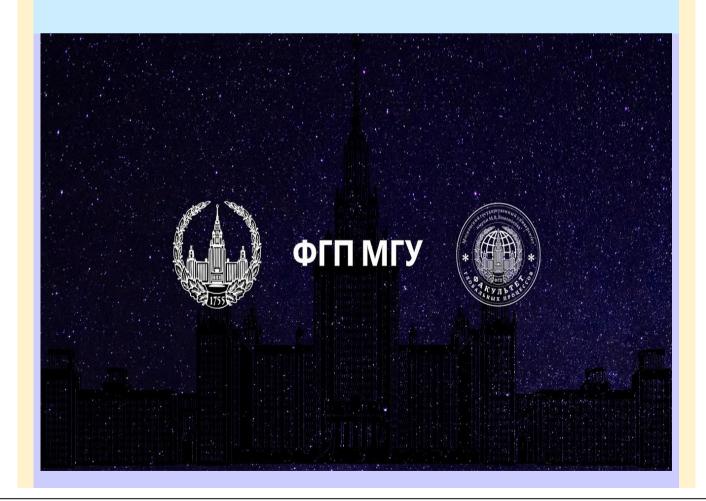
### **Book of Abstracts**

24th International seminar on Biocosmology
within the framework of the MSU(FGP)\_Congress-"Globalistics-2023"
«Globalisctics-2023: Sustainable Development in the Context of Global Processes»;

October 23–27, 2023; Moscow State University named after M.V. Lomonosov; at the *Faculty of Global Studies*, *MSU* 

on the topic:

"Biocosmological U-turn towards the Organicist Pole of Triadological scholarly knowledge and the North-Eastern vector of the peaceful world evolvement"





## Московский государственный университет имени М.В. Ломоносова

## ФАКУЛЬТЕТ ГЛОБАЛЬНЫХ ПРОЦЕССОВ

Lomonosov Moscow State University

## FACULTY OF GLOBAL STUDIES



### Biocosmological Association

for Universalizing Scientific and Philosophical Research based upon the Original Aristotelian Cosmological Organicism

24<sup>th</sup> International seminar on Biocosmology / XXIV Международный семинар по Биокосмологии

по теме / on the topic

"Biocosmological U-turn towards the Organicist Pole of Triadological scholarly knowledge and the North-Eastern vector of the peaceful world evolvement"

«Биокосмологический разворот к Органицистскому полюсу Триадологического научного знания и Северо-Восточному вектору мирового-реасеful развития»

Дата: 25 октября, 2023

Date: October 25, 2023

Время: (25 октября, 10:00 – 17:00)

Time: (October 25, 10:00 – 17:00)

Модератор: Хруцкий К.С.

Moderator: Khroutski Konstantin S.

#### Авторы докладов / Authors of presentations

ФИО / Name	Тема доклада / Торіс	Место работы/
		Affiliation

Проф. ОРЛОВ Александр Иванович / ORLOV Alexander Ivanovich	В.И. Вернадский и новая парадигма экономической науки /V.I. Vernadsky and the new paradigm of economic science	Московский государственный технический университет им. Н.Э. Баумана, г. Москва
Prof. LI Ping / проф. ЛИ Пин	Ethics towards the second beginning / Этика на пути ко второму началу	Henan University of Economics and Law; Zhengzhou, 450002, CHINA.
Проф. ГРИНЧЕНКО Сергей Николаевич / GRINCHENKO Sergey Nikolaevich	Триада Типов времён «Хронос—Циклос—Кайрос» и Ноосфера В.И. Вернадского— в контексте поисково-оптимизационной модели процессов самоуправления природы / Triad of Time Types "Chronos—Cyclos—Kairos" and Noosphere of V.I. Vernadsky— in the Context of the Search-Optimization Model of Nature Self-controlling Processes	Института проблем информатики Федерального исследовательского центра «Информатика и управление» РАН, г. Москва
CHIATTI Leonardo / КЬЯТТИ Леонардо	Being intimate with the stars. A brief reflection on time, potentia and entelechy / Близость со звездами. Краткие размышления о времени, потенции и энтелехии	ASL Viterbo Medical Physics Laboratory; ITALY
Проф. СОМКИН Александр Алексеевич / SOMKIN Alexander Alekseevich	Органический подход в понимании личности в современной социальной философии / Organic approach to understanding personality in contemporary social philosophy	Национальный исследовательский Мордовский государственный университет им. Н. П. Огарева; г. Саранск
Prof. LIU Xiaoting	Beyond "Organic" – Preface to the Theory of Vitalism / За пределами «Органического» – Предисловие к теории витализма	Beijing Normal University, Beijing 100875, CHINA
WAN Zhaoyuan / Вань Чжаоюань	A Preliminary Study of the Cosmological Views of Kang Youwei (1858-1927) / Предварительное исследование космологических взглядов Кан Ювэя (1858-1927)	School of Philosophy, Beijing Normal University; Beijing 100875, CHINA
Проф. МАКСИМЮК Николай Несторович / MAKSIMYUK Nikolai Nestorovich	"Пришло время собирать камни": концепция «автотрофности человечества» В.И. Вернадского и «социальной автотрофности» А.М. Уголева — в интегративном подходе к разрешению текущего экологического и продовольственного кризиса / "The time to gather stones.": V.I. Vernadsky's concept of "autotrophy of mankind" and A.M. Ugolev's concept of "social autotrophy" - in an integrative approach to solving the current environmental and food crisis	Новгородский государственный университет имени Ярослава Мудрого; г. Великий Новгород



д.ю.н. КОЖЕМЯКОВ Алексей Семенович / КОΖНЕМУАКОV Alexey S.	Стратегия и тактика в мировой политике: возможность гармоничного сопряжения / Strategy and Tactics in World Politics: The Possibility of Harmonious Integration		Независимый эксперт по международным отношениям; профессорконсультант московских университетов; г. Москва
		уплений первого дня работы Семин he Presentations made on the First da Sec	
Время: (26 октября, 10:00 – 16:00) Тіте: (С		Date: October 26, Time: (October 26, 10: Moderator: Khroutski K	00 - 16:00)
ZHANG Xiuhua & HE Di / ЧЖАН Сюхуа и ХЭ Ди	Life	of Marx's and Whitehead's Outlook on дов Маркса и Уайтхеда на жизнь	China University of Political Science and Law & the University of the Chinese Academy of Sciences; Beijing, CHINA
HE Jingyi / ХЭ Цзинъи	A review of the research on Organic Marxism of Chinese academic circles in recent years  / Обзор исследований по органическому марксизму китайских академических кругов за последние годы		School of Marxism, Northwest Agriculture and Forestry University; Shaanxi, Xianyang, CHINA
ZHAI Yujia / ЧЖАЙ Юйцзя	The Theoretical Path and Practical Principles of "Smart Library" – From the Perspective of Process Philosophy  / Теоретический путь и практические принципы «умной библиотеки» – с точки зрения философии процесса		China University of Political Science and Law; Beijing, CHINA, 100088
HE Qionghui / ХЭ Цюнхуэй	Individuals and a Wi Educational Model / Органическое ра	development of Human Potential as thole from the Perspective of the Anisa азвитие потенциала человека как с точки зрения образовательной	School of Philosophy, Beijing Normal University; Beijing 100875, CHINA



ФЕРНАНДЕС Мириам / FERNÁNDEZ Miriam	История первой мировой глобализации и отношений Испании и Китая в XVI—XVIII вв., в свете Биокосмологического подхода  / History of the first world globalization and relations between Spain and China in the XVI-XVIII centuries, in the light of the Biocosmological Approach.	Институт Арка Реал; Вальядолид, ИСПАНИЯ
BRAVO GARCIA Jose Ramon / БРАВО ГАРСИЯ Хосе Рамон	Alliance between Russian and Spanish speaking countries in a changing world system  / Альянс между русскоговорящими и испаноязычными странами в меняющейся мировой системе	The Gustavo Bueno Foundation, Oviedo, SPAIN
NAKATOMI Kiyokazu / НАКАТОМИ Киёкадзу	Organic Cosmology of Vernadsky and Asian Philosophies / Органическая космология В.И. Вернадского и азиатские философии	Chiba Prefectural Matsuo High School Sammu, JAPAN
ХРУЦКИЙ Константин Станиславович / КНROUTSKI Konstantin Stanislavovich	Пробил Час Биокосмологической Ноосферы: к реализации естественнонаучным путем полного (180°) разворота, от Трансценденталистского к Органицистскому полюсу — в Триадологическом реасемировом движении и интегральном (в совокупности целостного взаимодействия антропологической, социокультурной, экологической и других сфер) восхождении человечества на естественно (последовательно) новый и высший в сложности Ноосферный стратум мирового развития  / The Hour of Biocosmological Noosphere has struck: towards the realisation by natural science of a complete (180°) turn from the Transcendentalist to the Organicist pole - in the Triadological peace-world movement and integral (in the totality of holistic interaction of anthropological, sociocultural, ecological and other spheres) ascent of mankind to a naturally (sequentially) new and higher in complexity Noospheric stratum of world evolvement)	Новгородский государственный университет имени Ярослава Мудрого, Великий Новгород

Общее дискуссионное обсуждение поднятых на Семинаре вопросов

/ General discussion of the issues raised at the Seminar

# V.I. Vernadsky and the new paradigm of economic science Alexander I. ORLOV 1

The new paradigm of economic science is based on a solidary digital economy, which we are developing in response to requests from the military-industrial complex (including aviation and astronautics) and other sectors of the national economy. In accordance with the new paradigm, we consider the problems of artificial intelligence and changing technological structures. The new paradigm comes from the overdue biocosmological turn towards the Organicist pole of Triadological scientific knowledge and the North-Eastern vector of world development. The doctrine of the noosphere by V.I. Vernadsky and Russian cosmism in general is of great importance for the new paradigm. The preliminary results of a large area of research reflected in a number of our books and articles are summed up (see RSCI).

As established by V.I. Vernadsky, the main prerequisites for the emergence of the noosphere are as follows:

- The spread of Homo sapiens across the entire surface of the planet and its victory in competition with other biological species;
- Development of planetary communication systems, creation of a unified information system for humanity;
- The discovery of new sources of energy such as atomic energy, after which human activity becomes an important geological force;
- The victory of democracies and access to government for the broad masses;
- The increasing involvement of people in the pursuit of science, which also makes humanity a geological force;
- The limits of growth determine the guidelines for economic development. Environmental problems have been the focus of attention of researchers and society as a whole for more than half a century. In 1972, the report "The Limits to Growth" by D. Meadows and others was published, which is still very relevant today. Since the currently accepted concept of expanded reproduction leads to exponential growth of macroeconomic indicators, the presence of growth limits leads to the conclusion that it is necessary to change the guidelines for economic development;

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• For the perception of the report, it is important that, according to the Russian Science Citation Index, the contribution to science of A.I. Orlov (measured by the number of citations) is 7.24 times more than the President of the Russian Academy of Sciences. Professor A.I. Orlov is the most cited researcher at Bauman Moscow State Technical University, one of the most cited mathematicians and economists in Russia. As of 12/14/2023, the RSCI lists 702 publications and 18,420 citations, with an H-index of 46.

*Three stages in the development of economic science*. It is necessary to analyze the development of economic science. Let us highlight three stages: Aristotle – market economy – modernity.

Aristotle - the first economist in the history of science. Economics for Aristotle is the science of rational management in economic life, of activities aimed at meeting people's needs, i.e. for the production and acquisition of goods for the home and the state. Aristotle considered different levels of economic entities - household, enterprise (agricultural, urban production), city (polis), region (satrapy), state (empire). From Aristotle's point of view, chrematism (i.e. activities aimed at acquiring benefits, making a profit, accumulating wealth, primarily in the form of money) is unnatural. Thus, Aristotle considered it necessary to support producers of goods and fight financial speculators.

The negation of Aristotle's views is a market economy focused on profit and increased consumption. In accordance with the views of supporters of a market economy the state must be removed from the leadership of economic life. Supporters of a market economy began to assign him the role of a "night watchman." The main thing is to ensure free competition. The chrematistics criticized by Aristotle came to the fore with their fundamental rule: the purpose of economic activity is to obtain benefits (profits). It is quite natural that adherents of a market economy encourage activities in the field of financial speculation.

Let us note that even the understanding of the term "economy" itself has changed dramatically. From the point of view of marketers, Aristotle's concept does not relate to economics, but to the theory of management of economic activities, i.e. to management. At the same time, management itself was moved from the center of economic science "to the margins" and declared to be only one part of it.

This is how Aristotle's economics was rejected. But soon, in accordance with the laws of dialectics, the negation of the negation began. Currently, the economy is mixed, operating on the basis of a combination of plan and market.

The need for active government intervention in economic life was realized by the end of the 19th century. And then - in the twentieth century. - state power structures actively managed the economy in the main economically developed countries. In particular, in the USA (especially under President F. Roosevelt during the Great Depression), in the USSR, in Germany. After World War II, government agencies were very active in managing economic processes in various countries around the globe – China, India, Japan, Singapore, France, etc. Even in the most "market" country - the USA – the share of state participation in the economy in the twentieth century. increased 4 times and reached approximately one third. (By the share of state participation in a country's economy we mean the ratio of the expenditure part of its budget to the gross domestic product). The theoretical justification for the leading role of the state in managing economic life was given by the English economist J. Keynes.

Modernity is a period of denial of the market economy. To replace the "market economy," a new paradigm of economic theory is needed. The need to return to Aristotle's concept at a new historical stage is becoming increasingly recognized. As the President of Russia V.V. Putin unequivocally stated in a speech on October 21, 2021 (at the plenary session of the XVIII meeting of the Valdai International Discussion Club): "The modern model of capitalism has exhausted itself as an economic system... We will be guided by the ideology of healthy conservatism". As the basis of the new paradigm, we propose to use the solidary digital economy, the basic organizational and economic theory that we are developing.

#### **Solidarity digital economy**. The concept of "solidarity digital economy" has three components:

- -We understand "economy" according to Aristotle, according to whom the goal of production activity is to satisfy the needs of people and society (and not to obtain benefits or profits).
- -The adjective "digital" refers to the concept of a digital economy based on modern information and communication technologies that revolutionize the means of production.
- -The adjective "solidarity" means that industrial relations should be built on the basis of solidarity, mutual assistance, and not competition.

The concept of a solidarity digital economy is presented in scientific periodicals and is quite widely known. As of 12/12/2023, 71 publications on the solidarity digital economy have been published (see list in http://forum.orlovs.pp.ru/viewtopic.php?f=2&t=951), and the main information resource "Solidarity Information Economy" has been viewed 414,367 times (https://orlovs.pp.ru/forum/viewtopic.php?f=2&t=570). See, for example, our monograph: Loiko

V.I., Lutsenko E.V., Orlov A.I. Modern digital economy. – Krasnodar: KubGAU, 2018. – 508 p. (Chapter 1, pp. 12-58, 450–458)

Digital economy and decision making. Economic activity should be based on the intensive use of modern information and communication technologies, in other words, on the digital economy. As examples of such application, we point to the project OGAS (National automated system for recording and processing information) by V.M. Glushkov (implemented partially in the form of various automated control systems) and the CYBERSIN system of English cybernetic Anthony Stafford Beer (implemented in Chile). We believe that the solidary information economy, developing the ideas of Aristotle, should become the basis of a new paradigm of economic science. Management theory establishes that management decisions should be made on the basis of the entire set of five groups of factors — social, technological, economic, environmental, political. Consequently, economic science corresponding to one of these five groups of factors must be considered as part of management - the science of managing people. As a consequence, economics is part of management.

As shown in the solidary digital economy, modern information technologies and decision-making theory make it possible to develop and implement an information and communication system designed to identify the needs of people and society and organize production in order to satisfy them, both locally (for example, in a single country), and on a global scale. For the practical implementation of this opportunity, all that is needed is the will of the management of the relevant economic unit, aimed at transforming its management system. In particular, as is happening in most developed and developing countries, the Russian state can and should become the main actor in the economy.

Creators of the modern solidarity digital economy. The predecessors of the solidarity digital economy include primarily Aristotle, V.M. Glushkov, St. Beer. Many researchers have expressed thoughts similar to those of solidarity digital economy. You can name F. Bacon, G. Ford, K. Polanyi. At the present stage, theoretical developments and practical results achieved in the People's Republic of China are very important for the development of solidarity digital economy. As is known, since 2014 it has been the most economically powerful power of our time (with the largest volume of gross domestic product in the world, measured in comparable prices, i.e. based on the use of purchasing power parity).

Scottish economists W. Paul Cockshott and Allin F. Cottrell proved the theoretical possibility of organizing production in order to fully satisfy the needs of a country or humanity as a whole on the basis of direct product exchange. To calculate optimal management decisions within the framework

of the world economy, the power of standard modern computers of the 21st century. quite enough. Consequently, in modern conditions it is impossible to agree with Hayek's criticism of the planned economy, which proceeded from what took place in the mid-twentieth century. the impossibility of calculating the optimal development plan for the country based on the computers available at that time. A consequence of the work of V. Paul Cockshott and Allin F. Cottrell is the assertion that the USSR State Planning Committee, in principle, could not organize optimal planning of the national economy of our country due to a lack of computing power. However, at present it is already possible in principle to carry out such work.

A number of author's articles on the solidarity digital economy have been published in the journal "*Biocosmology – Neo-Aristotelism*" – the Bilingual Electronic Journal of Universalizing Scientific and Philosophical Research based upon the Original Aristotelian Cosmological Organicism;<sup>2</sup> at the website "High statistical technologies";<sup>3</sup> and in the *Russian Science Citation Index*.<sup>4</sup>

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<sup>&</sup>lt;sup>2</sup> BCnA-Journal (ISSN: 2225-1820) – the official organ of the Biocosmological Association, URL: https://biocosmology.org/?lang=en

<sup>&</sup>lt;sup>3</sup> See the website "*High statistical technologies*": <a href="https://orlovs.pp.ru/">https://orlovs.pp.ru/</a>; and its forum – <a href="https://orlovs.pp.ru/forum/">https://orlovs.pp.ru/forum/</a>

<sup>&</sup>lt;sup>4</sup> RSCI is available at the *Russian scientific electronic library* - Elibrary.ru: https://www.elibrary.ru/author\_items.asp?authorid=1844&pubrole=100&show\_refs=1&show\_option=0

### **Ethics towards the second beginning**

Ping LI<sup>1</sup>

In a Modern world dominated by technology, morality retreating, faith collapsing and gods retreating, the existence and development of ethics are facing new challenges. In the face of the prevalence of moral skepticism, moral nihilism, moral relativism, and techno-utopianism, we need to examine the crises of ethics, and then start philosophical reflection on the foundation of the first beginning ethics, that is, stepping out of the naturalization approach, the perspective of conformity, and the appeal to the normality of a single principle or basic concept to show that it is necessary and possible for an ethics towards a second beginning. The ethics of the second beginning makes a transition from the regulation and domination of the existent to the research of the generation, change and realization of the existence of the existent. It pursues ecological wisdom beyond the traditional three kinds of wisdom, and moves towards the harmony between nature and man of the post-subject and object relationship, which is demonstrated through the spirit ones and the future ones, and aims at the common good.

*Keywords*: Ethics; The second beginning; Ecological wisdom; Harmony between nature and man; Post-subject and object relationship; Common good

<sup>&</sup>lt;sup>1</sup> Henan University of Economics and Law; Zhengzhou, CHINA.



Triad of Time Types "Chronos-Cyclos-Kairos" and Noosphere of V.I.

Vernadsky – in the Context of the Search-Optimization Model of

Nature Self-controlling Processes (theses)

Sergey N. GRINCHENKO<sup>1</sup>

As you know, the ancient Greeks distinguished three types of time independent of each other: chronos  $(\chi\rho\delta\nu\sigma\varsigma)$  – the duration of the procedural course of events; cyclos  $(\kappa\delta\kappa\lambda\sigma\varsigma)$  – a circular (cyclic) sequence of events; and kairos  $(\kappa\alpha\iota\rho\delta\varsigma)$  – a convenient or happy occasion (in particular, a time of crisis).

In more detail, "Chronos (=Kronos), Cyclos (=Kyklos) and Kairos ("opportune moment") are the three main archetypes of time used by the ancient Greeks. They reflect a different understanding and different meaning of time. Chronos controls the linear flow of time, directed from the past to the future. Cyclos – processes cyclically repeated in time. Kairos – the timing of the onset and end of events" (Sazonov, 2009-2022).

There is a proposal to interpret the triad of concepts "chronos-cyclos-kairos", for which use the context of the idea of hierarchical search-optimization models of self-controlling processes in Nature (Grinchenko, 2004, 2007, 2010). Their spatio-temporal characteristics are based on a geometric progression with a denominator  $e^e = 15,15426...$ , which was revealed by A.V. Zhirmunsky and V.I. Kuzmin (1982) when studying critical levels in the development of biosystems. The results of applying this model in the study of the historical process in the archaeological epoch and their adequacy to the empirical data of paleontologists, archaeologists and historians are demonstrated in the works (Shchapova, Grinchenko, 2017; Shchapova et al., 2019).

#### Cybernetic scheme of wildlife self-controlling

The stages of the evolutionary development of living nature are traced on the basis of its search-optimization model: over the entire period from the beginning of life on Earth about 4.6 billion years ago to the present (Grinchenko, 2004). The whole process of this development, obviously, should be interpreted as a manifestation of "Chronos". At the same time, within the framework of such a model, moments of time of systemic transitions in the structure and characteristics of the hierarchical

<sup>&</sup>lt;sup>1</sup> Federal Research Center Informatics and Control" RAS, Moscow.

structure of living nature are distinguished, which are naturally interpreted as a manifestation of "Kairos". This:

- ~4.6 billion years ago (the beginning of the formation of subcompartments of future prokaryotic cells organic molecules on Earth after it cools to acceptable temperatures that do not destroy them)
  - ~3.67 billion years ago (first macromolecules compartments of future prokaryotic cells) –
  - ~3.61 billion years ago (the first "proper" prokaryotic cells) –
  - ~3.6 billion years ago (the first eukaryotic cells, with elements indistinguishable from each other, and in the size of their future subcompartments) –
  - ~2.66 billion years ago (the first eukaryotic cells in the size of their future compartments) –
  - ~2.6 billion years ago (the first "proper" eukaryotic cells) –
  - ~2.59 billion years ago (the first "single-tissue" multicellular organisms) –
  - ~1.65 billion years ago (the first organs in the composition of multicellular organisms) –
  - ~1.59 billion years ago (the first "proper" multicellular organisms) –
  - ~1.58 billion years ago (the first populations are subcompartments of future biogeocenoses) –
  - 0.64 billion years ago (the first parcels are compartments of future biogeocenoses) –
  - 0.58 billion years ago (the first full-fledged biogeocenoses) –
  - 0.57 billion years ago (the beginning of the first subcompartmental phase of the formation of the Biogeosphere) to the present.

In turn, the manifestation of "Cyclos" is determined by the innermost cybernetic structure of the living, which is a set of *hierarchical optimization circuits*. These contours form "direct" variables that reflect the search activities of representatives of all tiers in the hierarchy, and "reverse" ones that depend on them, reflecting (with inertia) the target criteria for search optimization of system energy, set on the corresponding tiers: there are *cycles*. Depending on the sign of the increment/decrease of the target criterion, the search optimization algorithm affects (ensuring that its extremum is reached) the change of signs and the magnitude of the increment/decrease of search activities (implementing search "yaws" with elements of randomness).

In the living system, one more, secondary, set of hierarchical optimization circuits is singled out, the processes in which are much more inertial compared to the processes in the primary set. They are

closely related, since the primary is the cause of the secondary, which is called the system memory of the living, which relatively slowly affects the relatively fast search activities of all the tiers of the hierarchy it covers.

#### Cybernetic scheme of self-controlling of personal-production-social nature

The stages of the evolutionary development of personal-production-social nature, which arises on the basis of wildlife, are traced on the basis of its search-optimization model: over the entire period from the beginning of cephalization of vertebrates about 428 million years ago (zero stage) to the present (eighth stage) [Grinchenko, 2007]. The whole process of this linear development, just as for living nature, should be interpreted as a manifestation of "Chronos". At the same time, within the framework of such a model, moments of time of systemic transitions in the structure and characteristics of the hierarchical structure of a personal-production-social nature are distinguished, which are naturally interpreted as a manifestation of "Kairos". This:

- ~428 million years ago (beginning of cephalization of vertebrates) –
- $\bullet$  ~28.2 million years ago (the beginning of the emergence of subsystem-1 of the hierarchical network system of Humanity, the "pre-pre-human" Hominoidea and the basic information technology (BIT) of signal postures/sounds/movements) –
- ~1.86 million years ago (the emergence of subsystem-2 of the hierarchical network system of Humanity, the "pre-human" Homo ergaster/Homo erectus and the BIT of mimics/gestures) –
- $\bullet \sim 123$  thousand years ago (the emergence of subsystem-3 of the hierarchical-network system of Humanity, the "proper" human Homo sapiens' and the BIT of speech/language) –
- $\bullet \sim 8.1$  thousand years ago (the emergence of subsystem-4, more complex Homo sapiens' and BIT of writing/reading) –
- $\bullet$  ~1446 AD. (the emergence of subsystem-5, even more complex Homo sapiens'' and BIT of text replication) –
- $\bullet$  ~1946 AD. (the emergence of subsystem-6, even more complex Homo sapiens''' and BIT of local computers) –
- $\bullet$  ~1979 AD. (the emergence of subsystem-7, even more complex Homo sapiens'''' and BIT of telecommunications/networks) –
- $\bullet$  ~1981 AD. (emergence of subsystem-8, even more complex human Homo sapiens''''' and nano-BIT) -
  - etc.

In turn, the manifestation of the "Cyclos" is determined by the innermost cybernetic structure of the personal-production-social system, each of the subsystems of which is a set of *hierarchical* 

optimization circuits. These contours, just as in the living system, form "direct" variables that reflect the search activities of representatives of all tiers in the hierarchy, and "reverse" ones that depend on them, reflecting (with inertia) the target criteria for search optimization of system energy, set on the upper tier of the subsystem hierarchy: there are cycles.

In the system of personal-production-social, as well as in the system of the living, one more, secondary, set of hierarchical optimization circuits in each subsystem of Humanity is distinguished, the processes in which are much more inertial compared to the processes in the primary set. They are closely related, since the primary is the cause of the secondary, which is called the systemic memory of the personal-production-social, which relatively slowly affects the relatively fast search activities of all the tiers of the hierarchy it covers.

It is important to note that in the course of the global evolution of Humankind, the principle of *systemic cumulation* is fulfilled – "the emergence in metaevolution (the process of successively increasing the number of levels/tiers of the hierarchical system in the course of its formation as such) of the Humankind system of new subsystems, which does not mean the elimination of previously emerged ones – they all co-exist, actively interact and co-evolve", and the principle of *systemic consistency* – "the emergence of new subsystems in the course of metaevolution, which is accompanied by cardinal changes in the structure and adaptive behavior of previously emerged ones, with a decrease in their contribution to the general course of adaptive behavior" [Grinchenko, 2020b].

# The noosphere of V.I. Vernadsky and the search-optimization model of Humankind

It is widely known that V.I. Vernadsky defined the noosphere as a new phase, a new state into which the natural process of development and complication of the biosphere passes. He wrote: "The biosphere has repeatedly passed into a new evolutionary state. <...> We are experiencing this even now, over the past 10-20 thousand years, when a person, having developed a scientific thought in the social environment, creates a new geological force in the biosphere, which was not in it. The biosphere has passed or, rather, is moving into *a new evolutionary state* – *into the noosphere* (emphasis added by the author of the quote) – is being processed by the scientific thought of social humanity. <...> Geologically, we are now experiencing the separation in the biosphere of *the kingdom of the mind*, which radically changes both its appearance and its structure – *the noosphere*" [Vernadsky, 1977, pp. 20-21, 91].

Obviously, V.I. Vernadsky outlined only the contours of the noosphere, and today this concept still lacks specifics, its formalization in a certain language of description, universal enough for such a complex problem. So, N.N. Moiseev points out: "Today, when the foundations of the theory of the

noosphere are being laid, a theory that, in its meaning, should unite disciplines that study the most diverse phenomena of the material world, it is very important to develop some common language that covers the processes of self-organization of the inanimate (inert) matter, and the development of living matter, and the processes of social nature" [Moiseev, 1986, p. 70]. A.D. Ursul notes that "for the most part, noosphere-environmental problems turn out to be social management problems, because the main difference between all previous development and future socio-eco-development is that it needs to be managed" [Ursul, 1993, p. 40].

But if the noospheric problem is *controlling*, then for its analysis it is natural to turn to the appropriate language - the language of management theory. That is, it is logical to consider the noosphere as a cybernetic system, describing it in this language, which allows not only to display the features of the course of its adaptive behavior, but also to identify and clarify the main stages of its formation – namely, in the language of the above-described search-optimization model of *a self-controlling* system of personality-production-social nature.

Thus, in the cybernetic view, in the prehistory of the modern Noosphere, five preliminary stages of the "pre-spheric" development of its territorial fragments, smaller than the Earth as a whole, and three – "properly spheral" stage and "above-spheral" stages can be distinguished. "Spheral" refers to the system of self-controlling, covering the entire Earth as such, "supra-spheral" (perspective) covers the Near-Earth and Intermediate Cosmos closest to it. Taking into account the fact that the search-optimization model of the Humanity system reflects such concepts directly related to the Human as basic information technologies, the individual and collective unconscious [Grinchenko, 2020a], etc., the parallelism of the phenomena of the Noosphere and the systemic cybernetic view of Humanity is obvious and mutually fertilizes them.

**Conclusion.** With regard to the idea of the search-optimization model of the self-controlling processes of Nature, Chronos corresponds to the trends of increasing – in the course of the processes of evolutionary development of non-living, living and personal-production-social systems – the number of tiers in their hierarchies, Kairos – to the moments of systemic upheaval in these processes, Cyclos – to the processes self-controlling in the contours of search engine optimization of such hierarchies. Thus, another example of the presence of triads in the structure of the Universe is revealed (Grinchenko, 2016).

In turn, drawing a parallel between the idea of the Noosphere and the results of modeling the systemic processes of self-controlling in the personal-production-social nature (Humanity) allows

you to gain new knowledge about the essence, spatio-temporal characteristics, prehistory and prospects of the Noosphere as a stage in the development of Humankind.

#### **Bibliography**

- 1. Vernadsky V.I. (1977) Reflections of a naturalist. Book 2. Scientific thought as a planetary phenomenon. M.: Science. 192 p.
- Grinchenko, S.N. (2004) System memory of the living (as the basis of its metaevolution and periodic structure). Moscow: IPIRAN, Mir. 512 p. – see also http://www.ipiran.ru/publications/publications/grinchenko/
- 3. Grinchenko, S.N. (2007) Metaevolution (systems of inanimate, living and socio-technological nature). M.: IPIRAN. 456 p. see also http://www.ipiran.ru/grinchenko/book\_2/text.shtml
- 4. Grinchenko, S.N. (2010) Worldview significance of modern concepts of informatics // Open Education, No. 6. P. 112–126.
- 5. Grinchenko, S.N. (2016) Bipolarity and triadicity: a cybernetic view of the problem // Electronic journal "*Biocosmology Neo-Aristotelism*", v.6. No. 1, pp. 166–175.
- 6. Grinchenko S.N. (2020a) On the spatial structure and metaevolution of the substratum of the collective unconscious in the Humanity system (cybernetic representation) // World of Psychology. No. 1 (101). pp. 62–73.
- 7. Grinchenko S.N. (2020b) Human communication and information technology: principles of systemic cumulation and systemic consistency // World of Psychology. No. 3 (103). pp. 235–244.
- 8. Zhirmunsky A.V., Kuzmin V.I. (1982) Critical levels in the development of biological systems. M.: Science. 179 p.
- 9. Moiseev N.N. (1986) Co-evolution of man and the Biosphere: cybernetic aspects // Cybernetics and noosphere. M.: Science. pp. 68–81.
- 10. Sazonov V.F. (2009-2022) Biorhythms [Electronic resource] // Kinesiologist: [website]. URL: https://kineziolog.su/content/bioritmy (date of access: 23.08.2023).
- 11. Ursul A.D. (1993) Path to the noosphere: The concept of human survival and sustainable development. M: "Ray". 275 p.
- 12. Shchapova Yu.L., Grinchenko S.N. (2017) An Introduction to the Theory of the Archaeological Age: Numerical Modeling and Logarithmic Space-Time Coordinate Scales. Moscow: Faculty of History Mosk. Univ., Federal Research Center "Informatics and Control" RAS. 236 p. see also http://www.hist.msu.ru/upload/iblock/03f/45831.pdf
- 13. Shchapova Yu.L., Grinchenko S.N., Kokorina Yu.G. (2019) Informatics-cybernetic and mathematical modeling of the archaeological epoch: a logical-conceptual apparatus. M.: Federal Research Center "Informatics and Control" RAS. 136 p. see also https://elibrary.ru/item.asp?id=39450775



# Being intimate with the stars. A brief reflection on time, potentia and entelechy<sup>1</sup>

#### Leonardo CHIATTI<sup>2</sup>

**Premessa**. The 2022 Nobel Prize in Physics to Alain Aspect, Anton Zeilinger and John Clauser represents an official recognition of the important work carried out not only by these three excellent researchers, but by an entire research community that has worked in the shadows, opposed and derided for more than forty years. Here we do not want to dwell on the relevant technological developments resulting from this research, among which we recall the sectors of quantum computing, quantum information and quantum cryptography, which today see the major world powers and industrial giants competing. Instead, we intend to return to the initial motivation that inspired the work of this community, namely the definition of the nature of "quantum reality".

We argue that the nature of quantum reality or, what is the same, of the quantum level of physical reality, so enigmatic and elusive from the perspective of classical physics, appears more accessible if we recognize a heuristic role for the Aristotelian concepts of "potentia" and "entelechy".

Contrast between classical and quantum reality. To give an idea of what quantum reality is, it is perhaps best to recall some characteristics of everyday physical reality, what in physics is called "classical reality". Classical reality is made up of objects, things like people, chairs, tables, trees; that is, entities that are: spatially localized (they occupy a definite place and a definite volume of space), persistent over time (they exist for all the moments of a continuous interval of time, more or less long), endowed with a continuous evolution in time and space (without jumps; for example, they do not appear out of nowhere or disappear suddenly). Furthermore, objects possess actual properties that can be expressed through propositions; propositions that always satisfy the principles of Aristotelian logic.

Now, the point is that ultramicroscopic physical entities, such as atoms, for example, are not objects, in the sense just represented. These entities belong to another level of physical reality, distinct from

<sup>&</sup>lt;sup>1</sup> The link to the video of author's presentation at the 24ISBC is available at: https://drive.google.com/file/d/1R-Y7vAUT0F85cmA6oUjJOyiwLcoKcw2C/view?usp=sharing

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classical reality, which is called quantum reality. To give a taste of this reality, let's consider a specific example.

The example is that of a beam of light, emitted by a source, which impacts a semi-silvered mirror. Two beams emerge from the mirror (which can be made perpendicular by appropriately orienting the mirror): one transmitted (t), the other reflected (r). The t and r beams can be sent to two separate photodetectors. If the source is sufficiently weak or, what is the same, the light emitted by it is strongly attenuated, we notice that the behavior of the photodetectors changes. The signals returned by them become intermittent (clicks), as if the light were made up of "grains" or "packets" which are called photons. The relevant point here is that if the photodetector r signals the arrival of a photon, the photodetector t remains silent and vice versa.

The following idea therefore comes to mind: 1) light is a classical object; 2) this object is made up of "grains" or photons; 3) the single photon that hits the mirror is always transmitted or reflected. It cannot be transmitted and reflected, because this would lead to simultaneous double clicks that are not observed. Photons are therefore objects endowed, after their interaction with the mirror, with the actual property of have been transmitted (t) or reflected (r). This property satisfies the Aristotelian principles of non-contradiction and the excluded middle. That is, a single photon cannot be neither t nor r (tertium non datur). It cannot, on the other hand, be t and t. Recall that the path of a transmitted photon is perpendicular to the reflected one. The validity of Aristotelian logic for these statements therefore implies the spatial localization of the photon on one of these paths and one only.

However, this idea doesn't work. Let's change the arrangement of the experiment, placing the semi-transparent mirror at the center of a system made up of two total reflection mirrors. These mirrors send the t and r beams completely back, which recombine along the two remaining arms of the apparatus, one of which is that of the source. Let's now place a photodetector along the fourth arm. It will give us a signal consisting of a series of distinct clicks, as we expected it to be. But now the frequency of clicks depends on the difference between the distances of the two mirrors from the central semi-transparent mirror. For precise values of this difference, the clicks at a given detector position are reduced and may even disappear! There is what is called destructive interference, the photons that would have arrived there no longer take the path of the recombined beams and are sent back to the source or diverted to other fringes of the interference figure. Now, it is clear that this is not the behavior one would expect from photon-objects. If the photons were objects such as microscopic balls, then the fraction of them sent towards the detector should be independent on the difference in path lengths of the beams. Their being transmitted/reflected by the central mirror should be a matter decided at the level of their contact with that mirror, and therefore independent on the

overall arrangement of the apparatus. The fact that the decision depends on the totality of the apparatus implies that the single photon interacts with the entire apparatus. That is, it is not spatially localized.

Thus, there are no photon-objects. More ingenious solutions, such as considering photon-objects riding wave-objects that somehow guide them, were eliminated experimentally in the nineties and I will not talk about them here. What we have is actually this: there are two separate and discontinuous events: the release of a certain amount, a grain, of light energy into the source and its subsequent absorption into the detector. *The photon is, in fact, nothing more than this amount of energy*. In its propagation from the source to the detector the photon *is not spatially localized*, but covers the entire apparatus. When it interacts with the semi-transparent mirror, it is transmitted and reflected, while maintaining its individuality. Its manifestation in our time, the time of human beings, *is discontinuous* being limited only to the events of emission in the lamp and absorption in the detector. The fact that the photon is transmitted and reflected implies that its behavior violates both the principle of noncontradiction and that of the excluded middle, and therefore Aristotelian logic. In conclusion, therefore, all the properties previously stated as the definition of an object are negated. This is the situation we find ourselves in when dealing with a quantum entity.

Now the question is: what kind of entity is a quantum entity? What can be that something that is everywhere and nowhere, but which suddenly manifests itself in all its entirety in a specific place and at a specific moment? What kind of thing is an entity with attributes that violate Aristotle's logic? These are the questions that tormented scholars such as the aforementioned Clauser, Aspect and Zeilinger in past decades, but also many other people who have actively worked on this problem without recognition and often derided: De Broglie, Vigier, Bohm, Selleri and many many others.

Quantum reality as the realm of "potentia". A consistent, although not necessarily unique, interpretative key was proposed in the 1950s by Werner Heisenberg, in his essay "Physics and Philosophy". He simply expressed in words what the mathematics of quantum mechanics renders transparently. Two actualities cannot contradict each other: if the photon were an object, it could not be simultaneously transmitted and reflected. But two unexpressed potentialities can very well coexist: there is nothing anomalous in the proposition "the photon can be transmitted and the photon can be reflected"; it is undoubtedly true in relation to an experimental apparatus that does not distinguish the two terms of the conjunction. In the first experiment, the one with two photodetectors, the apparatus was such that it could be established which term of the alternative was realized: the photon was t or (in Latin: aut) r; it followed that when one detector fired, the other did not fire. In the second

experiment the only detector on which the recombined beams incided was not able to distinguish between t and r; the two attributes therefore remained in their potential state, determining a series of strange behaviors including the absence of clicks for a given detector position. Therefore, and this aspect is important, the potentialities Heisenberg talks about are not mere categories of thought; they, when not expressed, are capable of interfering with each other, generating empirically verifiable physical behaviors. The violation of Aristotelian logic involved in quantum processes is merely apparent because that logic is now applied to potentialities, rather than to actualities.

The absence of control over the attribute implies that the attribute *remains in its potential state*. The photon is potentially, only potentially, transmitted or reflected. The photon causally evolves into its own internal map that reproduces spacetime; this map should not be confused with the territory it represents, that is, with the space-time theater of our experience. In this map, technically called "wave function", the photon is both transmitted and reflected, and therefore ubiquitous. It is the interaction with the detector (which here represents the transition from potency to act) that projects the photon into spacetime, that is, into the theater where we experience it as a click. If the arrangement of the apparatus is such that the two terms of the alternative (transmitted or reflected) can be distinguished, as in the first experiment, then only one of the two potentialities is actualized. Otherwise, as in the second experiment, none of them are actualized and the "t" and "r" attributes remain in their potential state. But this potentiality is still a reality, because it defines the frequency of clicks.

The passage from quantum reality to classical reality is therefore the passage from the internal map of the quantum entity to the territory represented by the space-time theatre, and this passage from potential to act is mediated by the quantum discontinuity: the micro-event or click. It is the set of countless clicks to which the elementary particles that make up the world give rise with their interactions, which form the classical reality, in the spacetime within which this reality is located. Within this reality the objects of our daily experience are recognizable. Space as we know and experience it is the site of interactions between quantum entities, but it does not contain these entities.

Of men and stars: a new way to entelechy? Let's imagine a photon emitted by a star. Its propagation occurs in a simulacrum of spacetime internal to the photon itself, which is its wave function. It consists of the sum of the potentialities constituted by all the paths that the photon would travel in space and time. When an earthly observer, from his terrace on a summer night, contemplates that star and the retina of his eyes absorbs that photon, what happens is that only one of the potentialities represented in the wave function, the one corresponding to the path that leads from the star to the eye of that observer in that instant, is actualized. The observer sees the star as an

actualization, in its own time and space, of the potentialities originating from the star itself as a source of photons. A much more intimate and ontological contact than the mechanical exchange of particles that would occur in a hypothetical classical corpuscular description of light. The observer participates, in a certain sense, in the emergence of the star into reality. And this participation *involves the actualization of a potentia. The difference between the quantum and classical levels of physical reality refers us, as Heisenberg had intuited, to the distinction between potentia and act.* 

The causal propagation of the quantum entity within its own wave function does not occur in spacetime; it's a kind of anticipation in terms of possibilities. A further example is given by the decay of an atom in vacuum, by spontaneous emission. Why does an atom, brought to a state of higher energy and then left to itself, spontaneously decay to the minimum after some time, emitting light? There are no external forces pushing it to do this. The point here is that the atom is surrounded by an almost incorporeal entity which is the electromagnetic field, considered here in its empty state, without photons. Therefore, we must consider not just the atom, but a more complex reality made up of the atom and the vacuum that surrounds it. This reality evolves causally according to its own internal map, its own wave function, which contemplates two possibilities. The first is that of the excited atom and the field in the vacuum state; the second is that of the decayed atom and the field enriched by a photon. The system evolves by developing this map, following its own entelechy made up of coexisting possibilities, until the second possibility is realized. Then the atom decays and emits a photon, and this event appears as an event of classical reality, recordable by an observer. We are, as we can see, very far from a mechanical universe where inert matter can evolve only under the action of external forces.



# Органический подход в понимании личности в современной социальной философии

### Александр Алексеевич СОМКИН1

Методология познания и преобразования человека приобретает в последнее время все большее значение в общем комплексе научных исследований. В авторском отношении: мы сегодня столкнулись с вызовом реализовать растущую актуальность органического подхода в подобного рода исследованиях; и что выступает основой целостного рассмотрения феномена личности и всего комплекса ее социальных связей. В общей сложности, данный подход являет собой продолжение российской научной органической традиции, как это формулирует А.А. Галактионов [1995]; и где «"органическое" объяснение природы и общества в их специфике и цельности как общего и отдельного принадлежит к числу "сквозных" концепций в истории русской философии и социологии». При таком подходе личность предстает как сложное многокомпонентное и многоуровневое интегративное единство. Именно на основе органического подхода разрабатывается авторская концепция целостной личности, основные положения которой будут освещены в докладе.

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# Beyond "Organic" – Preface to the Theory of Vitalism

Xiaoting LIU<sup>1</sup>

In recent years, international research on organism has made significant progress in various aspects as well as made a positive impact. However, as Heidegger pointed out, the original foundation of all existing organic theories was still rooted in mechanistic theories, thus searching the roots of organism is still an issue. And following reasons account for this situation. First, when discussing the organism, people tend to use mechanistic theories as a contrast, implying the existence of the "non-organic." Second, all organic theories are not based on the foundational ontology described by Heidegger. Third, the primordial origin of organic thought has also remained benighted, so that it has been unable to unfold its primordial nature, and thus has not been able to "chain up" or interpret the entire history of civilization. This leaves a challenging intellectual task for future explorations in organic theory.

International research in organic cosmology has attempted to return to Aristotle's conception of the organic, which is a commendable effort. However, a careful look at the history of Greek philosophy reveals that the original ideas of the organic were found in the early period of Greek philosophy, namely in the period of Thales and Heraclitus, rather than in the era of Aristotle. In this sense, Aristotle serves as a bridge for our return to early Greek organic thought.

Similarly, compared to the early thoughts of Greece, China and India also had their own organic ideas and positions. These ideas were homogeneous in terms of a more basic paradigm. Especially, Eastern organic thought was not attacked or interfered by later Western mechanistic theories and has retained some kind of originality. Therefore, it is necessary to return to the original Eastern perspectives to explore organic thought. Moreover, as we have seen that, at least in contemporary Western philosophers, whether Heidegger or Whitehead, these philosophers who extensively discuss organic thought had used Eastern ideas for reference.

However, considering that the term "organism" is already widely used, it could lead to confusion by uncritical use of this more general term. Therefore, it is indispensable to extract one core statement mentioned by the original canon of Chinese organic thought, I Ching, aiming to summarize the extensive connotation of Chinese organism in a concise category. It can be called "Vitalism" so as to

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contain and represent the organic thoughts involved in Chinese traditional culture, given that the underlying idea of I Ching is that "life persists for ever". This concept offers a broader and more profound perspective than the present widespread organic theories. This Vitalism is neither a scientific organic theory nor a metaphysical one, but rather a primordial definition. It has three main features: first, the natural organism of ontology; second, a superior organism with integrated inclusivity; and third, the self-unfolding of growth with endless succession. All phenomena in the universe today are nothing more than different manifestations of this vitalism at different times. This vitalism minimizes the isolation and opposition between organic and inorganic nowadays, presenting a complete, ever-renewing landscape of the world, and offering the nourishment and enlightenment to humanity.

# A Preliminary Study of the Cosmological Views of Kang Youwei (1858-1927)

Zhaoyuan WAN<sup>1</sup>

In recent decades, the devastating impact of human activities on the environment has awakened the acute awareness of the need of new understanding of ecology and cosmology. For wisdom to address ecological problems, environmental scholars have been turning to Chinese traditions, including Confucianism. In this respect, scholarly attention has also been given to modern Confucian thinkers of the era of transition from imperial to republican China, many of whom remained rooted in Confucianism but at the same time came under the influence of Western learning. Of those thinkers, the prominent reformer and thinker Kang Yowei has been considered as one of the most representative. Inspired by and building on Ban Wang's research on the "ecological motifs" in Kang Youwei's vision for a future world, I offer a preliminary study of Kang's cosmological views, in particular those found in his early writings penned in the 1880s. I will demonstrate that Kang has developed a conception of cosmic evolution that embraces the successive development of the material universe, the biological kingdom and the human world. Although he does assign humanity a unique character in his cosmology, he places humans in not only harmony but "consanguinity" as well with the rest of myriads of things, plants and animals.

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'Пришло время собирать камни': концепция «автотрофности человечества» В.И. Вернадского и «социальной автотрофности» А.М. Уголева – в интегративном подходе к разрешению текущего экологического и продовольственного кризиса

### Николай Несторович МАКСИМЮК1

Концепция «Автотрофность человечества» В.И. Вернадского [Vernadsky 1925] увидела свет в середине 1920-х; и чему предшествовало также выдвижение и исследование русским гением вопроса «Двух синтезов космоса» [1922]. В последнем, наряду с общепринятыми конвенциональными установками: Вернадский выдвигает и утверждает (и что имеет революционную, переворотной значимости) существование «живого космоса», как предмета для научного изучения. В настоящем, Биокосмологическая ассоциация собственно, и не без успеха, занимается научным изучением и развитием этого (Биокосмологического) круга вопросов; и здесь, выдвинутая учеными Биокосмологическая Инициатива призывает как раз к принципиальному развороту (на 180°) космологической активности человечества Земли. Задачей доклада является раскрытие космоантропоэкологической и ноосферной сущности научных идей Вернадского; и что никак не соотносится ни с теорией Мальтуса, ни с текущими установками глобалистов на решение экологической и продовольственной проблем. Важно понимать, что краеугольным основанием концептуальных представлений выдающегося ученого об автотрофности человечества выступает универсальный естественнонаучный принцип само-восходящего в сложности развития космического эволюционного процесса; например, что ярко представлено в макро-стадиальности возникновения Гео-, Био- и Ноосферы, в эволюционном движении на Земле. В настоящем, мир столкнулся со сложностью перехода к ноосферному развитию: поскольку предшествующая и доминирующая в настоящем ступень техносферы не желает сдавать господствующих позиций, но, напротив устремлена к 'увековечиванию' своего владычества. Тем более, сегодня, становятся крайне востребованными достижения российской науки, Органицистской сущности. Среди последних, особое значение имеют научные наработки у А.М. Уголева, в рамках его трофологической теории и концепции «нового функционализма» – в цели разрешения текущего экологического и продовольственного кризиса. Как и огромную важность приобретает его вывод, что в решении проблем автотрофности – «значение идей Вернадского не только сохраняется, но и возрастает» [Уголев 1989].

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# Стратегия и тактика в мировой политике: возможность гармоничного сопряжения

#### Алексей Семенович КОЖЕМЯКОВ1

«Стратегия» и «тактика» – извечные понятия политического, исторического, военного и логического лексикона. Однако, на всех наблюдаемых периодах истории, мы констатируем постоянный разрыв между этими двумя понятиями (отсюда – сменяемость самых якобы долгосрочных стратегий и очевидные и более частые провалы в тактике). Данная проблема, по ряду причин, усугубляется в современном мире (достаточно напомнить об объявленных и пока скрытых планах создания всё более разрушительных видов оружия массового уничтожения и вероятности его размещение в ближнем космосе).

Преодоление данного исторического разрыва, тем не менее, возможно, но не на пути очередного пересмотра соотношения (приоритетности и веса) каждого из двух ключевых понятий в политике, а через обращение к новым научным принципам «Биокосмологического разворота к Органистскому полюсу, Триадологическому научному знанию и Северо-Восточному вектору» применительно к мировой политике. Иными словами, встаёт двуединая задача: от пересмотра теории, перейти к постановке таких практических задач, решение которых необходимо для формирования принципиально иной картины будущего мира.

- 1. Из истории понятий изначально было 2 сферы их приложения: военная (*stratos* войско; ведение вооруженных действий, или стремление избежать их) и политическая (ago- вести, возглавлять; борьба за власть); *taktika* искусство построения войска, а в широком смысле правила использования средств для достижения целей).
- 2. Оба понятия существуют исключительно в «человеческой сфере» осмысления и действия (природа (среда обитания человека) и космос (вне-человеческая среда) проявляют своё воздействие иначе). Отсюда неизбежно возникающий разрыв между «онтологическим» (объективно данное «извне») и «аксиологическим» (воспринятое, проходящее осознание человеком через его «ценности») потребностями, Неизбежный итог этого имманентного противоречия отсутствие «заведомо заданной безошибочности» в планах и делах человека, а когда речь идёт о в войнах и борьбе за власть политиков. История многократно подтверждала, что «рациональность» в этих

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- сферах лишь приближает к истине (военной, или политической победе), но отнюдь не гарантирует её постижения и достижения успеха. Это «проблемное противоречие» порождает неоптимистичный вывод: существует некая первопричина (разрыв «онтологического» и «аксиологического») для наблюдаемого хронического рассогласования «стратегии» и «тактики».
- 3. Вторая причина «рассогласования» оба рассматриваемых понятия (стратегия и тактика) формируются/позиционируются по двум базовым критериям пространство и время. И если первое (весьма в разной степени для отдельных стран), но всё же, может быть предметом влияния человека (например, захват, или утеря «контролируемого пространства»), то второе неизбежно ограничено (сроком дееспособности, а в итоге жизнью человека (его смертности). Принципиальное расхождение двух отмеченных главных критериев/ограничителей создаёт вторую объективную подоснову для расхождения «стратегии» и «тактики».
- 4. Пространство, в котором реализуются «стратегия» и «тактика» («пространство состояний Наблюдателя», «поле Наблюдателя» и «механика Наблюдателя») имеет устойчивую тенденцию к нарастанию сложности (см. разбор этой темы в приложенной статье). Суммируя одно из положений последней статьи, отметим только, что «сложность» превратилась сегодня в своего рода «защитный аргумент», призванный оправдать «...всё более ощутимые исследователями трудности в анализе текущих и перспективных состояний мировой системы, следствия чего проявляются в возрастающей вариативности их текущих и прогностических оценок... и в итоге неуверенность Человечества в собственном будущем».
- 5. Причина столь тревожного положения в мире («невнятность будущего») видится, однако, не в увеличении числа «акторов» и усложнение «построений» в их «играх», на что обычно ссылаются всё более многочисленные специалисты по мировой политике. Вряд ли причина заключается и в «технических трудностях», связанных с необходимостью всё более сложных, междисциплинарных подходов в исследованиях современных ученых, с целью определения «поля возможных действий» политиков. Корни проблем кроются, на мой взгляд, в другом во всё более очевидной негодности безнадёжно устаревшего понятийно-теоретического аппарата, работавшего до сих пор исключительно на одну идею «ослабления/минимизации/подавления/вытеснения/ уничтожения» противоборствующей стороны (исходя из этого постулата выстроен весь

 $<sup>^2</sup>$  Кожемяков А.С. ФОРМИРОВАНИЕ «КУЛЬТУРЫ СЛОЖНОГО» В МИРОВОЙ ПОЛИТИКЕ: ОТ «ПОЛИТИКИ» АРИСТОТЕЛЯ К СОВРЕМЕННОСТИ // Biocosmology – neo-Aristotelism, Vol 8, No.1, (Winter 2018).

научный аппарат наук о политике и международных отношениях). Унаследованная посути от самих начал человеческой истории, эта идея явно пережила свой век и требует переосмысления. Начать следует с самих фундаментальных методологических и даже философских (гносеологических) причин, для поиска ответа на главный вопрос — куда (для чего, с какой целью) идёт Человечество? Очевидно на сегодня и другое: продолжение борьбы за пресловутые «национальные интересы», или даже их трансформация и попытки «агрегации» в рамках новых по конфигурации групп государств, включая, возможно, и смену их собственного самоопределения (Восток-Запад, Север-Юг, «континентальное позиционирование», «многополюсный мир», БРИКС, «мир западных демократий», «страны-изгои», «мир ислама» и пр.) не только не сулит «скорой и окончательной победы» кого-либо из объявленных «новых участников». Напротив, подобная «перегруппировка сил» чревата не просто усугублением «традиционной конфликтности», но её трансформацией в гораздо более тяжкую по последствиям ситуацию.

- 6. Выход из сложившегося положения (а начать переосмысление следует с самого научного сообщества), видится в отказе хотя бы части этого сообщества от «доминантного экспертного мнения», от жестко обозначенных в последнее столетие рамок т.н. «научной системы взглядов» (а по сути, давно преобладающей здесь, и на глазах стареющей, как и их носители, типа «вечного Киссинджера») «реал политик». Пора признать, что сегодня она становится всё более явно окончательно лишена исторической перспективы, сводясь в итоге к банальному «кто кого выдавит». Иными словами, этот необходимый «научный переход» видится не только в «смене понятийного аппарата, но и самой базовой парадигмы всей науки о международных отношениях». Последняя, на сегодня, преимущественно занята их «описанием» и «каталогизацией» (с явным упором на «тактику», вместо «стратегии»), и совершенно не способна «осознанно создавать новый мир» (заметим, для иллюстрации, что т.н. оценки «состояния и развитие отношений», как правило, сведены в наши дни к ссылкам на сугубо цифровой (лишенный «качественного содержания») «рост товарообмена»!).
- 7. «Смена вех» для наук о международных отношениях (который, подчеркнём, прошли до неё, в разное время, все другие отрасли науки) в преодолении «дурной бесконечности» прежних подходов, присвоивших себе название «классических» и единственно «научных и реалистичных». Отправной точкой должен стать разворот к «новой масштабности» взгляда: от нынешнего «разделённого мира» с его вечным «столкновением интересов», на смену которому должен прийти, напротив, целостный,

единый и нацеленный на будущее мир. Его сутью (со ссылкой на многих российских и зарубежных (прежде всего китайских) авторов-участников данного семинара), является «мировоззренческий переход» от Трансценденталистского к Органицистскому полюсу мировоззрения (переосмысление «от Платона, к Аристотелю»). Потребуется возврат к многомерному движению, к интегральной и рациональной совокупности целостного взаимодействия антропологической, социокультурной, экологической и других сфер существования и мировидения. Перспектива — «восхождение человечества на естественно (последовательно) новый и высший в его сложности «Ноосферный стратум» мирового развития (концепт «Единого Человечества»).

- 8. В такой перспективе, естественно, отпадает «устойчивое противоречие стратегии и тактики», сложившееся за тысячелетия предыдущей истории Человечества, вынесенное в название данного выступления. Оно эволюционирует от «сущностно центральной», в прошлом, к преимущественно «технической» задаче.
- 9. Параллельно будет обустраиваться и единственно пригодный для устойчивого будущего движение от «человека разумного» к «Человеку сознательному» (без становления которого все остальные построения «на будущее» утрачивают смысл). Двумя другими «опорными столпами» построения искомой концепции будущего должны стать «экология» (как наиболее ощутимый и воспринимаемый массовым сознанием вызов Единому Человечеству) и «общепризнанная человеческая этика» (изначально присущая человеку, но по ряду известных причин «разнесенная» за столетия между соперничающими религиями и связанными с ними морально-поведенческими нормами (политической культурой).
- 10. Даже из кратко изложенного выше, понятно, что речь идёт не об очередном «критическом комментарии» к нынешним, многообразным взглядам на мир, а о необходимости его принципиального и качественного изменения (хотя бы в целях снятия угрозы самому существованию современной цивилизации). В сегодняшнем мире существует относительное единство взгляда касательно происходящих «тектонических сдвигах в глобальном мироустройстве» (хотя его причины и содержание интерпретируют, чаще, весьма по-разному). Однако парадоксально, что вопрос о «смене научного инструментария» для понимания грядущего «нового мира» хронически откладывается и никого (пока) не смущает, что мировоззрение, научный метод и

Петербург: СИНЭЛ, 2022». - С. 11–27.

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<sup>&</sup>lt;sup>3</sup> См. Кожемяков А.С. Человек сознательный: как выйти из кризиса мировой политики. / В кн. «Научно-образовательная модель Человек Сознательный: сознательный реализм. Сборник текстов и выступлений: монография/ Давитая С.Ж., Кожемяков А.С., Градов С.Ю., (и др.). – Санкт-

- инструментарий остаются, в принципе, схожим с теми, которое Человечество унаследовало со «времен греко-персидских войн». Этот парадокс требует преодоления (для начала, как отмечалось, хотя бы в научном сообществе)
- 11. Желательно, чтобы дискуссионное обсуждение (предусмотренное вслед за заключительным выступлением на конференции К.С. Хруцкого), с участием китайских учёных-обществоведов, дало дополнительные стимулы для выражения мнений членов Ассоциации по поводу поднятых в данном выступлении вопросам. За результатами этого обсуждения видится и устойчивое будущее развитие нашей Ассоциации.

### The Commonality of Marx's and Whitehead's Outlook on Life

Xiuhua ZHANG<sup>1</sup> & Di HE<sup>2</sup>

Marx and Whitehead, based on modern science and following perceptual activity theory and historical logic, have formed a life outlook that transcends traditional metaphysics and mechanical cosmology under the modes of organism thinking, dialectical thinking, relational thinking, and practice-process thinking. They have explored the issues of the confirmation of the essence of life, process development, meaning embodiment, and value realization of specific subjects in the real world and the universe as a whole, demonstrating commonality.

Based on historical materialism and practical anthropology, Marx took "real people" as the theoretical premise, identified them as the essence of human beings in his dynamic perceptual practical activities, distinguished between life of species and life of kind through "two kinds of production", distinguished people from animals through labor and material production, and demonstrated the life community relationship between individuals and others, nature, and society, presenting the process of human pursuit of the value and significance of life from the perspective of social history.

Based on organic cosmology, Whitehead seeks the order of the universe, explains the evolution and development of the universe, and reveals the survival of individual life under the creation of the universe through a genetic and morphological description of the "actual entities", the most fundamental way of generating life. That is, transcending the present in creative progress, realizing oneself in constant adventure, and establishing an organic connection between individual life and the cosmic community through two-way causal effects, and then towards a cosmic civilization with a harmonious order. Therefore, both of their views on life are conducive to overcoming the urgency of modernity and promoting the construction of ecological civilization.

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<sup>&</sup>lt;sup>2</sup> The University of Chinese Academy of Sciences; Beijing, CHINA.

### A review of the research on Organic Marxism of Chinese academic circles in recent years

Jingyi HE<sup>1</sup>

At present, the increasingly severe global ecological problems have brought a serious impact on human society, but also caused us to reflect on the plight of people's survival in the perspective of modernity. Organic Marxism, as a kind of constructive post-modernism, provides a unique perspective for the critique of capitalism and tries to provide a feasible solution to the problem of modernity from the postmodern standpoint. In recent years, the research of Chinese academic circles mainly focuses on the theoretical characteristics, practical value, the relationship between organic Marxism and other theories, as well as the examination and reflection of organic Marxism. It is of great academic significance and value for further study and development of organic Marxist theory to sort out the research status of this theory in recent years.



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# The Theoretical Path and Practical Principles of "Smart Library" – From the Perspective of Process Philosophy

Yujia ZHAI<sup>1</sup>

The thinking paradigm of mutual interpretation of "organism" and "process" contained in Process Philosophy is a great subversion of traditional ontological thinking and mechanical epistemology, and its interpretation path based on modern scientific logic itself also helps to highlight the interaction between science and philosophy, technology and humanity that needs to be considered in "Smart Library" research, The practice of elevating the process to an ontological level reflects an absolute respect for the knowledge acquisition process, which not only makes process philosophy have certain commonalities with existing theories in library science, but also has the ability to open up an analytical path for the intelligent process of libraries. Based on the principle of process philosophy, this article attempts to solve three problems: First, breaking the mindset of conceptual definition, transforming the conceptual ontology of "What is a smart library" into a process ontology description of "Why is Smart Library Possible", and achieving a more essential analysis of the survival background and internal mechanism of libraries under intelligent technology; Secondly, examine the significance of change in the new paradigm established by process philosophy for the "Smart Library" research institute; Thirdly, to explore the practical principles of building a "Smart Library" with the purpose of shaping the process and body. The ontological interpretation of "why intelligent libraries are possible" by process philosophy and the transformation of the cognitive paradigm of "Smart Library" are the guiding significance at the operational level, which is the thorough implementation of generative, human nature, and procedural principles in the library body.

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# The Organismic Development of Human Potential as Individuals and a Whole from the Perspective of the Anisa Educational Model

Qionghui HE<sup>1</sup>

The advancement of civilization depends on the organismic development of human potential both individually and as a whole. How can this be achieved is a question worth pondering on. The Anisa Educational Model, constructed by Daniel C. Jordan while he was a professor of education, psychology and social anthropology at the University of Massachusetts, inspired by the Bahá'í teachings and the philosophical work of Alfred North Whitehead, provides a perspective to achieve this organismic development.

HoModel incorporates both the external and internal causation in the realization of the potentiality of the organism. Based on the process view of the Whitehead philosophy and the eternal progress of the soul in the Bahá'í Faith, Model holds that the realization of the potentiality of the organism has no terminal point but is a perpetual actualization. Different from the prevailing focus on the development of biological potentiality, which aims mainly at intelligence quality and physical growth, the Anisa Model focuses on both physical and spiritual potentiality.

This presentation will explore the philosophic foundation of the Anisa model and how it works in the organismic development of human potential as individuals and a whole.

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## История первой мировой глобализации и отношений Испании и Китая в XVI–XVIII вв., в свете Биокосмологического подхода

**Мириам ФЕРНАНДЕС**<sup>1</sup>

Согласуясь с основными положениями Биокосмологического подхода, автор преследует цель внести свой вклад в разработку оснований Органицистского (научного и философского) знания, существующего в Триединстве естественных Типов рациональности. В текущее время — Органицистское (и Интегралистское) движение мирового процесса и Земного социокультурного развития является не только реальным и возможным, но и крайне востребованным. В этой связи предлагается историческое исследование взаимоотношений, которые с XVI по XVIII вв. поддерживали Испания и Китай.

По сути, это была первая в мире глобализация, которая проводилась и осуществлялась с установлением реальных Органицистских космологических оснований и принципов. В свете Биокосмологического подхода, мы имеем в текущем моменте истории, напротив, попытки установления непоколебимой гегемонии и диктата исключительно западной, англосаксонской модели научного знания. Во всем этом скрывается причина состоявшейся 'космологической недостаточности' и 'критического дисбаланса' – в реальном развитии (и структуре знаний и компетенций) современного глобального академического сообщества.

Иначе говоря, в мире происходит переломный и опасный момент: когда из академической среды безвозвратно ускользает реальная широта и глубина всей палитры и гармонии альтернативных научных подходов, установок и взглядов. Поэтому столь важной выступает задача возвращения и изучения первой (Испанской) глобализации мира, датируемой XVI в.: и которая принципиально отличается от текущей и резко доминирующей (в XXI в.) англосаксонской протестантской модели глобального мироустройства, состоявшейся после волны либеральных революций на планете.

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Последняя жестко навязывает всем субъектам социокультурного мира строго однотипные – гомогенные, унифицированные, единообразные и неизменные правила общежития. Однако, по факту, изначальные основания и принципы глобального порядка и устройства мира — они родились между Азией и Испанской Америкой и Испанией, под иберийским и не англоязычным суверенитетом; все это сегодня открывает нам пути к реальному познанию и пониманию настоящего; и где, например, Китай вновь занимает свое прежнее присущее ведущее место как в мире, так и в конфигурации международного порядка.

Первая мировая глобализация, XVI–XVIII вв. была организована и установлена принципиально на Органицистских условиях и принципах. Таковым, например, служил принцип взаимного уважения: что и позволяло всем участникам глобального взаимодействия не только получать экономическую выгоду; но и реализовывать культурный обогащающий обмен — в целом, успешно осуществлять само-восхождение в сложности своего социокультурного развития.

# Alliance between Russian and Spanish speaking countries in a changing world system

Jose Ramon BRAVO GARCIA<sup>1</sup>

Whilst the international political system is seemingly evolving into an increasingly "multipolar" order, Anglo-American's persistent hegemony still raises many unknowns not only about the viability of the nation-states' system, but even about its own survival. Hence the pertinence of a discussion on the Hispanic-Russian mutual complementarity both from a diplomatic or economic, but also sociomoral perspective. Based upon the book 'Filosofia del Imperio y la Nación del siglo XXI', written by this report's author just a few months after the start of the special military operation into Ukraine in 2022, this presentation will discuss the hypothesis and potential likelihood of a rapprochement between the Hispanic and the post-Soviet cultural blocs (which type of alliance, the historico-political and cultural reasons, as well as its future prospects), from the triple perspective of political philosophy, socio-cultural history and geo-economic realities of our time.

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### Organic Cosmology of Vernadsky and Asian Philosophies

Kiyokazu NAKATOMI<sup>1</sup>

I once developed a cosmology in my paper "On the Synthesis of the Theory of Relativity and Quantum Theory" (World Congress of Philosophy, 2008). It is the cosmology of expansion and movement that began with the Big Bang from inexistence. The energy is the energy of inexistence. the flow of life, reality and particles as described by the Chinese philosopher Lao Tzu. This was scientifically grasped by atoms, quarks and neutrinos. This energy, which also includes vacuum energy and dark energy, fills the universe and constitutes the organic universe. This idea overlaps with the cosmology of the Biocosmological Association and Vernadsky. Therefore, the cosmology of Vernadsky overlaps with that of China and Japan and is a universal organic cosmology. The following is the discussion of the cosmology of Vernadsky from the perspective of Asian philosophies. The most important concept is "atomic flow" or "atomic vortex" which corresponds to the flow of microparticles in quantum theory. Therefore, Vernadsky is a proponent of quantum theory, and at the same time, his philosophy of the flow of life overlaps with my philosophy, the cosmology of Biocosmological Association, Chinese philosophy and Japanese philosophy. That is a universal cosmology. He also looked to the universe as the source of life, and constructed his own philosophy of life, different from Bergson's. He believed that life is nature itself and that the universe is the source of life. In effect, he called himself a naturalist after the name of his book ("The Thoughts of a Naturalist"). Chinese and Japanese philosophies, with its love of mountains, rivers, water, and nature, overlap with naturalism of Vernadsky. Naturalism is characterized by the unity of man and nature, the oneness of self and the universe. Vernadsky expresses his naturalism through his respect for Hinduism. In the Rig Veda, Hinduism teaches the creation of the universe from inexistence and this experience of inexistence continues to the discovery of Zero. The suggestion of Vernadsky made us aware of this great discovery of humanity and its infinite possibility.

*Keywords*: Organic Cosmology, Vernadsky, Flow of life, Atomic flow, Quantum theory, Naturalist. Hinduism, Zero, Biocosmological Association

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Пробил Час Биокосмологической Ноосферы: к реализации естественнонаучным путем полного (180°) разворота, от Трансценденталистского к Органицистскому полюсу – в Триадологическом реасе-мировом движении и интегральном (в совокупности целостного взаимодействия антропологической, социокультурной, экологической и других сфер) восхождении человечества на естественно (последовательно) новый и высший в сложности Ноосферный стратум мирового развития)

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Термин 'Органицистский' происходит из греческого (собственно из философии Аристотеля) понятия «'Όργανον» (Organon) : что имеет исходное значение «инструмента» («орудия» и «средства» для достижения цели), в конечном итоге – требующегося результата действия. Органон, по сути – это естественное предназначение-функция любого органа (субъекта), одновременно реализующего (претерпевающего) свой присущий энтелехистский онтогенетический путь в Биокосмосе. Поэтому Биокосмологию следует считать современным научным и философским выражением как учения Аристотеля и Лао-цзы, так и насущной актуализацией современного мощного Органицистского потенциала в мировой науке. Последний является укорененным в российской научной Органицистской традиции; здесь, в первую очередь, выделяя достижения (так называемой, в Биокосмологической ассоциации) 'Большой пятерки' русских гениев, проявивших себя в классической цивилизационной теории: Н.Я. Данилевского, К.Н. Леонтьева, В.И. Вернадского, П.А. Сорокина, Л.Н. Гумилева.

В Биокосмологической ассоциации (БКА) : основные положения Биокосмологического «разворота», его основания и цели – все они раскрываются (в подготовленной в БКА) *Биокосмологической Инициативе*; принятой сообществом на 22-м Международном симпозиуме по Биокосмологии (см.: https://biocosmology.org/?page\_id=2471) Краеугольным моментом в Биокосмологическом движении выступает (и, соответственно, являет собой фундаментальное основание для Биокосмологической теории) – таковым движущим моментом становится универсальный Биокосмологический принцип *свободного* 

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онтогенетического Само-восхождения субъекта на последовательно высшие (в сложности организации) страты индивидуального Эво-онтогенеза (в конечном итоге и в целом – ЭвоПроцесса). Важно отметить, что единый целостный Космический ЭвоПроцесс реализует свое Само-восхождение посредством усвоения как раз неисчислимых индивидуальных эффекторных *Telos*-вложений в общий Процесс – производимых великим множеством активных субъектов; что и составляет единое целостное эволюционное Биокосмистское движение ЭвоПроцесса.

Другим ведущим основанием ДЛЯ Биокосмологического развития выдвигается общепризнанный референциальный базис : это Органон Космология Аристотеля, с ее главными принципами энтелехизма и гилеморфизма, а также учение Даосизма – именно эти основания являются необходимыми в достижении результата успешного взаимопонимания между всеми учеными, задействованными в реализации Биокосмологического проекта. Это особенно актуально, когда ученые активно предлагают собственные оригинальные (следовательно, разнородные) научные концепции; и что закономерно натыкается, в преследовании целей общего эффективного взаимодействия – с трудностями при первичном их восприятии и понимании. В общей сложности, проводимая работа имеет главной целью осуществление исторической реабилитации и настоящего развития, но также и достижение реально согласованного и внутренне непротиворечивого (с Двумя другими Типами рациональности) становления фундаментального Органицистского (Биокосмологического) мышления современных ученых. В конечном итоге, все намеченные усилия призваны обеспечить результат – когда современное академическое сообщество придет к пониманию и признает естественнонаучную (натуралистическую – Органицистскую) сущность настоящей и будущей динамики живого мира Земли; и что (будущая реальность) естественным образом являет собой последовательно высший результат Само-эволюции живого Космоса, его ЭвоПроцесса.

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### Сборник Тезисов

### XXIV Международный семинар по Биокосмологии

#### по теме:

«Биокосмологический разворот к Органицистскому полюсу Триадологического научного знания и Северо-Восточному вектору мирового-реасeful развития»

В рамках МГУ(ФГП)\_Конгресса-«Глобалистика-2023» «Проблемы искусственного интеллекта и смены научно-технологических укладов»;

23–27 октября 2023 г., *на факультете глобальных процессов* Московского государственного университета имени М.В. Ломоносова, г. Москва