

MINISTERUL SĂNĂTĂȚII, MUNCII ȘI PROTECȚIEI SOCIALE AL
REPUBLICII MOLDOVA

*Universitatea de Stat de Medicină și Farmacie "Nicolae Testemițanu"
din Republica Moldova*

*Catedra Filosofie și Bioetică
Centrul Național de Bioetică din Republica Moldova*

Strategia supraviețuirii din perspectiva bioeticii, antropologiei, filosofiei și medicinei

Materialele Conferinței a 25-a Științifice Internaționale

*Culegere de articole științifice
Vol. 25*

The survival strategy in terms of bioethics, anthropology, philosophy and medicine

Materials of the 25th International Scientific Conference

*Collection of scientific articles
Volume 25*

**Redactor responsabil,
dr. habilitat în filosofie, prof. universitar
Teodor N. Țirdea**

**CHIȘINĂU – 2019
CEP „Medicina”**

Strategia supraviețuirii din perspectiva bioeticii, antropologiei, filosofiei și medicinei. Materialele conferinței a 25-a științifice internaționale II Culegere de articole științifice. Ediția 25.

Red. responsabil dr. hab. în filosofie, prof. univ. **Teodor N. Țirdea**.

- Chișinău: CEP "Medicina", 2019. – 204 p.

Aprobat

de Colegiul de redacție al Culegerii de articole al Conferinței a 25-a Științifice Internaționale din 21 august 2019
Procesul verbal Nr.1

Colegiu de redacție:

Țirdea Teodor N. (R. Moldova) dr. hab. în filosofie, prof. univ., acad.	- redactor responsabil
Cheshko Valentin (Ukraina) dr. hab. în filos. prof.univ.	- membrul colegiului
Iashevici Iadviga S. (R. Bielorusia) dr. hab. în filosofie, prof. univ.	- membrul colegiului
Ioan Petru (România) dr. hab. în filos. prof.univ.	- membrul colegiului
Mihail Rarița (România) dr. în filos. conf. univ.	- membrul colegiului
Ojovanu Vitalie I. (R. Moldova) dr. hab. în filosofie, conf. univ.	- membrul colegiului
Pustovit Svetlana (Ukraina) dr. hab. în filos. prof.univ.	- membrul colegiului
Sıcıov A.A. (Rusia) dr. hab. în filos., prof. univ.	- membrul colegiului
Ursul A.D (Rusia) academician RM, dr.hab., prof. univ	- membrul colegiului

În culegerea de față sunt incluse materialele *Conferinței a 25-a științifice internaționale* cu genericul „*Strategia supraviețuirii din perspectiva bioeticii, antropologiei, filosofiei și medicinei*”, în cadrul căreia au fost examinate probleme ce țin de elaborarea mecanismelor și instrumentarilor de asigurare a securității umane, de protejare a sănătății publice din perspectiva cunoștințelor bioetice, antropologice, filosofice și medicale. Ediția curentă - **Vol. 25** reprezintă o continuare a publicațiilor materialelor conferințelor științifice precedente în anii 1995-2018, îngrijite și editate de catedra Filosofie și Bioetică a USMF "Nicolae Testemițanu" (Red. responsabil dr. hab. în filosofie, prof. univ. **Teodor N. Țirdea**). Lucrarea este adresată oamenilor de știință, studenților, rezidenților, practicienilor, tuturor celorla ce sunt preocupați de problemele asigurării securității umane.

Recenzenți: **Tintiuc Dumitru**, dr. hab. în medicină, profesor universitar
Eșanu Anatolie, dr. în filosofie, conferențiar universitar

Publicarea materialelor în culegerea de față este realizată în redacția autorilor

Lucrarea de față a fost realizată în cadrul Proiectului „Promovarea și implementarea practică a bioeticii medicale în Republica Moldova”

Descrierea CIP a Camerei Naționale a Cărții

Strategia supraviețuirii din perspectiva bioeticii, antropologiei, filosofiei și medicinei – The survival strategy in terms of bioethics, anthropology, philosophy and medicine : Materialele Conferinței a 25-a Științifice Internaționale : Culegere de articole științifice : [în vol.] / col. de red.: Teodor N. Țirdea (red. resp.) [et al.] – Chișinău : Medicina, 2018 (Tipogr. "Print-Caro") – . – ISBN 978-9975-56-043-6.

Vol. 25. – 2019. – 204 p. – Univ. de Stat de Medicină și Farmacie "Nicolae Testemițanu" din Rep. Moldova, Catedra Filosofie și Bioetică, Centrul Naț. de Bioetică din Rep. Moldova. – Tit. paral.: lb. rom., engl. – Texte : lb. rom., engl., rusă. – Rez.: lb. rom., engl., rusă. – Bibliogr. la sfârșitul art. – 100 ex. – ISBN 978-9975-56-682-7.

17+1/14+614.2(082)-135.1-111-161.1

S 95

CUPRINS

Cuvînt înainte	8
Foreword	9

Partea I

ROLUL ȘI LOCUL PARADIGMEI BIOETICE ÎN ELABORAREA ȘI REALIZAREA STRATEGIEI DE ASIGURARE A SECURITĂȚII UMANE

Banari Ion (or. Chișinău, Republica Moldova) <i>Determinări metodologice cu privire la studiul valorilor creștine în abordările bioetice</i>	10
Capcea Valeriu (or. Bălți, Republica Moldova) <i>Locul și rolul datoriei morale în existența societății postmoderne</i>	16
Cheshko V.T. (Kharkiv, Ukraine) <i>As a stable adaptive strategy homo sapiens, NBICS technology and bioethics became evolution mechanism (anthropological and biopolitical essay)</i>	20
Leorda Ana (or. Chișinău, Republica Moldova) <i>Perspectivile aplicării principiilor etice în cercetările biomedicale</i>	23
Ojovanu V.I. (or. Chișinău, Republica Moldova), Cojocaru V. (or. Chișinău, Republica Moldova) <i>Aspectul axiologic al consilierii spirituale a deținuților</i>	27
Ostapenko B.I. (Kiev, Ukraine) <i>Methodological enquiry to belmont report</i>	31
Pustovit S.V. (Kiev, Ukraine), Palei L.A. (Kiev, Ukraine) <i>European bioethics: modern dimentions</i>	35
Rubanovici Ludmila (or. Chișinău, Republica Moldova), Rusnac Daniela (or. Chișinău, Republica Moldova) <i>Cunoașterea bioetică – mod de asigurare a calității în sănătate</i>	39
Sprincean S.L. (or. Chișinău, Republica Moldova) <i>Perspective de optimizare a sectorului de securitate din Republica Moldova cu aportul metodologic al bioeticii politice și concepției securității umane</i>	42
Țirdea T.N. (or. Chișinău, Republica Moldova) <i>Binomul «bioetica-nooetica» - un nou imperativ cheie al teoriei morale în epoca tehnologiilor planetare avansate: abordare discursiv-sistemică</i>	45
Бирюков В.С. (г. Одесса, Украина), Десятская Ю.В. (г. Одесса, Украина), Циунчик Ю.Г. (г. Одесса, Украина) <i>13 граней совершенства: этический аудит международного стандарта ISO 19011</i>	49

AS A STABLE ADAPTIVE STRATEGY HOMO SAPIENS, NBICS TECHNOLOGY AND BIOETHICS BECAME EVOLUTION MECHANISM (ANTHROPOLOGICAL AND BIOPOLITICAL ESSAY)

КАК СТАБИЛЬНАЯ АДАПТИВНАЯ СТРАТЕГИЯ НОМОСАПИЕНС, NBICS ТЕХНОЛОГИЯ И БИОЭТИКА СТАЛИ ЭВОЛЮЦИОННЫМ МЕХАНИЗМОМ (АНТРОПОЛОГИЧЕСКОЕ И БИОПОЛИТИЧЕСКОЕ ЭССЕ)

Cheshko Valentin T.

Doct. Sci.

Simon Kuznets Kharkiv National University of Economics

Kharkiv, Ukraine

Summary

The subject of the essay is the genesis of the evolutionary strategy of стратегии *Homo sapiens* (SESH) as a carrier element of the transformation of technology and ethics into the main factors of anthropogenesis and the evolution of complex, self-organizing human-dimension systems.

Аннотация

Предметом эссе является генезис эволюционной стратегии *Homo sapiens* ((SESH) как несущего элемента процесса превращения технологии и этики в основные факторы антропогенеза и эволюции сложных самоорганизующихся человеко-размерных систем.

Previously, the metaphysical concept of HIGH HUME technology was developed [1; 2]. Its basic postulates are the anthropic principle in Wheeler's formulation and the three-module model of a rational human evolutionary strategy (SESH). As a conclusion, the inevitable stratification of the post-Darwinian scheme of the evolutionary process into an objective-spontaneous and subjective-rationalistic components was postulated. The rationalistic component of the evolution of human-dimensional self-organizing systems includes the triad of BIOTECHNOLOGY-BIOETHICS-BIOPOLITICS, Bioethics plays the role of a controleur-homeostat between biotechnology and biopolitics; technology serves as a transmission mechanism between SESH and the rationalistic component of anthropogenesis and the evolution of technological civilization.

The general scheme of the genesis and development of SESH structural organization fits well with "Tektology" by A.A. Bogdanov (Malinovsky) [3] and the "triple helix" model by L. Leydesdorff et al. [4] that are two variants of general systems theory, separated in time $\frac{3}{4}$ century. In accordance with the tectological concept [3, c. 208] evolution of self-organizing systems is a regular alternation of two phases – conjugation (C) and demarcation (D). First, conjugation phase is a cycle of disintegration – integrating external to the system or its component connections and relationships. The result is the expansion of the evolving system, and this system is expanding the scope of its influence on the new elements and the complexity of the structure of the newly formed meta-system.

Demarcation phase is a process of internal structuring of the evolving system, accompanied by the differentiation of the functions of its constituent elements and the complexity of the connections between them.

In fact, as already noted, we are dealing with the description of macro-evolutionary process involving complex systems, regardless of the substantial nature. So, here it is well within the Thomas Kuhn scheme of theoretical scientific knowledge, where there are two successive phases in the development of science: (1) evolution phase that is the actual expansion of the pool of objects that serve as the application of this paradigm (disciplinary matrix); (2) revolution phase that is potential expansion of the application pool object of scientific theory as a result of the change of scientific paradigm.

The result of this process will be pulsating expansion of the applicability of successive scientific theories, that is to say, the expansion of "environment niche" of theoretical discipline.

As stated by Sarah Chan from Usher Institute for Population Health Sciences and Informatics, University of Edinburgh, UK [5, p. 49], "The history of our species is a stream of discoveries – major and minor – which have allowed us to progress and direct, to some extent, the course of our evolution".

Actually, in anthropology, the same patterns we observe in the genesis of SESH. The chain of successive ecological and evolutionary crises has resulted in pulsating expanding the limits of ecological niches and areal of *Homo sapiens*. The transition from one expansion cycle of ecological

niche to another was associated with the transformation of the internal structure of SESH that is transfer of a leading member of the adaptive strategy in the direction of biological adaptation to

socio-cultural adaptation and after to rationalist innovation. The amplitude of the expansion of the boundaries of the human ecological niche is determined by the efficiency (i.e. speed of adaptation genesis) corresponding component of SESH. The separation of each from the existing members of the triad of SESH began with the expansion of controlled contact to the environment of hominines (complication of ecological niche (S-phase) and ends with a change in the internal structure (D-phase).

Most modern scholars, anthropologists and evolutionary psychologists believe that individuals belonging to the biological species *Homo sapiens* are born with a built-in system of gene modules that provide the ability to assimilate the reproduction of social and cultural components of the adaptive information. In other words, every human being has an innate ability to learning to tools and ways of inter-individual and intergroup communication.

Within the framework of SESH theory, social and cultural heredity uses as elements of the maintenance and reproduction of their own organization “building blocks”, that are biological components of SESH. An alternative view, there is postulates that the genesis of social and cultural inheritance is provided by exclusively own internal mechanisms. (In more detail, these two hypotheses are set forth in the article by Cecilia Heyes [6]) In this case, the absorption of the encoding system and “instrumental support (language, reading, writing) of a communication are accompanied and, at least – in part, provided by biological component of epigenetic transformations of SESH.

There is a second (socio-cultural) in parallel to biological (genetic itself) system of the generation-replication-implementation of adaptive information; and time of occurrence of it is a complex problem for theory of anthropogenesis now. In scientific publications, circulate the three most commonly used hypothesis about the place and time of this, event [7, p.1298; 2, p. 1060].

In accordance with the first hypothesis, which focuses on the biological component of SESH, the reason for this phenomenon is a certain macro-mutation of the genome, essentially on the functional organization of the nervous system and the human psyche of an anatomically modern type. This event dates back to 50 thousand years ago and “tied to the African region of modern areal of *Homo sapiens*. The second hypothesis is based on the socio-cultural determination of cognitive processes, tying them with cultural innovations occurred 60-80 thousand years ago.

Finally, the third hypothesis suggests that in fact the process is stochastic and cumulative in nature. The emergence and spread of the same cultural innovation happened many times, and repeatedly interrupted. The initiating factor, to change this situation, was the demographic (Mellars, 2006). As modeling shown, on reaching the population size at 10⁵ individuals intergroup exchange and cross-group communication begins to take shape.

In any case, the ability to perceive and ability to active disseminate of relevant information through adaptive communication (learning and pedagogy) are an initial comprehensive adaptations during human evolution [8]. It led to the transition to the exponential growth in the number of socio-cultural adaptation and, accordingly, the adaptive capacity of hominines. “Germs forms of over-group social communities become the unit of evolution. Increase in the share of horizontal intergroup diffusion of social and cultural adaptation may have become the main reason for the differentiation of intra-system communication (speaking and writing language) too.

It initiated the genesis of intergroup exchange of products means rationalistic adaptations (proto-commerce, proto-market). Both factors in this interpretation acted as system group adaptations of “2-nd queues, initiated a total restructuring of the bio-, and techno-rational and culture sets of their adaptations in the integral anthropogenesis of hominines toward *Homo neandertalicus* and *H. sapiens*. The first of these adaptations (conventionalist linguistic diversity intergroup) in accordance with this hypothesis (Pagel, 2013) served as the immune system, i.e., safeguard of cultural and technological adaptations pool from “leakage” outside the group. Thus, the adaptive advantage of each group is relatively protected from erosion and leveling relative to other groups.

The second adaptation (ancestral form of the modern market) provides the appearance over-group adaptive communications and formation of over-group social structures. Thereby, while maintaining inter-group differences in the specific adaptations of the value of adaptability of each of them increased in the framework of inter-group associations.

module, the techno-rationalistic module originated within its predecessor (socio-cultural module) and was based also initially on the mechanism of a socio-cultural transmission (inheritance) of its “ancestor”.

Technological traditions are interpreted as a complex system of cultural inheritance, with information passed between individuals through the sophisticated human capacity for mimesis and social learning. This transmission system enables particular combinations of cultural information to persist from one generation to the next and from the social group to another group. The separation and autonomization of the techno-rationalistic module resulted from the emergence of a conventionalist language in a similar mechanism [10, p. 341-344]

The key and irreversible point of the genesis of SESH was the Neolithic revolution, when, strictly speaking, the prerequisites arose for the idea of man’s assuming the role of the Creator and the threat emanating from the knowledge acquired by man. Likewise, the first global technological revolution doomed man to tireless efforts to transform this world: “Cursed is the ground because of you in sorrow shalt thou eat of it all the days of thy life; thorns and thistles forth it to you; and you shall eat the herb of the field. In the sweat of thy face shalt thou eat bread, till you return to the ground from which you were taken; for dust you are and dust you shall return” (Genesis, 3:17 – 21).

Since the inception of SESH, the main principle of its functioning and, therefore, the survival of its carriers (hominines) is the construction of an evolutionary-ecological niche, i.e. its transformation into a cultural and ecological niche. The main global-ecological attribute of anthropogenesis is the radical reformatting of ecological systems as a result of socio-culture-anthropogenesis.

The role of SESH as an evolutionary factor reached its maximum with the emergence of technological civilization (17-18th centuries AD). During this period, a two-tier homeostatic system of balanced co-evolutionary relations was finally formed. Here, the role of the balancer controller is still played by culture. SESH at this time is a dynamic homeostat of genetic-cultural co-evolution and the techno-humanitarian balance, closing on the socio-cultural component of the adaptive complex. Now it becomes apparent already prospect in the near future to the last transition (IVth) phase of the cycle. Action of externalities of the evolution of culture (ecological environment, biological and ratio-technological modules of SESH) is equivalent to the displacement of techno-humanitarian balance towards predominance of technological component. Ultimately, it leads to the socio-cultural gap, the transition from Phase III to phase IV configuration of SESH. It determined the technologization of evolution of biological (genetic engineering), and socio-cultural components of SESH.

Adaptive fractal of SESH forms uncompensated loop forward and backward linkages between the individual modules. The loop of direct and inverse links between culture and biological adaptations (genome) disappears, which is fraught with a global socio-cultural rupture, i.e. violation of the continuity of evolutionary transformations of cultural types of *Homo sapiens*. This, in turn, means the destruction of both genetically-cultural co-evolution and the techno-humanitarian balance. Thus, coherent continuum series of conjugate evolutionary transformations of the genome (the system of biological adaptations), cultures and technologies are transformed by a sequence of discrete configurations of the triad of the same elements. The transition from one configuration to another will be determined solely by the laws of technogenesis, outside the co-evolutionary relations with bio- and cultural genesis.

References

1. **Cheshko V. T., Kosova Y. V., Glazko V. I.** *Metaphysics Of Controlled Evolution (Anthropic Principle, Evolutionary Epistemology And Ethics Of Nano-Bio Technologies)* //Advances in Social Sciences Research Journal. 2018. Т. 5. No 2. P.71-85.<http://DOI:10.14738/assrj.52.4136>
2. **Чешко В. Ф. и др.** *Антропоцен. Философия биотехнологии* //Москва: Курс. – 2018. 400 с.
3. **Богданов А.А.** *Тектология: (Всеобщая организационная наука)*. В 2-х кн. М.: Экономика, 1989. Кн. 1. 304 с.; Кн. 2 351 с.
4. **Leydesdorff L., Franse S.** *The Communication of Meaning in Social Systems* // Systems Research and Behavioral Science. 2009. 26, No 1. P. 109-117.
5. **Grimm, N., Jovanovic, B. R., & Sorgner, S. L. (Eds.).** *Evolution and the future: anthropology, ethics, religion*. Frankfurt am Main: Peter Lang, 2013. 190 pp.

6. **Heyes C.** *Grist and mills: on the cultural origins of cultural learning* // Phil. Trans. Roy. Soc. 2012. Ser . Vol. 367. P.2181–2191.
7. **Powell A., Shennan S., Thomas, M.** *Late Pleistocene demography and appearance of modern human behavior* // Science. 2009. Vol. 324, No 5932. P. 1298–1301.
8. **D’Errico Fr, Stringer Ch. B.** *Evolution, revolution or saltation scenario for the emergence of modern cultures?* // Trans. R. Soc. 2011. Ser. B.Vol. 366, No. 1567. P. 1060-1069.
9. **Csibra, G. , Gergely, G.** *Natural pedagogy as evolutionary adaptation* Phil. Trans. Royal. Soc. 2011. Ser. B 366. P. 1149–1157.
10. **Jordan P.** *Technology as human social tradition: Cultural transmission among hunter-gatherers.* Oakland, Calif.: Univ of California Press, 2014. 412 pp.