

Valentina Bogachenko¹

Philosophy, Psychology and Pedagogy Department

A.S. Popov Odessa National Academy of Telecommunications

Co-evolution of Human Corporeality and the Technosphere: a philosophical-anthropological discourse

Słowa kluczowe: koewolucja; ludzka cielesność; technosfera; antropologia technogeniczna; wirtualna rzeczywistość; „osobowość wirtualna”; „wirtualna cielesność”.

Keywords: co-evolution; human corporeality; technosphere; technogenic anthropology; virtual reality; “virtual personality”; “virtual corporeality”.

Introduction

With the rapid growth of innovative technologies' quantity and quality, the assimilation of the Technosphere into everyday life makes the issue of co-evolution of Human Corporeality and the Technosphere a paramount priority. As a rule, the term «co-evolution» is used for a dialectical understanding of the symbiosis of biological systems and nature. In our study, it assumes an explanatory status between the merger of natural and artificial, human and technology, natural philosophy and philosophy of technology. Co-evolution reflects a way of interdependent development of elements in any system.

Technical inventions create new conditions for changing human nature and culture. From the very outset, the co-evolutionary approach in natural-scientific knowledge revealed the issues of human influence on nature, and vice versa, the algorithm of changes in nature on the development of various kinds of socio-ecological forms of perception of the world. Now it is necessary to consider the fusion of the natural and the artificial in humanity itself (in its culture, in its worldview, in its individual body and everyday life). The consideration of the bodily image of man in the

¹ Bogachenko Valentyna, Philosophy, Psychology and Pedagogy Department, A.S. Popov Odessa National Academy of Telecommunications, Kuznechnaya St. 1, 65020 Odessa, Ukraine, dreamsummer1212@gmail.com, <https://orcid.org/0000-0002-4105-0480>.

context of Technogenic Civilization is the objective of our article and modern philosophical knowledge. In our study, corporality is regarded as «a bodily image» that is formed at the compound of natural and artificial, internal and external, individual and the environment, personal and cultural. Moreover, since this is already a process of a non-natural nature, co-evolution is replacing the concept of evolution.

The main part

The concept of co-evolution is based on the principles according to which humanity, transforming the biosphere in order to adapt it to their needs, should change themselves, taking into account the objective requirements of nature. However, since for the most part modern man lives in technological conditions, this strategy can be applied in considering the relationship «man-technician». This is not just interaction – this is the substitution of virtual natural attributions for virtual ones, this is the disappearance of the need to train personal abilities and qualities (memory, attention, etc.) and the replacement of the latter with alternatives – computerized (Google search, computer programs, etc.).

Because of co-evolution of the system of inanimate and living nature, the natural and artificial paradigm of human development, a complex and contradictory integrity is formed. This integrity is reflected in the image of the “technogenic” person. It is possible that this person represents the next step in the evolution of humankind. The concept of co-evolutionary development of nature and society is revealed in the works of N. Moiseev as a way of preserving man within biosphere. “So, the principle of co-evolution means such a system of prohibitions (ecological imperatives) that would exclude the possibility of changing the parameters of biosphere, bringing its state closer to the boundaries of the attractor – that forbidden line that humanity has no right to cross over under any circumstances” (Moiseev N., 1998, p. 26–32). In our study, we are talking about the preservation of man as a species within the Technosphere and the actualization of the humanistic imperative through projections of the personal corporeality.

The modern term the Technosphere was introduced by the American geologist and engineer P. Huff. He explores the anthropocene phenomenon as an era of revising the interaction of human and nature with the inclusion of the influence of technology. “The term Anthropocene, proposed and increasingly employed to denote the current interval of anthropogenic global environmental change, may be discussed on stratigraphic grounds”

(Zalasiewicz J. and others, 2008, p. 7). According to P. Huff, technological systems are the creation of man, but they have long gone out of his control and project themselves some social changes and have their own implementation rules. P. Huff identifies the latter in six main positions, one of which: the rule of control, that a human cannot control a technological system that expresses a larger number of behaviors than he himself. “The technosphere is a system for which humans are essential but, nonetheless, subordinate parts. As shorthand we can say that the technosphere is autonomous. This does not mean that humans cannot influence its behavior, but that the technosphere will tend to resist attempts to compromise its function” (Haff P., 2014, p. 127).

The process of anthropogenesis is the biological field migrated to the technogenic sphere. Firstly, this is evidenced by the transformation of human corporeality. Many bodily problems (various types of whitening) have an etiology that indicated by interaction with computer technology. We are talking about the indirect connection of lifestyle and psychosomatic conditions of a person. For example, diseases of the spine, vegetative-vascular dystonia, increased cranio-cerebral pressure, etc. Currently this is not only the consequences of a lifestyle – it is a phenotype that is transmitted by anthropogenic civilization to the next generation. Secondly, a sign of the “technologicalization” of human nature is a series of corporeal incarnations and attributions in culture. Mass culture popularizes the cult of the ideal body. An uncountable number of services are associated with improving the visualization of «body image», starting from sports training and ending with the intervention of plastic surgery. The rapid growth of the market of «body beauty» indicates a shortage of natural body realizations and an attempt to replace them artificially. At the same time, the method of filing an improved image occurs through virtual broadcasting (social networks, forums, etc.). Perhaps, in the history of anthropogenesis *Homo sapiens* is replaced by *Homo technicus*? In addition, as in all historical periods, we observe both morphological changes in the body and non-standard implementation of it in culture through corporeality.

Compared to other animals, humans do not have a number of physiological ways of adapting to nature, which makes them less adapted to their natural habitat. Nevertheless, at the same time, this «inferiority» gives a rise to a new defense mechanism that is not peculiar to the animal world – creativity. “Among other creatures with which nature has treated especially severely in this sense, man undoubtedly takes first place. He/She is deprived of any equipment inherent in other animals, which would allow him to fight against nature, and must provide him/her with all the necessary means of protection. Our entire culture is the result of these protecti-

ve tendencies, due to the connectedness of people among themselves, as well as to all human abilities to which we attribute value” (Adler A., 1997, p. 26). This approach reflects the position of the biological-anthropological approach of M. Scheler, who considers human evolution as an aspiration for discrimination with animals. This is characteristic of the first anthropological turn and in the field of research is a classic consideration of the objectification of human.

In our study, a person is explored as a psychosomatic integrity, and his creative realization as one of the aspects of the attribution of corporeality. The somatic originality of man and his reflection through cultural manifestation form the existential world of man. “Already in the sensory organs and in the senses themselves, and not in the forms of contemplation and thought, hides the transcendental condition of any and all knowledge of reality” (Rothaker E., 1966. p. 84). The two indicated trends of anthropology – biological-anthropological and cultural, were very relevant before the development of a technogenic-virtual civilization, which offers new ways of person self-representation in a socio-cultural environment, including incorporeal ones.

Philosophical-anthropological discourse cannot take place without a research of the technogenic environment and virtual reality of modern man. The philosophy of technology is being replaced by the anthropology of technology, which no longer considers the influence of technology on human life, but discloses technology as one of the areas of realization of human existence. In addition, this artificially created sphere does not exist in isolation in any of the spheres of human existence – nor in nature, nor in society, or in interpersonal relations. It requires the inclusion of a person and can both manifest itself in these areas, and exist separately. The Technosphere creates another level of reality – virtual one. “Technology is a human’s reaction to nature or circumstances, as a result of which between nature, environment, on the one hand, and man, on the other, a mediator arises – super-nature, or a new nature, built on the primary” (Ortega-y-Gasset H., 1993. p. 164–232). Technology is not an end in and of itself in retrospect of scientific progress. It is rather a means to overcome the difficulties of the environment and improve the quality of human life.

However, in modern society, technology goes beyond the limits of casual understanding of its essence. If earlier technical and computer inventions became an analogue and method of projections of corporeality and mind of a person, now the question is radically different. Virtual space is a place of interaction and communication, a place of self-identification and incorporeal self-representation. Thus, a person takes an artificial model of his/her «I» beyond the limits of bodily physiological boundaries.

Considering this situation, McLuhan introduced the special term «narcissistic anesthesia». It denotes one of the painful syndromes of a person in the information space, which consists in leveling and non-perception by a person of the psychological and socio-cultural consequences of staying in a virtualized world of modern technology. McLuhan talks about the effect of «self-amputation» as a way to maintain balance. That is, unable to cope with the perception of the perceptual image here and now, a person is trying to take this image beyond the boundaries of his/her body. The author also noted interestingly the textual manifestations of bodily amputation's phenomenon. For example, «one wears fingers to the bone», «lose temper», «slip one's mind», etc. Telling about the prototype of the human nervous system that is implemented in the techno-information space, McLuhan notes: "To the degree that this is so, it is a development that suggests a desperate and suicidal auto amputation, as if the central nervous system could no longer depend on the physical organs to be protective buffers against the slings and arrows of outrageous mechanism" (McLuhan M., 1994, p. 53).

A person becomes a hostage of cyberculture, which gives rise to a new layer of anthropogenic being – virtual reality. Thus, a person has "a virtual body" aside from «natural», «social» and «cultural» bodies. A person lives simultaneously in two dimensions – ordinary life and virtual, which is projected by technology. In perspective, these two types of reality can intertwine and coexist. However, the predominance of the virtual method is obvious, since it gives unlimited possibilities for the realization of fantasies and human needs, both creative and hedonistic. According to V. Rozin: "All this will require new abilities and even corporeality, so it is likely that the Internet will contribute to the metamorphosis of not only culture, but also the anthropological image of a person" (Rozin V., 2004, p. 22). Virtual reality affects the basic modes of the human psyche: cognitive, emotional, volitional processes and states; his/her abilities and imagination. Reality becomes multiple connections with the transition from authentic reality to virtual and vice versa.

The virtual world has many advantages. At the same time it eliminates a very important moment in a person's life – staying in the present moment of life and perceiving themselves through the prism of one's corporeality. Our body has one very important function – being associated with reality here and now. Thoughts and emotions often force us to arrive in the past, sometimes thinking about the future, and only the bodily sensations in all their diversity bring us back to the present moment, give us a way of self-identification here and now and reveal us in sensory-emotional experience. With the predominance of virtualized forms of communica-

tion, the ability to develop perceptual forms of perception, which are given to us as a feature of tactile research and understanding of the world, is lost.

According to Gardner's theory of multiple intelligence, Body Intelligence (BQ) is one of the leading ways of world cognition and oneself. "Thinking» with the body is one way to quickly respond in critical situations, learning with the body is not only a perceptual experience, it is a way to express your thoughts and abilities. It makes it possible to determine the personal boundaries of a person and allows us to differentiate 'I' from 'Other' and from the world as a whole. Along with bodily-kinesesthetic intelligence, Gardner considers other types of intelligence: linguistic, logical-mathematical, spatial, musical, interpersonal and intrapersonal. These types of intelligence can function both in synergy with each other, and as independent modules of the psyche. Departing from the classical model of intelligence in psychology, Gardner defines bodily intelligence as «the ability to solve problems or create products that are valued within one or more cultural settings» (Gardner H., 1993, p. 15). That is, the same makings of a physiological body when realized through corporeality into a cultural and social body can lead to different variations.

For example, the athlete's physique can tell us about a person's addiction to physical activity. If we consider the presented image in the historical periods of culture, we can define various interpretations. In Antiquity, this image rather spoke to that of a warrior and in combination with simple clothes – he carried a message about a person who works physically. In modern mass culture, this image works more for the presentation of a model or actor in symbiosis with a well-groomed body and fashionable clothes. One image can change the visual message when changing its cultural attributes. As M. Kagan notes: "The little Chinese woman's leg or the wasp waist of a European aristocrat are cultural products that work as her signs, symbols of social status; this applies to an even greater extent to hairstyles, make-up, clothes, which can be considered as 'a second body' of a person, incomparably more accessible to cultural processing – all this taken together turns out to be the language in which a person represents himself around" (Kagan M., 1996, p. 137). In the modern world, this cultural «second body» may not carry comprehensive information. A millionaire can walk in a T-shirt and jeans, and a simple handyman can wear a classic suit, etc. The external projection of corporeality, or rather the method of its manifestation, indicates to us the leading values of successful self-identification of a person. Plasticity of perception is an alternative value of the virtual information society. The ability, acceptance and understanding of "dissimilar", "different" – is the path of mankind

co-evolution in the conditions of multiculturalism and a multi-information strategy for the development of society. Corporal projections should be preserved and transformed in a technogenic society – after all, they form the basis of humanistic development and the psychological aspect of harmonization of the human inner world.

Corporal-tactile attitude, along with other types of intelligence, is a mechanism of cognition and merging with the world, starting from an early age and a way of building personal boundaries – at a more mature age that allows you to create a zone of emotional comfort. J.-L. Nancy considering the body as «an organ of the formation of meanings» notes it both as an external and internal way of personal differentiation (Nancy J.-L., 1999, p. 105). “The body here is no longer distinct from anything; it distinguishes itself and distinguishes itself. Distinguishing itself, it distinguishes a certain self – it distinguishes itself as ‘The Self’ – and already proceeding from this it distinguishes two systems or two registers that appear to each other as ‘internal’ and ‘external’” (Nancy J.-L., 2006, p. 123). Corporeality forms as a psychosomatic integrity through the junction of the “external” and “internal” bodies.

The contextual understanding of reality – space and time carries the ontological mechanisms of corporeality, including bodily memory in its various manifestations – motional, motor, emotional, etc. A vivid expression of these methods of world reflection is observed in the hyperactive behavior of modern children. Theoretically, this fact may indicate “a deficit” of bodily manifestations and expansions in connection with the massive use of computer technology as a virtual gaming space, including by children. This is not an individual feature; it is about changes at the level of humankind co-evolution – a phase transition.

V. Vernadsky is exploring the prospects for the transition of the Biosphere to the Noosphere as a new geological phenomenon on the planet, notes: “In it (The Noosphere), for the first time, man becomes a large-scale geological force. He can, and must, rebuild the province of his life by his work and thought, rebuild it radically in comparison with the past. Wider and wider creative possibilities open before him. It may be that the generation of our grandchildren will approach their blossoming” (Vernadsky V.I. – the generation of “virtual personalities”. An unequivocal definition of this concept does not exist, but along with it the term “virtual corporeality” appears. This indicates a new type of transformation of corporeality from the nature sphere, society, culture into a virtual environment. “Virtual personality” excludes a number of constructs through which natural corporeality is realized, which leads to destructive processes and stressful situations in everyday life. A. Revonsuo analyzes presentation virtualism

and argues that “[...] perception is realized not by any immediate or direct contact with the external world, but indirectly via a surrogate of the external object unconscious, directly experienced” (Revonsuo A., 2006, p. 121).

Thus, realizing ourselves through virtual reality, we project a presence in artificial space that excludes natural forms of the corporeality embodiments – bodily expansion and relaxation that provide a correlation of sensory perception in the body area. Body expansion occurs when you relax. “Characteristic examples of corporeal expansion are the experience of beholding a wide, beautiful landscape, the first breaths outside in fresh air after having been locked inside a cramped and stuffy room, or the pleasant relaxing the body feels when gently gliding into a hot bathtub” (Schmitz H. and others, 2011, p. 241–259). The reverse state is bodily contraction. The opposite pole of corporeal contraction is a marked narrowing of the felt body, often in states of sudden, unexpected change to one’s bodily orientation – such contraction occurs in states of shock, in panic or moments of great focus and concentration» (Schmitz H. and others, 2011, p. 241–259).

These mechanisms reveal corporeality as a way of holistic reflection of a person through chains of conscious and unconscious, bodily and spiritual, etc. In addition, it reveals the actual dualism in solving the issue of corporeality in acts of perception and attitude. M. Merleau-Ponty explores the essence of human perception as a body structure, and the body as a «point of view on the world» and determines that: “The body is not just a causal but a transcendental condition of perception, which is to say that we have no understanding of perception at all in abstraction from body and world” (Merleau-Ponty M., 2012, p. 16).

If consciousness is a reflection of objective reality, then corporeality is the navigator of the boundaries between «I» and the surrounding reality. These are reflexes at the level of the biological body. For example, physical pain can indicate boundaries in space and focus on avoiding negative feelings in the next act of interaction. The nervous system regulates our behavior and protects us from danger. Mental pain – psychological suffering through the projections of the social body, which is built on the experience of relationships, indicates social boundaries (values). Researchers in the field of medicine and psychology often note that the physical and mental pain in the human brain is practically the same.

The violation of the natural projection of corporeality and its transfer to the artificial virtual world deprives a person of vital navigation in the real world. “The body is existence, and existence can only be bodily. This is the only radical and consistent materialism. This is materialism of exposed matter” (Nancy J.-L., 2006, p. 123). To comprehend true values, it is

necessary to refract through the basic human value – life. Awareness of the mortality of the body leads to the right accents of life and returns to the truly important values that are relevant in the real dimension here and now. The quintessence of reality is expressed through natural corporeality, which is modified under the influence of the Technosphere, but remains the basis of humanity and finds new forms of realization, including virtual ones.

Considering the situation of virtualization of the life of a technogenic society, we are faced with a paradox of a displacement of the natural way of self-identification. This is realized through the ability of a person to take out the artificial model of his “I” beyond the bodily physiological boundaries. Thus, a person has a virtual body in addition to the natural, social and cultural body. It has several advantages – many ways and forms of representing oneself, a variety of self-identification models, etc. But at the same time, the study of corporeality as a psychosomatic integrity reveals its most important and irreplaceable function – conjugation with reality here and now through sensory-emotional experience.

Conclusions

Co-evolution of the Technosphere and human life leads to new ways of self-identification of a person. Technogenic anthropology reveals new paradigms for the research of the issue of Human Corporeality. Its purpose is not to refute or limit the application of technological innovations, but to find a way to consider them in integrity and acceptance. Human Corporeality is considered as psychosomatic projections of the personality. The existential manifestations of Human Corporeality are designated through its main substrates: corporeal intelligence, corporeal sensuality, corporeal states, corporeal image, cultural attribution of the body, etc. These constructs allow a person to keep a communicative equilibrium between different kinds of anthropogenic being: nature, society, culture, technology and virtual reality. As a result, the nominal classification of a person's physicality is determined by the areas of its implementation: “biological body”, “social body”, “cultural body”, “virtual body”.

Plasticity is represented as a core value that makes it possible to adapt in the information society. Many situations, patterns and forms of communication of a technogenic society require a flexible type of human reflection. It is possible to ensure this only by using the natural mechanism of psychological balance between the boundaries of “I” and “Not-I” – corporeality as a way of natural communication. The quality of corporeality as

an alternative value for the social being co-evolution and the Technosphere outlines the prospects for the study of physicality (or rather, “virtual corporeality”) in Anthropology of Technology.

KOEWOŁUCJA LUDZKIEJ CIELESNOŚCI I TECHNOSFERY: DYSKURS FILOZOFICZNO-ANTROPOLOGICZNY

(STRESZCZENIE)

W artykule autorka omówiła strategię rozwoju i transformacji bytowej sytuacji człowieka w kontekście postępu technicznego. Zmiana naturalnego sposobu bytowania człowieka na technogeniczny sposób komunikacji prowadzi do powstawania „wirtualnej osobowości”. Zachodzi także proces asymilacji tego, co naturalne, z tym, co sztuczne. Ponadto prowadzone rozważania dotyczą kwestii, jaką są etyczne alternatywy odnośnie do kształtowania się przyszłej egzystencji człowieka jako gatunku istniejącego w technosferze, a także możliwości zachowania człowieczeństwa w różnych technologicznych projekcjach osobowości. Według autorki koewolucja człowieka i technosfery wiąże się z powstawaniem coraz to nowych sposobów ich interakcji i domaga się rozwijania antropologii technogenicznej. Można też zauważyć, że natura ludzkiej cielesności znajduje swoje odzwierciedlenie w takich pojęciach, jak „ciało biologiczne”, „ciało społeczne”, „ciało kulturowe” czy „ciało wirtualne”. Tego typu pojęcia ujawniają plastyczność jako główną wartość i jakość, dzięki której współczesny człowiek może lepiej komunikować się z innymi i zrozumieć samego siebie.

CO-EVOLUTION OF HUMAN CORPOREALITY AND THE TECHNOSPHERE: A PHILOSOPHICAL-ANTHROPOLOGICAL DISCOURSE

(SUMMARY)

This study reflects the development and transformation strategies of the anthropological situation in the context of technological progress. The change of the natural way of human existence to the technogenic method of communication leads to the formation of the image of «a virtual personality». The process of assimilation of natural and artificial takes place. Ethical alternatives of the human existence as a species within the Technosphere and the preservation of their humanistic imperative through the bodily projections of the personality are considered. Co-evolution of man and the Technosphere leads to a new way of their interaction and generates Technogenic Anthropology. The study of corporeality in various areas of human life is reflected in its ontological disclosure through the nominal classification: «biological body», «social body», «cultural body», and «virtual body». Plasticity is revealed as the main value and quality, which provides self-reflection in various forms of communication of modern man.

BIBLIOGRAPHY

- Adler Alfred, 1997, *Individual Psychology as a Way to Human Knowledge and Self-Knowledge*, Kiev: The Science of Living.
- Gardner Howard, 1993, *Multiple intelligences: Theory in practice*, New York, NY: Basic Books.
- Haff Peter, 2014, *Humans and technology in the Anthropocene: Six rules*, *The Anthropocene Review* 2014, vol. 1(2) 126–136, DOI: 10.1177/2053019614530575.
- Kagan Moses, 1996, *Philosophy of Culture*, St. Pb., LLP TC “Petropolis”.
- McLuhan Marshall, 1994, *Understanding Media: The Extensions of Man*, London; New York: Routledge, 2010, cop..
- Merleau-Ponty Maurice, 2013, *Phenomenology of Perception*, Routledge.
- Moiseev Nikita, 1998, *Once again on the issue of Co-evolutionthe*, *Questions of Philosophy*, No. 8, p. 26–32, <http://www.ecolife.ru/jornal/ecap/1998-2-2.shtml>.
- Nancy Jean-Luc, 1999, *Corpus*, M.: Ad Marginem Publ.
- Nancy Jean-Luc, 2006, *Body: inside or out. Fifty-eight body testimonies*, Blue sofa, Vol. 9, M., p. 122–138, http://intelros.ru/pdf/siniy_divan/09/9.pdf.
- Ortega-y-Gasset Jose, 1993, *Reflections of technology*, *Questions of philosophy*, No. 5, p.164–232, <https://gtmarket.ru/laboratory/expertize/5483>.
- Revonsuo Antti, 2006, *Inner Presence: Consciousness as a Biological Phenomenon*, MA: The MIT Press, Cambridge.
- Rothacker Erich, 1966, *Philosophische Anthropologie*, Bouvier, Bonn.
- Rozin Vadim, 2004, *Internet – a new information technology, semiosis, virtual environment // Influence of the Internet on the consciousness and structure of knowledge*, M.: IF RAS, p. 3–23.
- Schmitz Hermann, Müllan Rudolf & Slaby Jan, 2011, *Emotions outside the box – the new phenomenology of feeling and corporeality*, *Phenomenology and Cognitive Sciences*, vol. 10, p. 241–259, <https://link.springer.com/article/10.1007/s11097-011-9195-1>.
- Vernadsky Vladimir, *Some Words About The Noösphere1 by Vladimir I. Vernadsky*, Spring 2005, *21st Century Science&Technology*, p. 16–21, http://21sci-tech.com/translations/The_Noosphere.pdf.
- Zalasiewicz Jan et al., 2008, *Are we now living in the Anthropocene?*, *GSA Today*, vol. 18, no. 2 , p. 4–8, doi: 10.1130/GSAT01802A.1.

