthetic world) is reflected in sufficient completeness and in accordance with cultural specificity. In essence, the earthly world is reflected and/or re-modeled as harmonious, majestic, orderly, ethical, ergonomic, multidimensional. A simple manifestation of such an anthropocosmic consciousness is admiration for the infinity and beauty of the starry sky, which opens up the opportunity for a person to understand both his own smallness and comprehend himself as a unique being, as well as see his own harmony with the Cosmos and discover the boundless Cosmos in himself, that is, the world in himself.

The appeal to the idea and phenomenology of the Cosmos, which is reflected in art and architecture, is revealed, first of all, in its original ancient Greek understanding as an ordered and harmonious world. Modern interpretations of the Cosmos have some similar meanings and interpretations to the ancient Greek ones, which are determined by the ideas of the interaction between order (in this interpretation as a manifestation of harmony, balance) and chaos, as presented in the classic work by Prigogine and Stengers (1984) “Order out of chaos: Man’s new dialogue with nature”. The educational and socio-cultural basis for the implementation of the Sustainable Development Goals is ecologization, which, in accordance with the ideas of “human qualities” by Peccei (1977) is aimed at forming a new person as a carrier of environmental consciousness. The metacognitive and strategic aspects of ecologization are interpreted as worldview and cosmogonic, which determines the need to reveal some ideas about reality as an ordered harmonious earthly Cosmos, the anthropologically significant aspects of which are transformed in culture into the idea

of home and architectural traditions. Thus, the aforementioned “architectural dimension” of human nature is conceptually linked to the cosmic dimension, which is a deep anthropological prerequisite for anthropospace consciousness. Accordingly, as a significant component of ecologization, there is a need to consider Cosmos and, above all, the Earth as Earthly Cosmos. This is realized through the actualization of anthropocosmic consciousness, which includes the need to consider some anthropo-ecologically significant aspects of the phenomenology of Cosmos in relation to architectural phenomena.

The ecologically oriented disclosure of the phenomenology of the Cosmos determines the following topical areas of this problematization as analysis and reference to phenomena: systemicity (Cosmos as a system), diversity (Cosmos as a system in which various phenomena are integrated), harmony (Cosmos as a special “complete” harmony, order), vitality (Cosmos as a “living being” as a “living world”, which is a prerequisite and environment of life), cognitive (Cosmos as a cognitive environment or a world that promotes the disclosure of intelligence), Cosmos as a home and as a relatively complete, safe and comfortable world. Let us present this in more detail.

The Cosmos as an ordered world in which antagonistic forces (e.g., fire and water) coexist harmoniously is one of the first mythologized representations that clearly and visually reveals the phenomenology of a system that has: its goal – the sustainability, harmony and “comfort” of the existence of the Cosmos itself and its components; the presence of many different levels of organization – the worlds of minerals, plants, animals, people, etc.; integrity, integrity, interdependence of components. Updating the concept of space as a system contributes to the development of systemic thinking and understanding of the multidimensionality and interconnectedness and interdependence of the Earth’s world. The comprehension of the systemic nature of space or an ecological system, in turn, also underlies the development of cognitive attitudes aimed at preservation, at delicate intervention (or not intervention) in complex ecological processes.

Diversity reveals the Cosmos as a megasystem in which various phenomena are integrated, thus ensuring its existence. In this aspect, let us recall the cybernetic law – “the law of requisite variety” by Ashby (1968). Its essence lies in the fact that a system can exist sustainably only if it has the necessary diversity of elements and subsystems. If this diversity is reduced, the system will begin to collapse. This pattern is inherent in ecological systems, including the “mega-ecosystem” of the Earth. Accordingly, the pre-

scribed idea of diversity presented in the format of the law of necessary diversity of the system determines a meaningful, not formal, understanding by a specialist of the problem of biodiversity conservation as a determining condition for the existence of life on Earth, as well as a relevant factor in preserving human health (Marselle et al., 2021). Thus, the use of the idea of diversity, which is actualized through the understanding of Cosmos as a harmonious complex world with a variety of phenomena and their manifestations, is crucial in the development of a specialist's understanding of the phenomenology of ecological systems and represents an important cognitive component of environmental consciousness.

Cosmos as a manifestation of harmony: The essence of the concept of the Cosmos in its original Greek sense is based on the concept of harmony. In other words, the Cosmos is a harmonized, ordered, balanced and multidimensional world that determines its sustainable existence. Accordingly, the modern concept of sustainable development reflects the ancient ideas of harmony, an important aspect of which is balanced development.

Cosmos as a vital phenomenon: The idea of the vital nature of the Cosmos has been known since ancient Greek times. At that time, the cosmos was considered a living being. To a certain extent, we prescribe these ideas, specifying the presence of a significant amount of living matter in the earthly Cosmos – flora, fauna, and humanity. The importance of a specialist's comprehension of the vitality of the Cosmos is an emotional, value, and cognitive prerequisite for the preservation of terrestrial ecosystems. At the anthropological level, this is largely determined by such a human quality as biophilia, which is love and goodwill toward living things. Biophilia is an innate human quality, a characteristic of human nature (Fromm, 1956; Wilson, 1984), the actualization of which is an important factor in the formation of environmental awareness (Barbiero and Berto, 2018). In this aspect, the biophilic trend in architecture (Yaseen and Mustafa, 2023) and design is interesting.

The cognitive dimension of the Cosmos is revealed through its complex structuredness, systematicity, and multidimensionality. That is, both the structure and the existence of the Cosmos contain cognitive nature as a special "natural superrationality". The idea of the cognitive nature of the Cosmos, which is revealed through the interaction of the Earth and humanity, is reflected in the concept of a reasonable Earth shell – the noosphere. The interest in the spatiality of the Cosmos (in the sense of the Earth's Cosmos) and its cognitive nature, as well as its integrity and systemicity, is a significant component

of the development of spatial, critical and systemic thinking, as well as the formation of anthropospace consciousness. These cognitive factors are also intellectual prerequisites for the development of the metacognitive level of consciousness (Yevtuch et al., 2021a). Significant aspects of the metacognitive level of consciousness are goal setting and the ability of a person to reflect and critically evaluate themselves and their mental and other capabilities and perspectives. The development of metacognition is an important aspect of environmental consciousness. This is due to the fact that in the intellectual dimension of environmental consciousness, the following are significant: goal setting and understanding and critical evaluation of goals, as well as the ability to determine the limits of both one's capabilities and the resources of the environment. The ability to define the limits of one's capabilities, including intellectual, emotional and volitional, personal, and to take into account the resources of the environment is a feature not only of a competent professional but also of a harmonious and mature personality with developed intellect.

Cosmos can be perceived and interpreted as a home and as a relatively complete, safe and comfortable world. Such perceptions contextually become conceptual and ideological attitudes in the design and construction of houses and other architectural structures. Accordingly, in the construction and arrangement of housing, the idea of space as a harmonious, comfortable, safe world with the above attributes – systematic, diverse, harmonious, vital, cognitive – is laid down. In the modern world, this idea of the cognitive nature of the world (Cosmos) is realized in the technologies of the smart home (Sovacool and Furszyfer Del Rio, 2020) and the smart city (Ahad et al., 2020), which are energy-efficient and environmentally oriented architectural structures that interact closely with the environment. Thanks to these technologies, there is a deepening of integration in the system of interaction "Man – Earth Space". Ecologically and anthropologically oriented cognitivism, which is embodied in a smart home as a spatial anthropo-cosmic phenomenon, is a determining factor in integration, which is realized through synergies, mutual complement, interpenetration, and a careful and ethical attitude towards nature.

As a manifestation of anthropocosmic consciousness, cognitive activity directed to the environment and represented as a smart home, smart city, and smart environment becomes a prerequisite for the effective implementation of a new ecological and global ethics. The ideas of anthropocosmism and the intellectual potential of anthropocosmic consciousness have largely determined the global, cosmic and hu-

manistic formats of such social and religious movements as Freemasonry, Buddhism, Taoism, Confucianism, etc., which have an environmental focus and an orientation towards preserving the Earth. In this aspect, the study of Lu and Jover (2019), which presents a consideration of a Chinese university from the perspective of the potential of anthropocosmism, which is one of the central concepts in Confucian holistic humanism. Based on the concepts and interpretations presented above, ecologization, which is traditionally understood as an anthropo-psychological and socio-cultural way of realizing the goals of sustainable development, is also considered within this methodological system as a special anthropocosmic phenomenon that has a close mutually reinforcing relationship with architecture and art.

The specificity of this anthropocosmic consciousness is its integrity, closeness or even “transition” to the theocratically oriented and/or magical perception of reality. From the point of view of ecologization, as a way of realizing the goals of sustainable development, we define it as an actual purposeful development of environmental consciousness, taking into account the phenomenon of anthropocosmic consciousness, which is interesting and significant, first of all, for its integrity, systematicity, harmony, aestheticism, and in essence, originally determined and existing contextually ethical dimension in the system of “Human-World” interaction. Human is fascinated by the grandeur, beauty, sophistication, perfection, harmony and grandeur of the world. This creates natural or anthropocosmic prerequisites for harmonious behavior and a delicate, kind, valuable, moral attitude towards the environment and the Earth.

Ecologization as a modern cross-cutting systemic trend integrates many components – educational, pedagogical, psychological, ethical, social, cultural, political, artistic, architectural, philosophical, etc. Let us consider this in more detail. The determining factor in this area is pedagogical ecology (Matsunobu, 2017; Klochko et al., 2022; Yevtuch et al., 2021b), which provides practical, technological and methodological support for the implementation of ecological education for both children and adults (Onopriienko et al., 2021). In this aspect, the opinion of Bonnett (2021) about the expediency of human (in the sense of total) “management” of nature in its traditional format is important. Our study reflects the results of applying adult ecological education, namely for the training of physical education teachers. Accordingly, in the system of pedagogical ecology, the potentials (knowledge, value, ethical) of pedagogy, psychology, ecological ethics, ecology, art and humanities in general are integrally actualized for the purpose of ecologization.

gization.

Currently, the direction of ecologization of the philosophy of education is significant (Affifi et al., 2017), which is considered as a philosophical and methodological basis for ecologization. In the philosophical and methodological directions, the development of Bonnett’s phenomenological ecology (Bonnett, 2019) is important, which is considered as an important component of ecologization. The ethical direction of ecologization is represented by ecoethics and ecologization of the philosophy of education, within which the idea of “earth ethics” by Joldersma (2017) is original, revealing the importance of human responsibility to the planet Earth.

We have developed a telos (in the sense of the Earth) and an existentially oriented methodology of ecologization (Yevtuch et al., 2021b), which is essentially close to the idea of “earth ethics” by Joldersma (2017) and the direction of phenomenological ecology updated by Bonnett (2019). Accordingly, we have formed a system of methodological concepts aimed at ecologization: “Tellus-Anthropoc Convergence”, “Good of the Dialogue of Man and Earth”, “Arete of the Earth”, “Compliance with active impact on the Earth”, “Tellus-Anthropoc Harmonization”, “Epistrophe of the Earth” (Yevtuch et al., 2021b).

The use of art can to some extent be considered a mainstream direction that actively, deeply and expressively affects a person, acting on his or her emotional, volitional, value and volitional, existential, aesthetic and ethical spheres. Our development of the ecologization of the health-preserving competence of physical education teacher using architecture, including the actualization of the anthropospace component, also applies to the use of art. The gender approach is also actively used in the application of ecologization with the use of art. Rodríguez-Labajos and Ray (2021) identify six ways of gender artistic activism (or “artivism”).

An important pedagogical and cultural direction of ecologization is ecomusicology (Gautier, 2016), which has a certain connection with structuralism and multinationalism. Matsunobu (2017), based on the structure of ecomusicology, actualizes the idea of “ecomusicality”, which is crucial in his pedagogical system. Porri et al. (2023) actualizes ecomusical influences in the pedagogical system within the integrative application of transgressive pedagogy and eco-creative and innovative approaches.

An important contribution to ecologization is realized in ecological architecture and ecodesign. In this development of ecologization of health-preserving competence of physical education teacher, architec-

tural and artistic aspects together with the idea of actualization of anthropocosmic consciousness and aesthetization are leading. At the same time, we are guided by methodological intentions that can be schematically represented as a mental movement and environmentally oriented personal development: from aesthetic to ethical (“Earth ethics”); from anthropocosmic ideas and comprehensions to ecophilic consciousness.

The formation of ecological discourse is a topical area of ecologization within which ecopoetics (Margrave, 2019) and geopoetics are important. The value of geopoetics is primarily in the formation of an intentionality that is directed to the Earth and its landscapes, as well as in the actualization of the earthly world, landscapes, and artifacts that are considered to have special aesthetic and ethical values. In this aspect, important is the work of Shabliy (2014), who reveals the aesthetic and ethical potential of the works of the Ukrainian classic Taras Shevchenko from a geopoetic perspective.

The tourism industry creates a certain pressure on ecosystems. This determines the ideas and experiences of ecologization of tourism as such that are of particular relevance in our time. In this aspect, the study of Xu et al. (2022) is important, which proposes to assess the greening of the tourism industry using the Driver-Pressure-State-Impact-Response model.

Let’s look at some areas of greening related to religious traditions. Ecologically oriented ideas, values, and intentions are present in the doctrines and practices of world religions: Christianity, Judaism, Islam, Buddhism, Hinduism, Taoism, Confucianism, as well as in many polytheistic religious traditions. In this aspect, the relatively new field of ecotheology (Zucaro, 2021), which is being developed in the Catholic and Protestant traditions, is relevant. It is important to study interreligious ecotheological practices aimed at maintaining the integrity of creation and environmental sustainability (Purnomo, 2022). The defining and systematic document is the encyclical of Pope Francis – “Laudato Si” (Pihkala, 2018). This encyclical is dedicated to the preservation of the Earth for all living things. The direction of ecotherapy developed in the Christian tradition is practically oriented (Buzzell, 2020).

The above-mentioned multidirectionality and diversity of approaches and ways of ecologization, in fact, form an epistemological megasystem that permeates the vast majority of spheres of human activity. This points to the vital importance and necessity of transforming modern man into an Ecological Man, who can preserve and restore earth’s ecosystems, ensuring the sustainable and co-evolutionary

development of humanity and the Earth. The above-mentioned ways of ecologization, despite their relative isolation from each other, can be applied and, accordingly, are already being used integrally, complementarily and interdependently. Among the above-mentioned directions and ways of ecologization, the actualization of the cognitive, value-semantic and aesthetic potentials of art, architecture, as well as the application of a philosophical and ideological ecologically oriented understanding of reality, one of the significant variants of which is represented by the phenomenon of anthropocosmic consciousness, are particularly important. The above determines the methodological orientation and expediency of applying these paths integrally, as having internal deep conceptual, semantic and substantive connections. This idea of the integrative use of anthropocosmic consciousness, architecture and art for the ecologization of specialists and the educational process is not sufficiently represented in the scientific literature.

One of the culturally determined ways of methodological understanding of the phenomenology of anthropocosmic consciousness and the actualization of the possibilities of its purposeful disclosure and development is the ecological and value reflection of architecture, presented not only and not so much as a narrowly professional phenomenon, but, above all, as an anthropological cultural, socio-anthropological (Müllauer-Seichter, 2020), spatial (Drozdowicz, 2021), psychological, aesthetic, ecological phenomenon (Barber, 2020; Goldberger, 2011; Cole and Hamilton, 2020; Thampanichwat et al., 2023; Poon, 2020; Zhong et al., 2022). The cultural and social semiotics of architecture is important, in particular, as a component of the discourse of power (Jasz, 2021). Accordingly, we define as an urgent educational, pedagogical and environmental problem the need for purposeful application of epistemological-value, aesthetic-ethical, aesthetic-existential and interpretive potentials of the architectural tradition and architectural objects (buildings) for integrative ecologization and aestheticization of the educational process and competencies, including health-preserving. A significant aspect of this problem is its development and practical application on the example of ecologization of the health-preserving competence of a physical education teacher in the conditions of postgraduate education. The above-mentioned aspects of the use of architecture and art, the fate of the actualization of anthropocosmic consciousness, which is considered as a significant component and prerequisite for the ecologization of the cultural and educational space, are not sufficiently covered in the scientific literature. This, taking

into account the importance of ecologization as a way to achieve the goals of sustainable development, presents this research as relevant.

2 SELECTION OF METHODS AND DIAGNOSTICS

The paper *purpose* is to develop an architectural and artistic strategy of ecologization as a mental-spatial way of realizing the goals of sustainable development on the example of improving the health-preserving competence of a physical education teacher.

A system of methods and approaches was used in the study. The analysis of scientific literature and ecological, architectural, artistic, aesthetic, ethical, competence, health-preserving (Klochko et al., 2020a), systemic, anthropological, cultural, pedagogical, reflexive, hermeneutic, axiological, eco-ethical (Belardinelli and Pievani, 2023), epistemological, archetypal (Erazo Andrade et al., 2022), geopsychological, psychological, existential (Gosetti-Ferencei, 2022), ontological, transdisciplinary approaches and methods.

Concepts were applied: anthropocosmism (Kultaieva et al., 2021; Kultaieva and Panchenko, 2022), sustainable development goals (Guerra et al., 2022), "Gaia" (Gaia hypothesis) (J. Lovelock) (Žukauskaitė, 2020), knowledge transfer (I. Nonaka) (Obembe and Obembe, 2020), existentials (L. Binswager), geopsychology (A. Mindel), ecological education and ecological pedagogy (Su and Zhao, 2023; Corpuz et al., 2022), care for the Earth (A. Gore Jr.) (Nickerson, 1992), the aesthetics of the surrounding environment (Brady and Prior, 2020; Slawsky et al., 2022), the idea of counteracting ecophobic tendencies of consciousness (Klochko et al., 2022), human qualities (A. Pecchei) (Facioni and Paura, 2022).

Own methodological developments. The author's own methodical concepts were used: "Architectural and artistic strategy of ecologization" (discussed in section "3. Results") and "Questionnaire Fedorets definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher."

This questionnaire was used to determine the effectiveness of the application of the "Architectural and artistic strategy of ecologization", which was used to ecologization the teacher's health-preserving competence.

"Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher":

1. What is the mental and psychological phenomenon that reflects the system, integrity, spatiality, harmony of human interaction with the world and its unity with the Earth, which is consciously or intuitively applied in the process of developing and building housing and/or in its arrangement and design in traditional cultures?

- 1.1. Innovativeness.
- 1.2. Anthropocosmism.
- 1.3. Critical thinking.
- 1.4. Emotional intelligence.

Correct answer: 1.2.

2. In the "Encyclical letter "Laudato Si'" of the Holy Father Francis: On care for our common home", the planet Earth is viewed from a spiritual perspective as:

- 2.1. Home-cosmos.
- 2.2. An inexhaustible resource.
- 2.3. The field of innovative activity.
- 2.4. System of industrial landscapes.

Correct answer: 2.1.

3. A person defines and reveals his existence as spatial by:

- 3.1. Buying a watch.
- 3.2. By purchasing a computer.
- 3.3. By purchasing and arranging a house (housing).
- 3.4. By buying shares.

Correct answer: 3.3.

4. In order to aestheticize and ecologize the educational process in the development and improvement of health and movement systems and technologies of physical culture, we can apply the ideas of the architectural and artistic style of the Baroque, among which the following are relevant:

- 4.1. Formality, informatization, activity, innovativeness, etc.
- 4.2. Lack of cosmicism and mundaneness, anti-aestheticism, static, disharmony, "seriousness", lack of plasticity, fluidity, desacralization, lack of ethical contexts.
- 4.3. Cosmism, aestheticism, dynamics, harmony, playfulness, plasticity, fluidity, virtuosity, detail, sacredness, ethical and aesthetic semantic contexts, effects of both volatility ("ethereality") and eternity.
- 4.4. Philosophizing, digitalization, technology, gamification, virtualization, etc.

Correct answer: 4.3.

5. In order to aestheticize and ecologize the educational process in the development and improvement of health and movement systems and physical culture technologies, we can apply the ideas of the architectural and artistic style of organic modernism of Antonio Gaudi, among which the following are relevant:
- 5.1. Formality, regularity, symmetry.
 - 5.2. Plasticity, playfulness, imitation of living nature (plants, animals, elements).
 - 5.3. Imitation of technical systems, detailing, directness.
 - 5.4. Informativeness, closedness and security of the system, technology.

Correct answer: 5.2.

We use the McNemar's test (Fay, 2020) for dichotomous data to confirm that the results of the questionnaire according to the diagnostic method "Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher" of the experimental group are significantly different from the results of the control group after the experiment. We also use it to reliably confirm that the control and experimental groups had equivalent test results before the start of the implementation of the "Architectural and artistic strategy of ecologization" strategy in the educational process.

The null and alternative hypotheses were formulated:

X_0 : there is no difference between the test results of the control group and the experimental group;

X_1 : there is a significant difference between the test results of the control group and the experimental group.

The R programming language was used in the Posit Cloud (Posit Software, PBC, 2022) environment to perform calculations according to McNemar's paired test.

3 RESULTS AND DISCUSSION

Let's consider this problem using ecological-anthropological, cultural, existential, anthropocosmic and pedagogical approaches. Methodologically understanding this problem can be singled out as a significant spatial aspect. This is due to the fact that ecology "works" with both spatial and living objects, and, above all, such a central megaobject is the Earth as a planet and as a living being (according to the concept of "Gaia" by (J. Lovelock) (Žukauskaitė,

2020; da Silva and Tsigaris, 2022). The above is the "methodological bridge" that reveals the organicity and appropriateness of the study of spatial objects, which are, first of all, architectural structures as ecological-anthropological and anthropocultural phenomena.

Internalization of the symbolism of "Earth-Cosmos" into the mental reality of a person. In archaic and traditional cultures, the relationship between man and the Earth was largely determined by religious, magical and partially mythologized secular traditions. One of the central and defining aspects of these traditions was a person's understanding of himself as a being that is an organic part of the cosmos (the world) (Kultaieva et al., 2021; Kultaieva and Panchenko, 2022). The cosmos was presented as a "native" and eternal home, with dangers and risks as well as resources. In this way, we actualize the ancient idea of anthropocosmism (Kultaieva et al., 2021; Kultaieva and Panchenko, 2022) as significant for modern ecologization processes.

It is clear that the boundless cosmos became a home in full when a part of it was isolated, demarcated and "alienated" in the process of man's creation of his own dwelling. In the process of building and "getting used" to a new house, a person modeled the eternal World (Earth Cosmos) in it again (Kultaieva et al., 2021; Kultaieva and Panchenko, 2022). For example, in the dwellings of the vast majority of traditional cultures, the existence of a central pillar was typical, which symbolized the World Tree, the Cosmic Axis, and other archetypal ideas (Erazo Andrade et al., 2022). A hearth or a heating device (for example, a stove) had a special and, mostly, complex spatial symbolism. That is, in the dwelling itself, the World was recreated, "reborn" on a new high-quality everyday and everyday level. The Earthly World was created "anew", which, unlike the real world, was "cleansed" of the risks, challenges and threats from which man built his home and "hid" in it. That is, the real unpredictable world, which is actually both a system of threats and a "good" irreplaceable resource, was reproduced and "born" again. The world as a reality, "passing" through human consciousness and activity, was transformed into a "Good Cosmos", into the Garden of Eden precisely in the process of planning and creating housing (and/or its arrangement, design and existence in it). Passing through the specified cultural and activity transformations, the earthly reality, accordingly, became a "human", "soft", "warm" understandable, safe, predictable Anthropological Cosmos, such that was amenable to management. As the ancient Romans noted, – *Domus sua cuique est tutissimum refugium* (Latin) (One's

own home is a safe shelter for everyone). When creating a dwelling, a person projected, reproduced the external macrocosm ("big world") in the "Home cosmos" that protected his "microcosm".

An additional mental and psychological effect of building a home was the construction of one's inner human Microcosm. The human "I" acquired cosmic-spatial dimensions forming the inner world of a person as ordered, harmonious, plastic, dynamic, i.e. somewhat close to the Earth-Cosmos. In general, the above-described process, which from a psychological point of view is interiorization, i.e. "transferring the external reality inwards" into the human consciousness. External reality is transformed into semiotic-symbolic systems (first of all, language), images, algorithms, intentions, values, meanings. Interiorization forms the inner world of a person through the disclosure and reception of external reality as significant. This is done on the basis of certain cultural specifics. Aesthetic, ethical, behavioral features and connotations of culture and its unique "aura" thus become the property and component of the personality and all its spheres. That is, our inner cosmos is necessarily filled with a panorama of symbols and images of the culture in which we are formed and, accordingly, which is also ours, another cosmos. And, accordingly, the home-cosmos as a model of the World-Earth is one of the central ones that is interiorized. The consideration of the above-presented aspect of the internalization of natural reality – the Earth-Cosmos by actualizing the cultural dimension was carried out on the basis of anthropological ideas and the cultural-historical concept of the psyche.

Home is a system of harmonizing a person and his relationship with the Earth. The indicated process of formation of the inner cosmos of a person based on the reception of the house as a cosmos contributed to the harmonization of relations between man and the world. Accordingly, a person became, primo loco (first of all), a sophrosyne person (that is, a moderate, harmonious person) regardless of the type of temperament, character, attitudes and life goals. "Human-Sophrosyne" (sophrosyne, Ancient Greek: σωφροσύνη), who is moderate, harmonious, so that he has common sense and a clear mind, not clouded by ideologies, represents both the ancient and, to a large extent, the Ukrainian ideal. We consider a moderate person (harmonious, sophrosyne) as one who, first of all, has a harmonized relationship with the Earth-Cosmos, which, accordingly, is a psychological prerequisite for the realization of the goals of sustainable development. In such a "Human-Sophrosyne" the harmony of the external world, as well as the harmonious and harmonizing "essence of

Gaia" (the world of the Earth) through internalization (the analysis is carried out in accordance with the cultural-historical theory of the psyche) is transformed into the harmony of the individual, and into the real existing "sustainable (harmonious) development" of the individual, cultures and social groups. As indicated, the reception and "unfolding" of harmony in the soul occurs through building one's home in the real world and, "in parallel", in the human mind. That is, "Home-cosmos" is our human way of harmonizing relations with ourselves and the World-Earth, corresponding to human nature.

Existential aspect of the problems of the house. A person is a being who has the ability to experience and live his existence (to be in it and to be it), that is, to exist. Our being is also "being with the Earth", which, in fact, "includes" the dimension of our existence. Earth as space, as reality, as being in us and with us. Accordingly, in order to clarify and expand the deep psychological meanings of the House, we interpret the presented visions of the earthly house-Cosmos from the standpoint of existential psychology in the system of fundamental concepts of which there are existentials (existentials are formally separated but, at the same time, significant fragments of our existence). Existentials of space, corporeality (it is understood also spatially, or more precisely spatio-temporally), time, etc. are distinguished. The specified existentials of space and time exist in the system of others, namely, together with the existentials of care and love (Heart), harmony, etc. Accordingly, we interpret the existential spatiality in the context of the manifestation "through them" not only of human, but also as the disclosure of the existence of the Earth as a planet and a living entity, as a unique landscape (remember those dear "our" landscapes that "live" in us and always with by us). Thus, our interpretation of the spatial-existential dimension includes earthly connotations, which is transformed into the phenomenology of existential space. Accordingly, time as such is in fact Earthly time, which without limits passes into our existential temporality. Thus, in the system of our inner being, both human and earthly dimensions merge and exist relatively separately in their spatial, temporal, and vital formats. That is, humans are anthropogeographic beings (we recall the idea of "anthropogeography" by Friedrich Ratzel). Therefore, even from a deeply intrinsic position, Home, Home-Earth are deeply rooted in our existence, or rather, they have always existed there.

The existential of the House or, as we understand it, the House-Earth and the existential of love and the existential of care, being in the same "plane", form one essential integrity. Thus, in the system of existen-

tially oriented understandings, Home and Earth are what is not only outside of us, but also what is inside us, in our being, and this is ourselves, this is our share.

Integrative understanding of the human home as an earthly anthropocosm in the context of ecologization and health preservation process. Summarizing, it can be noted that a person's home (Barber, 2020; Goldberger, 2011) is not only a "place of residence", but also a system formed on the basis of a special "anthropo-terrestrial integration and the formation of a special integrity" of phenomena of various nature: anthropological, social, mythological, existential, earthly, cosmic, symbolic, spiritual. Thus, the human home includes the Earth-Cosmos transformed both: 1) into the building itself and into – 2) a Semiotic-symbolic-figurative system, the sum of certain stereotypes, myths, scenarios of behavior, attitudes that collectively form the person himself and his inner world; 3) to culture; 4) into the human Umwelt (Klochko et al., 2020b), in which we distinguish the dimensions of House-Space-Earth and Earth-Space ("Great House"); 5) into the system of harmonizing relations: a person with himself (reflexive and harmonizing aspect), a person and the Earth as a Great House (Cosmos), between people in society; 6) the projection of harmonious interactions into the future and the past – a culturally determined harmonious attitude to the future as the future of Earth and human, that is, compatible, co-evolutionary. The methodological and worldview interpretations and understanding of the house as a special earthly anthropocosm, which not only "surrounds" but also forms a person and which is simultaneously significant in his mental reality, represents architecture (Barber, 2020; Goldberger, 2011; Manurung et al., 2022; Müllauer-Seichter, 2020; Drozdowicz, 2021; Cole and Hamilton, 2020; Thampanichwat et al., 2023; Poon, 2020; Zhong et al., 2022; Jasz, 2021) as a special anthropological-spatial sphere and as art. Accordingly, the ecological value reflection of the architectural tradition can be purposefully applied for: ecologization of education; development and preservation of health; the formation of a developed moderate person – Homo Ecologicus (Latin), in which ecophilic tendencies of consciousness are present; transformation of crops into ecophiles.

For the purpose of environmentalization of education, which includes environmentalization of the health-preserving competence of the physical education teacher, as well as for the development and preservation of psychological and spiritual health in the educational process, we use presentations of architectural structures and ecologically and health-preserving oriented narratives (stories) about them.

Accordingly, environmentalization, which is implemented by actualizing knowledge of architecture, is carried out in relation to the aestheticization of the educational process. For this, presentations of works of art and architecture are used. Images of architectural structures are also included in our "Epistrophe of the Earth" (Yevtuch et al., 2021b) technique. "Architecture as frozen music", according to the definition of Le Corbusier, which carries the boundless spirit and the majestic eternal image of Gaia-Mother (Mother-Earth), is aimed at revealing the manifestation of human nature in the form of kindness directed to its earthly essence and to the Earth itself. That is, we are talking about the Epistrophe of the Earth (Yevtuch et al., 2021b) as an eternal descent to the Earth as a great soul and a living being, which, first of all, must take place in the souls of people. This is the spiritual revolution that Aurelio Peccei spoke about (Facioni and Paura, 2022). On the basis of an ecological and valuable understanding of anthropocosmic ideas, architectural and artistic traditions, we are forming the "Architectural and Artistic Strategy of ecologization" as one of the defining trends in the development of ecophilic consciousness.

An important source of aestheticization, ecologization, and axiologisation in education, implemented integratively, is the application of knowledge about certain architectural and artistic styles and traditions. Ecological and anthropological, value and aesthetic analysis of relevant author's styles and unique works of certain creators is also significant. In this ecologically oriented pedagogical system, we turn to the disclosure of the ecological, creative, axiological, aesthetic, ethical, anthropological, cultural, harmonizing potentials of such styles as baroque, Ukrainian baroque, Ukrainian folk architecture, eco-architecture, eco-design, as well as the work of the classics of Antonio Gaudi, etc. We will briefly present the indicated areas

Ecological and valuable reflection of architecture and baroque style. Baroque is not only an architectural style or an aesthetic system. Baroque is a wider and deeper socio-cultural and artistic phenomenon (Jasz, 2021). It can be considered as a special worldview, a special culture, a specific style of thinking, reflection, interpretation, etc. Baroque as a style extends to all art and life. We can also talk about the phenomenon of the "Baroque Human", who is refined, kind, playful, creative, aesthetic, humane, free, intelligent, capable of rising to his spiritual heights. Ukrainian national character, as well as Ukrainian culture and architecture, in their essence, are baroque or can be represented in baroque symbols and images. This luxurious style, which reflects the greatness of

the cosmos, its diversity with “surplus”, is close to Ukrainians (Cherkes et al., 2020). Accordingly, at one time Ukraine actively prescribed and developed it. This style was initiated by G. L. Bernini (1598–1680) and developed by the classics of the Renaissance.

This style is interesting in that it probably most fully reflects the idea of a harmonious, balanced, majestic and, at the same time, dynamic, plastic, fluid, playful and living Cosmos (World), filled with Spirit and Light. In Baroque, there is an attempt to depict the diversity and richness of the world, the greatness of the Earth, the elements, and the forces of nature (figure 1). It reflects the spirit of diversity and effectively synthesizes architecture and art. In fact, the baroque represents an attempt in art to “recreate” the worlds created by God, including the earthly and heavenly. At one time, this style was officially recognized by the Catholic Church as one that corresponds to the ideas and values of Christianity and reflects the majestic “shining” world structure, its hierarchy, the music of the spheres, the majesty of the Creator.



Figure 1: Trevi Fountain (ital. Fontana di Trevi) in baroque style (photo taken by the author).

The construction of buildings in this style required significant material resources and artists with a high level of training and real talents. It is clear that it is cheap and simply impossible to model a complex majestic world. In this style, there is a play of forms, a play of light, and essentially virtual worlds are created. It is luxurious, multidimensional, multifaceted, polysemantic, polyontological, exquisite and harmo-

nious.

In the context of ecologization (Kultaieva et al., 2021; Kultaieva and Panchenko, 2022; Barber, 2020) this style is relevant for the aesthetic and valuable understanding of the planet Earth, its landscapes, and biodiversity. It, perhaps not the best, reflects the unity, dynamic interaction and co-evolution of the earthly, human, and divine. Despite the often massive and large volume of buildings in this style, the size of the building is not as significant as in other areas of architecture. What is important is the luxurious internal and external representation of the world formed by the Creator. This style, in fact, models the “living” space of the earth, landscapes and its earthly and heavenly Cosmos-world (Kultaieva et al., 2021; Kultaieva and Panchenko, 2022; Barber, 2020). Baroque is imbued with optimism, vitality, ethereality, playfulness, perspective, harmony.

Ukrainian folk architecture as a representation of ecological culture and ecophily of the people and its anthropocosmism. Ukrainian folk architecture reflects the indomitable and, at the same time, balanced, cheerful and active nature of the people, its dynamism, contemplativeness, emotionality, unity with landscapes, sense of measure and harmony (Cherkes et al., 2020). The Ukrainian house, regardless of the region and the material, which is mainly clay or wood, is a special earthly cosmos in which, on a symbolic level, the spiritual worlds and heavens are represented. In the Ukrainian house, various materials were uniquely and harmoniously combined, which created a special harmony and peace. The house was originally formed as one that organically integrated into the landscape, taking into account the occurrence of underground water and ideas and practical understandings about favorable and not unfavorable places for construction. The idea of purity manifested in white color was relevant. The hut was traditionally whitewashed twice a year and thus renewed and enlivened. The bright design, in which the cosmogony and stylized flora and fauna are reflected, gave a special representative, expressive color to the dwelling, emphasizing the liveliness, playfulness, dynamism of the whole world “in miniature”. The house is filled with human spirit, warmth, life and goodness thanks to the use of towels, carpets, paintings, and dishes. At the same time, there was a spirit of measure and harmony in everything. Ukrainians, namely folk craftsmen, experimented a lot with form and materials.

Both earthly and heavenly Cosmos and Spirit are fully reflected in the folk sacral architecture, which, according to its spirit, “gravitates” towards the baroque in its plasticity, expressiveness, sophistication, as in the Ukrainian house. Modeling flowing

spaces filled with “light-spirit” is relevant.

Antonio Gaudi’s organic modernism as a manifestation of “ecological spirituality”, ecological aesthetics and the Spirit of Gaia. The work of the outstanding Spanish architect Antonio Gaudi (figure 2) (Avilés, 2021; Ramzy, 2022), who was canonized by the Catholic Church as a saint, we are primarily interested in the unique potential of anthropocosmism, sophistication, spirituality and aestheticism.

The architect said that he continued the Gothic tradition. He was one of the first to use organic forms in architectural creativity. The indicated use of organic forms was not only copying, it was, first of all, conceptualization, stylization, transformation, the result of which was an attempt to understand and represent the essence of the idea, the value and meaning of the “source phenomenon” (for example, a flower), on the basis of which the architectural form was developed.

The work of the American architect Frank Lloyd Wright (Vaughan and Ostwald, 2022) is relevant for understanding the unity of the human dwelling and the Earth and, accordingly, Human and Gaia.

His unique “Fallingwater” in Pennsylvania shows the “flow” and “interaction” of land forms, landscape and spaces of the house. In fact, it is a “game” of two worlds – the earthly world and the world of a person’s home (figure 3). Concluding the consideration of the “Architectural and Artistic Strategy of ecologization”, we recall the ancient wisdom expressed by Cicero – *Nullus est locus domestica sede jucundior* (Latin) (There is no place nicer than the native home).

3.1 Experimental study

To determine the dynamics of the actualization of anthropocosmic consciousness as a significant component of the ecologization of the health-preserving competence of the physical education teacher in the educational process of professional development in the conditions of postgraduate education, the “Architectural and artistic strategy of ecologization” technique was applied. The analysis of training results was carried out with the help of the “Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher” (see section “Selection of methods and diagnostics”).

816 physical education teachers took part in the study, of which 411 were in the experimental group, and 405 were in the control group, the research was conducted in 2017–2021. The experimental study was conducted in Ukraine in 9 institutions of higher education: Zhytomyr Regional Institute of Postgraduate Pedagogical Education, Drohobych State Ped-

agogical University of Ivan Franko, Zaporizhzhia Regional Institute of Continuing Pedagogical Education, Chernihiv Regional Postgraduate Institute of Postgraduate Pedagogical Education named after K. D. Ushinsky, Mykolaiv Regional Institute of Postgraduate Pedagogical Education, Donetsk Regional Institute of Postgraduate Teacher Education, Kherson Academy of Continuing Education, Sumy Regional Institute of Postgraduate Pedagogical Education, Lviv Regional Institute of Postgraduate Pedagogical Education.

As a result of the questionnaire aimed at determining the dynamics of the actualization of anthropocosmic consciousness as a significant component of the ecologization of the health-preserving competence of the physical education teacher, the following results were obtained: the number of correct answers of the teachers of the control group before the experiment is 43% (figure 4), and after the experiment – 47% (figure 5); the number of correct answers of the teachers of the experimental group before the experiment was 46% (figure 6) and after the experiment – 93% (figure 7).

We will use McNemar’s test to confirm that before the start of the implementation of the “Architectural and artistic strategy of ecologization” strategy in the educational process, the results of the questionnaire according to the diagnostic method “The Fedorets Questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher” of the control group were not differ significantly to the results of the experimental group. For this purpose, in the Posit Cloud environment, we will use the *mcnemar.test()* function to calculate McNemar’s test statistics for the data of the control and experimental groups.

In the process of checking the test results of the control group and the experimental group before the start of the implementation of the “Architectural and artistic strategy of ecologization” strategy in the educational process, was obtained the McNemar’s test statistic:

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McNemar’s Chi-squared test
chi-squared=1.0309,
df=1,
p-value=0.3099.
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Consequently, the calculated value of $\chi^2=1.0309$ is less than the theoretical value of $\chi^2_{1,0.05}=3.8$ at the level of significance $\alpha=0.05$ ($\chi^2 \leq \chi^2_{1,0.05}$), and the p -value is greater than 0.05 at the level of significance $\alpha=0.05$ ($p>0.05$). Therefore, we accept the hypothesis X_0 that there is no difference between the test results of the control group and the experimental group.

In the process of checking the test results of the



Figure 2: Plant-shaped columns in the temple “Sagrada Família” (“Holy Family”) in Barcelona (Spain) (Sagrada Família, 2023), architect Antonio Gaudí.



Figure 3: Kaufman’s residence “Fallingwater” – a house designed in 1935 by the famous American architect Frank Lloyd Wright (1867–1959) (Fallingwater, 2023).

control group and the experimental group after the implementation of the “Architectural and artistic strategy of ecologization” strategy in the educational process, was obtained the McNemar’s test statistic:

McNemar’s Chi-squared test
chi-squared=28.167,
df=1,

p-value=1.113e-07.

Consequently, the calculated value of $\chi^2=28.167$ is greater than the theoretical value of $\chi^2_1=3.8$ at the level of significance $\alpha=0.05$ ($\chi^2 > \chi^2_1$), and the p -value is less than 0.05 ($p < 0.05$). Therefore, we reject the hypothesis X_0 and accept the hypothesis X_1 that there is a significant difference between the test results of

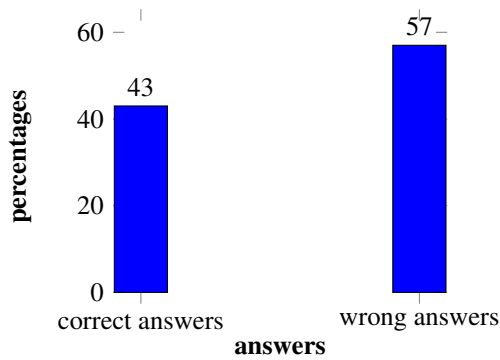


Figure 4: The results of a questionnaire aimed at determining the dynamics of the actualization of anthropocosmic consciousness as a significant component of the ecologization of the health-preserving competence of the physical education teacher in the control group (the diagnostic technique “Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher” was used), before the experiment.

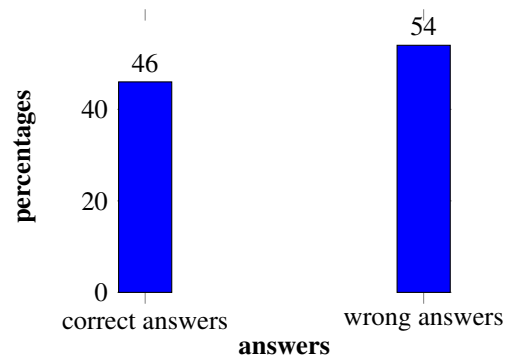


Figure 6: The results of a questionnaire aimed at determining the dynamics of the actualization of anthropocosmic consciousness as a significant component of the ecologization of the health-preserving competence of the physical education teacher in the experimental group (the diagnostic technique “Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher” was applied), before the experiment.

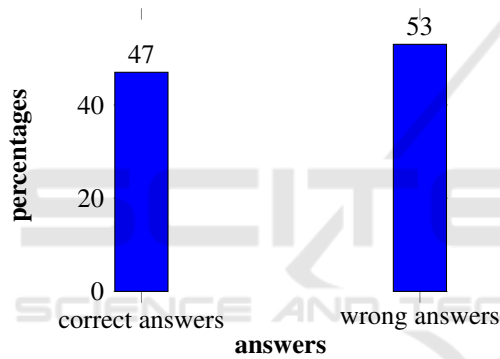


Figure 5: The results of a questionnaire aimed at determining the dynamics of the actualization of anthropocosmic consciousness as a significant component of the ecologization of the health-preserving competence of the physical education teacher in the control group (the diagnostic technique “Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher” was used), after the experiment.

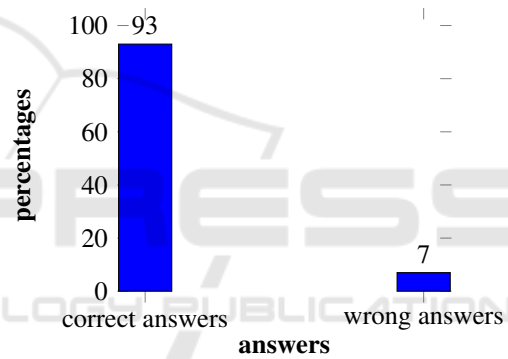


Figure 7: The results of a questionnaire aimed at determining the dynamics of the actualization of anthropocosmic consciousness as a significant component of the ecologization of the health-preserving competence of the physical education teacher in the experimental group (the diagnostic technique “Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher” was applied), after the experiment.

the control group and the experimental group.

Thus, the positive dynamics of the results of the implementation of the “Architectural and artistic strategy of ecologization” strategy in the educational process as a component of the ecologization of the health-preserving competence of the physical education teacher have been determined.

Conceptually and methodologically, this study is formed within the framework of the paradigm of ecological pedagogy (Onopriienko et al., 2021; Yevtuch et al., 2021b), which includes a value reflection on the ideas of phenomenological ecology (Bonnett, 2019) and the ecologization of educational philosophy (Af-

fifi et al., 2017). In contrast to the above authors, the format of ecologization developed by us includes the active and integrative use of existential, psychological, aesthetic, anthropological, systemic, artistic approaches, as well as the use of anthropological, value and methodological potentials of the ancient Greek cultural and educational system of paideia (ancient Greek παιδεία) (Yevtuch et al., 2021b). The socio-cultural and psychological orientation of our approaches to greening is the application of the ideas of ecophilic and ecophobic orientation of consciousness (Klochko et al., 2022). The mainstream way of ecologization in this pedagogical system is the use of

architecture as a spatial phenomenon integrally with the use of fine arts (viewing reproductions of paintings), which is presented as an artistic way of comprehending the greatness and harmony of the world and actualizing anthropocosmic consciousness. The choice of these spatially oriented approaches is due to the “spatial” specificity of pedagogical influences on physical education teacher, which are consistent with motor activity, which is the basis of the professional activity of these specialists. It is clear that motor activity also has a distinct spatial dimension. In our pedagogical practices of ecologization, we also use eco-poetics (Margrave, 2019) and geo-poetics (Shabliy, 2014), as well as ecologically oriented narratives.

This study is based on the methodological basis of previous research and, in fact, is their further development and practical implementation. The methodology integrally applied a system of approaches, among which the most important were competence-based health, anthropological, geopsychological, ethical, psychological, and existential. The concepts of “Caring for the Earth” (Gore, 2000), noosphere, “Gaia” (Lovelock, 2010) were also applied, as well as the cognitive and ethical and value potential of the ancient Greek cultural and educational system of paideia (ancient Greek παιδεία) (Yevtuch et al., 2021b). The concepts aimed at ecologization and, accordingly, the development of an ecophilic person of the future – Homo Ekologicus – were developed. These ecological concepts, which are tellus (in the sense of the Earth) and anthropologically oriented, in their totality represent a special “eco-cognitive-ethical-value” system: “Tellus-Anthropic Convergence”, “Good of the Dialogue of Man and Earth”, “Arete of Earth”, “Compliance with Active Impact on Earth”, “Tellus-Anthropic Harmonization”, “Earth Epistrophe” (Yevtuch et al., 2021b).

The concepts of “Tellus-Anthropic Convergence” and “Good of the Dialogue of Man and Earth” are considered as methodological intentions and practical attitudes that reflect the idea of the need for close co-evolutionary and dialogical interaction between man and humanity with the Earth, including the restoration of a value-based and careful attitude towards the planet as an integral ecosystem and individual ecosystems. The concept of “Arete of Earth” presents the idea of developing human ecophilicity, which is considered as a charity – arete (ancient Greek ἀρετή – charity, benefits, virtue). The concept of “Tellus-Anthropic Harmonization” clarifies and specifies the interaction in the Human-Earth system as one that should be formed on the basis of harmony, which is accordingly projected onto the personality itself. Accordingly, it is recommended to develop the Hel-

lenistic phenomenon of sophrosyne (ancient Greek σωφροσύνη – prudence, discretion, common sense, moderation, “pure mind”), which is a system of behavioral stereotypes and a set of cognitive and characteristic features that generally determine harmonious, balanced, reasonable human behavior. In an ecologically oriented interpretation, we consider Sophrosyne as the behavioral and characterological basis of Homo Ecologicus. We have conducted research on ecophilic and ecophobic tendencies of consciousness (Klochko et al., 2022) as mental and behavioral characteristics that integrally reflect the orientation of the individual and his or her ecological orientation and the presence of biophilia. The methodological ideas used in the study of ecophobic tendencies of consciousness were also applied in the study of the architectural and artistic strategy of ecologization as a mental-spatial way of realizing the sustainable development goals.

4 CONCLUSION

Based on the integrative and ecologically oriented use of the ideas of anthropocosmism, the concept of sustainable development and the traditions of architecture and art, the “Architectural and artistic strategy of ecologization” was formed, which is a method of ecologization and aestheticization of the cultural and educational space and competencies. The application of the specified methodology is given on the example of environmentalization and aestheticization of the health-preserving competence of a physical education teacher in the conditions of postgraduate education. Making it more specific, we note that this technique is primarily aimed at improving the anthropocultural component of the specified competence. The peculiarity of the anthropocultural component of the health-preserving competence of a physical education teacher is that in his meaningful and value-semantic systems, ecological and anthropocultural (including aesthetic, motor, etc.) problems are considered as central, system-organizing, complementary, harmonizing. That is, within the framework of the anthropocultural component, the unity of Man and the Earth existing in ecophilic archaic and traditional cultures is restored through the actualization of anthropocosmic consciousness. Accordingly, an ecologically oriented understanding of culture is actualized and developed: as an ecophilic human environment, as an ecologically acceptable way of being, as a harmonious existence based on the deployment of the concept of sustainable development. “Architectural and artistic strategy of ecologization” is aimed at realizing the goals of sustainable development. First of all, this

strategy contributes to the implementation of “Goal 3. Good health and well-being”, “Goal 4. Quality education” and “Goal 11. Sustainable cities and communities”.

Anthropocosmic consciousness includes a systematic and holistic perception of the world as a home, and the interpretation of the home as a projection of the earthly Cosmos. Accordingly, the presence of anthropocosmic consciousness in a person is considered as a personal-psychological and socio-cultural prerequisite for the effective environmentalization of the cultural and educational space, competencies (in this study, health-preserving competence) and the socio-cultural sphere as a whole. The architectural tradition is the direction in the system of founding ideas that has anthropocosmic aspects. In many cases, the architect develops a housing project as a model of space, which is ordered, harmonious, aestheticized. The same construction of housing based on anthropocosmic intentions and ideas about the home as a small cosmos was carried out in archaic and traditional cultures. We consider anthropocosm as such a phenomenon that is inherent in human nature as well as in the vast majority of cultures. Therefore, it is important to actualize it as a significant psychological and cultural component of environmentalization. Accordingly, through familiarization with architecture as an art that creates a second “architectural reality”, a “new cosmos” for man, opportunities are revealed for the actualization of both the potentials of anthropocosmism and aesthetics, which we consider as psychological and anthropocultural prerequisites and foundations of environmentalization.

“Architectural and artistic strategy of ecologization” includes an introduction to some architectural and artistic styles and reproductions and videos of significant architectural works (buildings, interiors, parks, etc.). In the process of greening the health-preserving competence of the physical education teacher, the issue of reception of ideas significant for certain architectural and artistic styles, which can be applied to organize the motor activity of students and preserve their health, is considered.

For example, the idea of harmony, as one of the determining factors in the existence of the world and man, and which is the basis of both the baroque style and the trend of sustainable development, can be applied to improve the organization of motor activity, preserve health, and improve the educational process in as a whole. The idea of harmony traditionally includes: the concept of measure in relation to the purpose of physical exertion; actualization of beauty, grace and plasticity in motor actions; determines refined, humane, delicate high relations and specifics

of communication of participants in the educational process, etc. Pedagogical and valuable reflection of exquisite architectural works enables the teacher of physical culture not only to understand but also to feel harmony as embodied in real architectural objects and objectified ideas, as an aesthetic spatial phenomenon, and not only to consider harmony as a formal abstract concept. Baroque, as an anthropocosmic and theocosmic style in its essence, is characterized by harmony not only and not so much as statics, but as dynamics, which, accordingly, can be applied in the organization of motor activity. Such aspects as friskiness, the ability to create spatial illusions, carnival elements, refinement, aristocracy are of particular interest for the transformation of baroque ideas into the educational process. The baroque interpretation of health is existentially oriented, namely as the fullness and harmony of life, its friskiness, fullness of events, multidimensionality, activity, self-realization, existence as *Homo Estetikus*. Thus, on the example of the application of the baroque architectural and artistic style for environmentalization and aestheticization, operationalization (transformation of theoretical provisions into practice and technology) and transfer (in the sense of reception, transfer, adaptation, concretization) of ideas, values, meanings, images, contents of the specified style in educational practices of health preservation and organization of motor activity.

The analysis of the results of the training of physical education teachers in the conditions of postgraduate education using the “Architectural and artistic strategy of ecologization” was carried out using the “Fedorets questionnaire for the definition and actualization of ecologically oriented anthropocosmic ideas, values and intentions of the teacher”. In the experimental group, a positive dynamic of educational results is observed. In this group, there is an increase in positive responses by 47% (before the experiment it was 46%, after it became 93%). In the control group, the dynamics is insignificant – 4% (before the experiment it was – 43%, after it became – 47%).

Using the example of “Architectural and artistic strategy of ecologization”, we represent a humanistically oriented idea of soft ecologization. The essence of soft ecologization consists in the primary and dominant application of humanitarian (psychological, social, pedagogical) methodologies, techniques and technologies as system-organizing and determining factors in the development of environmental consciousness and in the formation of the person of the future – *Homo Ekologicus*. That is, not so much legal and administrative and other (hard) influences should be leading and determining, but a system of soft, humane, human-centered influences. Soft ecologization

is aimed, first of all, at the formation of ecophilic human qualities (according to Peccei (1977)) on the basis of revealing the best manifestations of human nature (aestheticism, kindness, mercy, biophilia) and by actualizing internal motivation, and not through the threat of punishments and restrictions.

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