

Addressing the scientific community – Biocosmology Initiative

(Adopted at the 22nd *International Symposium on Biocosmology*;
as part of the 7th International Conference on Globalism, Moscow State University,
15–18 June 2021)

PREAMBLE

A century ago, Vladimir Ivanovich Vernadsky raised the issue of introducing new cosmological foundations into science. He argued as follows: “It took many years before I realized (in the mid-30’s) the backwardness of philosophy (in its global scope) at the historical moment we are experiencing in the life of mankind... It stands in essence on grounds of the 17th century, unaware of the impossibility to grasp new phenomena with ‘old bellows’ ...” (taken from the scientist’s book *Philosophical Thoughts of a Naturalist* (Filosofskie mysli naturalista) [M., 1988. P. 237]). There is no doubt (in view of the current global crisis) : the time has actually come for the scientific community to reconsider the supremacy of the 17th century’s cosmological (basic scientific and cultural) foundations; but instead to take as a basis the new foundational principles for the scientific and cultural activities produced by man and society in the 21st century.

At the 22nd International Symposium on Biocosmology (22ISBC), held as part of the 7th International Conference on Global Studies (organized at MSU, June 2021); and by virtue of consistent preparatory efforts and contributions of the Biocosmological Association’s (BCA) scholars – into the realization of the needed scientific basis and the sought-for (Biocosmological) path of scientific evolvement : the conditions have matured here for launching the *Biocosmology Initiative* (through Addressing the scientific community). The main challenge for the Biocosmology Initiative is about undertaking the decisive U-turn shift with regard to contemporary (of the 21st century) scientific knowledge, based on the recognition and actualizing (in scientific theory and practice) the universal Triadic (Triune – Triadological) nature and essence of scientific and philosophical (rational) pursuits and results (successes).

MAIN CONCEPT

Basic Principles of the Biocosmological Approach. The Biocosmological approach first argues that the real world is a Single (one whole) natural Dynamic Living Biocosmos. In this world every physical (from *physis* – Greek Φύσις; and the title of Aristotle’s work *Physica*) : every physical *subject*¹, from physical fields and energies, to a particle, atom, molecule, bacterium, subject of plant, animal and sociocultural (human) worlds; in Vernadsky’s approach: *Geo-, Bio-, Socio-* and *Noosphere* – every physical subject is naturally subordinated (subject to) and follows the single (universal, timeless and omnipresent) laws (fundamental principles):

- the Dynamic*** (*Hylemorphist* and *Entelechist*) ***coherent oneness*** of a subject : its Organicist *active-evolutionary* Self-existence and Self-changeability – in the ontogenetic process of the subject’s Self-ascending evolvement (in the complexity of organization – within the surrounding Biocosmos); which is realized through the inherent (to any natural-cosmist subject) *inner entelechist* powers-potentials;
- Bipolarity*** : unchanging existence of two opposing centers (poles) of the integral life organization in a subject;
- Triadicity – in the Triune***: the poles are united into an integral life organization through an essential and unchanging (homeostatic) center, the only one capable of interacting synchronously with both poles;
- Circular Cyclicism*** : dynamic natural alternating dominance (poles and center) in the organization of a subject's holistic life a subject’s coherent life;
- Quaternity (Four-sidedness)*** : essential (necessary) simultaneous activity of both poles; and, under the influence of their dominant organization – two cycles in the subject’s circadian life activity (as in the example with the circadian cycles of “*sleep*” and “*wakefulness*”);
- Pentavalence*** : the inherent importance of the *Center* – in the existence of a subject’s life poles and the circular realization of all its life cycles (thus, of all five essential elements);
- Ontogenetic finiteness*** (of a subject’s life path), ***Functionalist Heterogeneity*** and ***Hierarchy*** in existing systems of integral life organization;
- And others.*

¹ Here, the *subject* means, in a universal way, the physical (natural, cosmic, natural-scientific) whole whose main property is the inherent purpose-oriented (telic – *entelechist*) lifelong Self-evolvement; and which is realized on the basis of Self-maintenance and Self-controlling, on the homeostatic level, of all its vital functions.

On the national (civilizational) nature of science. 150 years ago (with an outline in the work “*Russia and Europe*” published in 1871): N.Ya. Danilevsky, in his theory of the world civilizational evolvement – here the scientist substantiated the essential self-consistent importance (for the world) of the Russian civilization; and proclaimed its rapid phenomenal evolvement in the cultural and social sphere, with reliance primarily on scientific development. The great scientist’s prediction was fully justified : the Organicist civilizational essence of the Russian social organism was formed both in terms of social and economic development, and in terms of the formation of the inherent scientific (naturalistic – *Organicist*) tradition : with its schools of “Russian” *cosmism, Organicism, cyclism, pulsationism, functionalism*; and, as substantiated in *BCnA*²-publications [2020 – DOI: 10.24411/2225-1820-2020-00006] – with the highlighted ‘*Russian school of civilization studies*’; wherein the importance of the ‘*big five*’ of outstanding scholars (N.Y. Danilevsky, K.N. Leontiev, V.I. Vernadsky, P.A. Sorokin, L.N. Gumilev)³ is emphasized.

First of all, as Danilevsky established a century and a half ago: the sociocultural (therefore – including scientific) world cannot be monolithic, uniform and homogeneous (unified for all); but is essentially heterogeneous (non-uniform), and which ultimately has a purely national (civilizational) essence; because it possesses its own (natural) cultural-historical type, and the latter (in each individual instance) – leads the civilizational subject to realizing and actualizing its inherent mission and place in the world evolvement. First of all, as Danilevsky established a century and a half ago : the sociocultural (therefore – including scientific) world cannot be monolithic, uniform and homogeneous (unified for all); but is essentially heterogeneous (non-uniform), and which ultimately has a purely national (civilizational) essence; and that each civilization, according to Danilevsky, acts as a bearer of its own (natural) cultural-historical type, and the latter (in each individual instance) naturally leads the civilizational subject to realizing and actualizing its inherent mission and place in the world evolvement. The fact that Anglo-Saxon (dominant, in general – in the West) civilization has succeeded (since the 17th century) both in imposing on the entire global world an exclusive commitment to Transcendentalist (Dualist) cosmology, and in forcing scientists to unquestioningly adhere to it – is a striking confirmation of this. In other words, the results of one-nation (civilization) dominance have manifested themselves in a sharp (radical) adherence to a unified *Transcendentalist*

² *BCnA* : the journal “*Biocosmology – neo-Aristotelism*”, an electronic scientific periodical – the official organ of the Biocosmological Association; URL: <https://biocosmology.org/?lang=en>

³ However, the integral (united as a whole) significance of the world scientific (in civilization theory) contribution of Russian scholars – such a significance has not yet become a subject of actualization in the scientific and philosophical community : because of the ‘dissociation’ of the achievements of these five great scholars from each other in the thorns of the historical process that had taken place (and for other reasons).

cosmology that enables the *ideal-abstract* (mathematical) conditions and possibilities of human consciousness's confrontation with the external (admittedly chaotic) material world-cosmos (that, following Plato, is taken in the modern academic community to mean an essentially aimless “*physicalist*” world); and which exists both for its anthropocentric “re-creation” and (primarily) for the subordination of its natural forces (potencies) to human consciousness. As it becomes clear – all this is possible exclusively on conditions of unquestioning obedience of scientific thought to appropriate (Dualist cosmological) scientific foundational principles of (objective and positive, *mathematical-physicalist*) knowledge of the real world; while these fundamental scientific principles (and “scientific method” in general) were put forward and accepted as back as in the seventeenth (XVII – !) century.

The Bipolar nature of scientific knowledge. In turn, as far back as Ecclesiastes stated : there is “*a time to scatter stones, and a time to gather stones – everything in its own time*”. There is no doubt that the age of analytical knowledge was (and still is) absolutely essential. But, due to the natural cyclicity in the evolvment of the world : presently, in the twenty-first century, when the Integralist sociocultural era is inescapable, and which naturally comes into its own (as Pitirim Sorokin justified this, 80 years ago, with the publication of his four-volume *Social and Cultural Dynamics*, in 1941,⁴ which promulgated his Triadological civilization theory) – Integralism equally requires an understanding of both poles of scientific knowledge; because it equally uses (integrates) their powers and means to produce true Integralist cultural knowledge.

The gist is that scientific knowledge is naturally *Bipolar* : i.e. scientific knowledge always contains two polar (and incompatible with each other directly) – opposing (to each other) scientific approaches; but which are equally essential for integral (Triune – comprehensive) true rational (scientific and philosophical) knowledge. However, each of the three types of scientific knowledge (Dualist, Organicist, and Integralist) is able to cognizing the real world only in tin the realm of its potential capabilities. Thus, the modern dominant (or even dictating) Dualistic (of objective, mathematical-physicalist cognition) science, that is enrooted in the *Transcendentalist* (opposition of human consciousness to the physical world) pole of worldview – this science establishes grounds and conditions that completely remove (exclude, cross out) from scientific inquiry the natural-scientific

⁴ However, the first Russian-language publications (initially, fragments of the outstanding scientific work) have appeared in Russia only since 1995.

significance of the (Bio)cosmic *telic*-driven (purpose-oriented) causes and acting (in a subject – *from within*) forces.

As a result, within the Dualist science : here, the subject's (*internal Dynamic*) telic causes of the subject are removed and are not allowed (forbidden) to be studied, and banned from application; but only objective (positivist) external data and factual knowledge are allowed to be studied and applied, ultimately demanded for their use by human consciousness (and which, on a fundamental level – is recognized in Western science as a homogeneous and uniform substance) – for their mathematical-physicalist and constructive applications (of the gained objective knowledge). In turn, what is essential : here (in Dualism) the natural purposeful behavior of natural subjects is not denied, but is taken *for granted* (*without proof; as a given; as a matter of course*). Similarly, and herein lies the key point : the polar (opposite to Dualist) – Organicist science, but already in relation to objective (empirically revealed and reliable data) : the latter uses these objective data with necessity (although they are mined precisely by modern global positive science).

Organicist pole of scientific activity – of the Dynamic Entelechist Naturalism. Thus, Organicist science does exactly the same thing as Dualist Science, however with the opposite meaning : addressing these (objective) data as to the reliable information required for the study; but taking them *for granted* (*as a matter of course*) in already “*a given*” – in a ready valid meaning (originally existing, though recently discovered in Dualist studies) : essentially ready for carrying out a direct full (without the artificial framework of experimentation) mode of understanding the subject's life activity, in its natural surroundings. In other words, in the Organicist approach : the subject under study initially (and without ceasing) cosmologically belongs originally to the *Biocosmist* (living) world; and all the subjects of this world – naturally possess the inherent properties of *natural Dynamism*, *telic* Goal-directedness (*Telos*⁵ – *Teleo*-moveability) and *ontogenetic* Self-evolvement; and what a scholar-Organicist inevitably and inescapably elucidates on his or her way of knowing the *Entelechist* and *Hylemorphist* physical essence of the studied subject; and, hence – of all its related inherent qualities and features. To put it differently, the Organicist approach essentially uses objective (derived from Dualist experiments) objective data, but which is already perceived as the natural

⁵ From the Greek - τέλος; in transliteration – *telos*; meaning “purpose” as the “final destination” of the subject's efforts, i.e., the final “result” of his actions; introduced into science and used by Aristotle to denote the full potential physically inherent in man (or thing – subject) – to realize his purpose or goal of existence and activity; and that acts as the key element in a compound concept, the original and essential in Aristotle's scientific system – *entelecheia* (as explained by Will Duran: “... having (*echo*) its purpose (*telos*) within (*entos*) ... “ [1926]).

inherent properties of a subject under study - already in the mode of its direct wholesome study (as the subject of a single Dynamic Bipolar Cyclic-Triadic – *Triune* Self-evolving natural real world).

In this light a key point about the Organicist Type of scholarly endeavors becomes clear : Organicist science levels the priority of using only (but superseding everything else) objective study and the external data on a the subject (gained by the way *from without*; and based on non-natural, but artificial abstract – Anthropocentric) mathematical methods; while Organicism takes into account that objective (experimental) data have purely Static character : as a studied physical subject (in experiment) is alienated from its own *dynamics* – for, all the objective (external) data about it are obtained by an artificial experiment; i.e., by artificially separating the subject from the natural coherent world's evolutionary movement. Therefore, despite phenomenal advances in the in-depth knowledge of the material world and outstanding technological advances : but the Dualist science (with its foundations in mathematical physicalism) – this Type of science deletes from the scholarly search, in principle, the significance of *telic* (acting *from within* – on the effective wholesome, *AnthropoKosmist* result of the life activity) causes and capacities in the subjects of the real world; and here (for a Dualist scientist) – the inherent ontogenetic *telic* Dynamics of the natural world subject's (under study) activity inevitably escapes from his attention.

At the same time, as becomes clear from the Biocosmological perspective (and which has cornerstone value) : both polar scientific approaches (Dualist and Organicist) are equally essential for the integral success of rational knowledge (science and philosophy). However, the latter becomes possible solely on the basis of applying an autonomic Third (but First, in importance) – the Integralist Type of scientific knowledge that relies on its own cosmological foundations, and which studies subjects in their full (wholesome) scope, as the Systemic, of Complex knowledge, Holistic and Biocosmological approaches do.

Type of Integralist basis that realizes the (Triadological) synergy of both polar types of scholarly activity. No less essential, as far as the Integralist knowledge is concerned, is that the latter, and since it does not have its own polarity – consequently, Integralism is incapable, in principle, of possessing and using its own primary (comprehensive) conceptual foundation (which is the case with polar cosmologies; as, for instance, in Platonism or Aristotelism). Consequently, in a significant way – all the cosmologies of Integralism (and their conceptual foundations and conceptual systems, and any scientific Integralist knowledge) are capable of knowing and explaining the real world solely through the essential integration of the grounds and means from both polar Types of knowledge (as,

for example, the realization of systemic knowledge is not possible without recognizing the essential purpose in each of the constituent elements-organs of a system).

In its turn, every Integralist approach is forced to acquire its vectorial rootedness in one of the two polar Types of knowledge (either Dualist-*binary* – Static; or Organicist-*ternary* – of the Dynamic naturalism) – in order, as a result, to acquire the basic conceptual structures and terminological resources for building its own unified conceptual system for its scientific expression. Thus, the aforementioned systems approach, which describes natural systems as already established integrated entities (i.e. no longer possessing the inner potential for Self-evolvement) – this scientific approach is inevitably based on the foundations of Transcendentalist (Anthropocentrist) cosmology and its fundamental principles and terminologies (aetiological, epistemological, methodological, anthropological, etc.), which currently are inherent precisely to the global (Anglo-Saxon) worldview and world-attitude (Type of mentality-mindset) and scientific practice.

The essence of the Biocosmology Initiative. Then, summarizing the above, and what is the essence of the Biocosmological Initiative – this Address reveals that scientists around the world can (and should) maintain and pursue an equal perception of both poles of rational (scientific) knowledge – the *Transcendentalist* (Dualist – Static, mathematical-physicalist – *Top-Down*, Platonic); and the *Organicist* – Self-ascending (*Bottom-Up*) natural evolutionary organization of the world, in this correlating with the Aristotelian Dynamic naturalism. In the light of the above it becomes clear that the intermediate, but basal and axial Integralist knowledge (that unites the poles) – is itself essentially organized into the Two Types (and which, by their general vectors, are in turn opposed to each other). Then the first fundamental (polar) course immediately is represented by a modern systemic and complex knowledge, which have the main vector facing the pole of Transcendentalism (Dualism, Anthropocentrism); and wherein the world is basically seen as eternally Static (organized in Top-Down order), but continuously monolinearly progressive, i.e. the world ‘with eternal Western Democracy and domination of the Anthropocentrist scientific-cultural foundations from the XVII century on’.

In contrast, the second fundamental course of Integralism that is opposite (in direction) : the opposite vector is precisely the *AnthropoKosmist*, essentially of the Biocosmological evolvement and knowledge; and which first of all relies on the naturalist viewing of a Self-evolving wholesome world – Purpose-Result-oriented (of the Dynamic Functionalist essence) – Organicist, of life world (Biocosmos) subjects’ Self-movement (*Bottom-Up*) towards the goals of a new (of higher

complexity) wholesome, mutually beneficial organization; in the natural process of evolutionary Self-growth of the real world. It is essential that this intentionality and ascendance of the living world subjects fully corresponds to (and actualizes the significance of) the great Chinese cultural (21st century) project of building a Community of the Shared Future and Common Destiny for Mankind.

The main thing in the Biocosmology Initiative is the reorientation of the main vector of scientific activity – to the pole of Organicism (Dynamic Entelechist naturalism, AnthroKosmism, the Noosphere’s coherent organization of world processes). Thus, the Biocosmological Initiative – put forward on the basis of the recognized apparent *natural* Bipolarity and *dynamic* Triadicity of the physical (natural living) real subject (autonomic – *telic* Self-evolving) world; and provided that scientific knowledge is considered in its wholesome unity – the Triunity (respectively, Triadology) : the essence of the Initiative is to promote (with urgency) the Biocosmological approach as a new form of Integralist knowledge which undertakes a complete vectorial reversal towards the pole and foundations of Organicist Type of rational (scientific and philosophical) knowledge. Thereby, the most important thing for the latter (Biocosmological approach) is its orientation in the general vector (unlike, for example, the established systematic approach) directly to its organization on the grounds and in conceptual constructs (and by possess its own adequate contemporary scientific and terminological apparatus) – of the Organicist Type of scientific knowledge. Naturally, in this general (Organicist) vector of the Biocosmological scientific development : the mathematical support of the necessary scientific efforts (knowledge that is currently in demand, but which is substantively neo-Aristotelian – Telic-Result organized) – plays an essential role. Modern sprouts of the “*new*” mathematics, for example, are found in the works of L.A. Rastrigin, N.N. Moiseev, A.N. Kolmogorov, V.V. Nalimov, V.A. Uspensky, N. P. Brusentsov, and others.

In turn, with respect to the latter (the fundamentally Organicist vector of movement and evolvement) : the availability (and use) of an effective referential conceptual base is here of key importance; i.e. already existing (and which comprehensively reveals and explains the real world) – a conceptual referential base, in relation (relatively) to which any scholar could present (in a comparative way) his own Integralist (or Organicist) scientific conceptual approach, thereby making it understandable to colleagues; hence – for later interaction and practical use.

The essential significance of the Aristotelian OrganonKosmology. The rational system of Aristotle, the universally recognized “Father of Science”, is unconditionally recognized in the BCA as a required (all-encompassing) referential framework; and which is referred to here as *OrganonKosmology*⁶. The BCA recognizes the vital basis that Aristotle’s *OrganonKosmology* can effectively serve : as a basic concept – the referential framework – for relating and achieving the necessary mutual understanding and interaction between scholars. It is of paramount importance that the modern scientific naturalistic theories of Danilevsky, Sorokin and Vernadsky are highly complementary to Stagyrte’s Organicism. In its turn, the main problem here is the misinterpretation (radical Platonization of Stagyrte’s doctrine)⁷ made during the last centuries; and with the current (New Age) misunderstanding of the whole (in general) edifice (foundations and conceptual elements) of Aristotle’s coherent system of Organicist knowledge. In this respect, see *BCnA*-publications (2021) for more details. In this respect, see *BCnA*-publications (2021⁸) for more details.

FINAL SUMMARY OF THE DOCUMENT

Thus the essence of the Address to the academic (scientific and philosophical) community and the Biocosmological Initiative being put forward is a call for the consideration and recognition of the urgent return (restoration, in natural cyclical rotation-evolvement) of the true Triadic (the Three Types, but only possible in the Triune) essence of authentic scientific knowledge.

In carrying out this grand task : the recognition of the *naturalist* Bipolarity and *dynamic* Triadicity of scientific knowledge, and in the structure of the latter – the significance of the pole of Organicist, *teleo*-moveable integrating knowledge that is equal in importance to the Dualist, Anglo-Saxon analytical knowledge (and whose foundations were established in the XVII century); and that in this connection a decisive *U-turn*, on the basis of the contemporary (21st century) Integralism : from the Transcendentalist (the *Southern*, Anthropocentrist) Dualist pole – to the *Northern* (of AnthroKosmism and Noosphere) pole of the Organicist Type of rational (scientific and philosophical) knowledge is urgently needed; preferably in the course of Biocosmological (Integralist – *North-Eastern*) evolvement.

⁶ Here, “*Organon*” – from the Greek ὄργανον - directly has the original meaning of 'instrument' ('tool' and 'means' to achieve an end); and what is, ultimately, a function of the subject (thing, organ).

⁷ But what is natural to (Platonism-based) modern global (Anglo-Saxon) civilization and its science.

⁸ DOI: 10.24411/2225-1820-2021-00004