

REINSTATING ARISTOTLE'S COMPREHENSIVE ORGANONKOSMOLOGY AND THE GENUINE LANGUAGE OF HIS ORGANICIST NATURALISM ARCHETYPE

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ABSTRACT. In the 1620, Francis Bacon (1561–1626), in his famous “Novum Organum” concluded that scientific gentlemen (of his time) were under “the spell of antiquity, of authors and of consent”, which had “so shackled men’s courage that (as if bewitched) they have been unable to get close to things themselves.”² At the present time, remarkably, we have the similar situation, but of inverse significance – when men of science are under constant pressure from the impacts of modern scientific establishment (already of Baconian essence, i.e. modern authorities and implied consent are fully consistent with “the new scientific method”), and which currently completely suppress and shackle the courage of contemporary learned scholars who (“as if bewitched”) are unable “to get close to things themselves”. We now imply (under “things themselves”) and refer to the unacceptable loss of Aristotle’s Organicist naturalism, and emphasize the urgent need, in our time of crises – to reinstate Aristotle’s comprehensive *OrganonKosmology* and re-establish the genuine language of Stagirite’s Organicist naturalism archetype. For that, we, in the Biocosmological Association (BCA) – develop the Triadological approach of scholarly endeavors, and, in this work – try to shed light at the three cornerstones (key issues; but, in general, their number is greater): 1) that Aristotle’s philosophy is the self-dependent *OrganonKosmology* and the archetype of Organicist rationality; 2) that Aristotle’s philosophy has its own language and the apparatus of indispensable notions, terms and concepts; 3) and stressing the cornerstone significance of Aristotle’s notion *entelecheia*, which cannot be translated as “actuality”.

KEYWORDS: Aristotle, Bipolarity and Triadicity, Spiral and Monolinear, *OrganonKosmology*, *entelecheia*, organon, dunamis and kinesis, hyle and morphe, Functionalist organ, Type of rationality

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² See: Bacon, Francis (2000). *The New Organon*. Edited by Lisa Jardine and Michael Silverthorne. Cambridge: Cambridge University Press (first published 1620 as *Novum Organum*), p. 69.

Introduction

As Prof. Demetra Sfondoni-Mentzou, President of the Congress “ARISTOTLE 2400 YEARS” (in Thessaloniki, May 2016) rightly stated, in the contents of her “second circular” – Aristotle is “the universal philosopher,” whose work “spreads over the broadest range of topics, covering all major branches of Philosophy such as Logic, Dialectic, Syllogistics, Metaphysics, Political-Moral Philosophy, Rhetoric, Poetics and extending in an impressive way into areas related to all fundamental scientific fields, such as Physics, Biology, Zoology, Botany, Taxonomy, Mathematics, Meteorology, Astronomy, Geology, Psychology, Medicine, Economics, Humanities, Law and Political Science, Economics, Health Sciences and even Technological Sciences.” This is evidently the cosmology – comprehensive (all-embracing) knowledge. All the more, Aristotle is widely recognized Father of science (of the rational cognition). In other words, his archetype of rationality had become (together with Plato’s rational knowledge) the basis for further (world cultural) educational and scholarly (scientific) development. However, at the recent congresses on Aristotle that (in the Year of Aristotle³) have been held in Greece, neither in Thessaloniki (WCA2016), nor in Athens (WCP2016) – the programs of both congresses did not include any session (even any item) that could deal with the cultural (rational) heritage of Aristotle as the autonomic (self-dependent) cosmology – all-encompassing system of knowledge; and moreover – as the ahistorical (atemporal) Type of (Organicist – *Entelechial Hylemorphist* – Naturalist) rationality. The crux is (to remedy this situation) – we need to reintroduce both two main (and independent) approaches for understanding the historic (evolutionary) sociocultural ways: a) Spiral (dynamic and Triadic); and b) Monolinear (static and Unipolar).

In realizing the proposed Triadic approach, we firstly need to understand that the emergence of the two Greek geniuses⁴ – Plato and Aristotle – is a key juncture in the world cultural history, which gave rise to the Two (scholarly, but opposite) Types of rationality – Aristotle’s Organicist (that is *Entelechial* and *Hylemorphist*); and Plato’s Dualist (Anthropocentric and Mathematical-physicalist) that dominates in the modern time. Yet in the middle of the XXth century (in the 1941)⁵, speaking about the global crisis, on the issue of its type of mentality (in the Foreword to his book entitled as the “Crisis of Our Age”) – Pitirim Sorokin claimed⁶ about “an increasing replacement of the dying sensate elements of science by the new – idealistic or ideational – ones”; and that “In the field of philosophy this double process has manifested itself in

³ The year 2016 was proclaimed by UNESCO as “Aristotle Anniversary Year”, in respect to the 2400th anniversary of the birth of Aristotle, great scientist and philosopher (and whose science and philosophy is the single body of knowledge that is based on its own rational principles, notions and concepts), and who (Stagirite) is a figure of unquestionably universal significance.

⁴ Two creators of permanent contrasting cosmologies (comprehensive knowledge) in European science and philosophy – the two opposite visions of cosmos and cosmic order.

⁵ See: Pitirim A. Sorokin. (1992). *Crisis of Our Age* [1941]. Oneworld Publications Ltd, Oxford.

⁶ In the line with his conception of the “Three Systems of Truth: Ideational, Idealistic and Sensate” and “The Rhythm of Domination of Systems of Truth in History” that are given in the special chapters of this book.

increasing sterility and decline of recent materialistic, mechanistic, ‘positivistic’, and other sensate philosophies and in the emergence and growth of ‘the Existential’, ‘the Intuitive’, the ‘Neo-Thomist’, ‘the Integral’, ‘the Neo-Mystical’, ‘the Neo-Vedantist’, and other philosophies congenial to the basic principles of Ideationalism or Idealism.” [p.9]

The urgent task, therefore⁷, is to rehabilitate the genuine significance of Aristotle’s supersystem of knowledge as the autonomic (one of the main Three) Type of rationality and Type of cosmology – (*Organon*)Kosmology – of the Functionalist naturalism essence, thus needing primarily to have restored the genuine Aristotle’s scholarly language – the true significance of Aristotle’s main notions and concepts (through their thorough and cosmologically proper analysis, and which have the *Organon*Kosmological foundations). Emphatically, we stress the present urgency of moving back to the original texts of both Greek geniuses (Aristotle and Plato) – aiming at the rehabilitation and reinstatement the initial and originative existence of the two independent polar (opposite to each other) great cosmologies’ initial existence – Aristotle’s and Plato’s – that gave birth to the two essential atemporal Types of rationality (Aristotle’s *Entelechial*-functionalist *Hylemorphism*-naturalism; and of Plato’s Idealist Dualism that further brought about modern mathematical physicalism).

1. First cornerstone – Aristotle’s philosophy is the self-dependent *Organon*Kosmology and the archetype of Organicist rationality

In the Wikipedian article on “Physics (Aristotle)”⁸ – an interesting statement can be found that "For Aristotle, the motion of natural things is determined *from within* them, while in the modern empirical sciences, motion is determined *from without* (more properly speaking: there is nothing to have an inside)." In his presentations during the World Congress of Philosophy (WCP 2016), “The Philosophy of Aristotle”, in Athens, on July 10–15, 2016 – “Rehabilitating Aristotle’s Functionalist naturalism (teleological physics): Introduction of the Biocosmological Triadologic approach”, at the section “Aristotle’s philosophy of science”; and at the roundtable “Actuality of Aristotle’s Teleological (Functionalist) Naturalism as a Type of rationality (Type of (Bio)cosmology)” – the author (expressing the main positions of BCA) tries to emphasize and explain the two cornerstones of BCA’s strategy. The first is that we distinguish the two (synchronous and equal, but which rotate successively, replacing each other in their relevance, significance and timeliness of their epochs) ways of perceiving the world – Spiral and Monolinear.

In this, we recognize Aristotle’s philosophy as the autonomic (self-dependent) all-encompassing cosmology (supersystem of knowledge) which could be understood exclusively in the Spiral mode. In other words, we state that Stagirite’s entire (super)system of scientific and philosophical knowledge (*Organon*Kosmology, the

⁷ Although, in his works and theoretical constructions – Sorokin did not explain a direct connection to Aristotle’s foundational Organicist (super)system of knowledge and Type of rationality, thus postponing the endeavors of addressing this (most pressing) challenge to the present time.

⁸ See: https://en.wikipedia.org/wiki/Physics_%28Aristotle%29

all-encompassing *teleological physics* – Functionalist naturalism) is the self-dependent supersystem of knowledge and the archetype of (Organicist) rationality, which permanently exists and rotates in the ascending World Spiral of sociocultural evolution. In other words Aristotle's teleological naturalism (that is the foundation for the modern expression of the Organicist Type of rationality) is permanently active and, synchronously (among the Three equal Types) – are included into the World Spiral sociocultural ascendance. Spiral mode means that always there are (at least) Three Types of cosmos (and cosmic life) existence, and, accordingly – the Three Types of cosmological (rational) perception of the world (cosmos), which permanently and successively interchange each other (in their domination, over the two other types. Such a mode (of dynamic cyclic Triadicity) is expressed in Pitirim Sorokin's sociocultural theory that has the Triadic essence and is expressed in the four-volume "Social and cultural dynamics"⁹.

At present, however, the dichotomy of Spiral/Linear cognitive approaches is reduced to separate branches and fields of modern science and philosophy. We can meet them mainly in the areas of sociology (like in the study of J.E. Hale¹⁰), psychology (A. Samuels¹¹), physics (L.L. Van Zandt¹²), informatics¹³, and medicine (L.Rae¹⁴). In sociology, the main attention (in applying the Spiral/Linear models) is drawn to the issues of managing crisis response. Y. Zhong and S.P. Low argue that "the spiral model,... builds on and correct the preceding iterations in an attempt to achieve better performance."¹⁵ In psychological research, Andrew Samuels significantly concludes that "the notion of a spiral has often been employed to suggest that the developing personality consists of the same elements but with a greater degree of integration as life proceeds." [p. 13] In a more general (phenomenological) approach, Anna-Teresa Tymieniecka speaks about "the glorious ascent" and "the spiral evolution of types" (in respect to "the human creative condition"), and underlines the importance of "the entelechial nucleus of self-

⁹ See, for instance: Sorokin, Pitirim A. (2010). *Social and Cultural Dynamics: A Study of Change in Major Systems of Art, Truth, Ethics, Law, and Social Relationships*. 4 vols. 1937 (vols. 1-3), 1941 (vol. 4); rev. 1957 (Fourth printing 2010), Transaction Publishers, New Brunswick, New Jersey.

¹⁰ See: Joanne E. Hale, Ronald E. Dulek and David P. Hale. (2005). "Crisis Response Communication Challenges – Building Theory From Qualitative Data." *Journal of Business Communication*. Volume 42, issue 2, 2005, pp. 112–134.

¹¹ See: Samuels, Andrew. (1996). *The Plural Psyche: Personality, Morality, and the Father*. Tavistock/Routledge London and New York.

¹² See: Van Zandt L. L., and Ovehauser A. W. (1966). "Towards a Theory of the Anomalous Thermoelectric Effect in Magnetically Dilute Alloys." *Physical review*. Volume 141, No2, January 1966, pp. 584–591.

¹³ See the internet publication – "The Office of Science Data-Management Challenge", at: http://science.energy.gov/~media/ascr/pdf/program-documents/docs/Final_report_v26.pdf

¹⁴ See: Rae, Lisa. (1985). "The Single-Session Group and the Cancer Patient, *Social Work with Groups*, 8:2, 81–99.

¹⁵ See: Ying Zhong, Sui Pheng Low, (2009). "Managing crisis response communication in construction projects – from a complexity perspective." *Disaster Prevention and Management: An International Journal*, Vol. 18, Iss: 3, pp. 270–282.

individualization"¹⁶; and that, “in fact self-individualizing progress carries within its system a replicating code of virtualities and a mechanism for unfolding, that is, it lies within the innermost virtualities of the entelechial nucleus to prompt generation within a new living individual and to bring it to an autonomous life course carried on outside the nucleic womb.” [*Ibid.*, p. 305] A.-T. Tymieniecka likewise gives a valuable reference to Ilya Prigogine’s works, stressing that “the finishing touch of Prigogine’s approach to becoming is his conviction that becoming is self-generative.” She adds: “like Aristotle, Leibniz, Spinoza, Kant, and others, Prigogine believes that becoming emerges “*from within*”, *sua sponte* (italics supplied. – K.K.).”¹⁷

However, in essence, within current scientific and philosophical pursuits – there are still none attempts to explore the Spiral/Linear models in studying and understanding the cross-cutting (general) issues. Therefore, we (in BCA) actualize this topic and urge the necessity of recognizing the Spiral/Linear dichotomy in realizing the effective ways of sociocultural studies, thus contributing to a safe and prospering future (evolution); and in rehabilitating the Triadology of scholarly endeavors. Alternately stated, we recognize and contend that, in respect to the world (cosmic) sociocultural development (evolution) – there is always two main approaches for understanding the evolutionary ways: a) Spiral (Triadic); and b) Monolinear (Unipolar). The former (Spiral), which includes Aristotle’s *Organon* Kosmology (among the Three main Types) – is essentially bipolar, dynamic, cyclic, inherently changeable (driven *from within*), triadic, ascending; while the latter (Monolinear) is unipolar (reducible to Plato’s Dualism) and uniform, and static (although progressive), and which is driven *from without* (by external causes and forces). The scholars of BCA recognize both ways of sociocultural evolution, but essentially acknowledge the importance (especially, in the current historical period, of the global cultural crisis) precisely of the Spiral (Bipolar, dynamic, cyclic, Triadological, ascending) sociocultural evolution, thus complying (to) and developing Pitirim A. Sorokin’s findings, put forward in his “Social and cultural dynamics”; 1937–1941). In this perspective, BCA develops the Triadologic approach directly to scholarly endeavors – primarily, through the recognition and utilization of the Three autonomic synchronous Types of reality, and, accordingly – of the Three Types of knowledges (Types of cosmologies): Two polar (opposite to each other); and the Third (or the First, in significance) that is intermediate and Integralist.

First of all, we are to understand that the emergence of the two Greek geniuses – Plato and Aristotle – is a key juncture in the world cultural history. The gist is that their (Aristotle’s and Plato’s) rational (super)systems of knowledge have been taken (in the world cultural history) as foundations and patterns – the Types of rationalities – for the contemporary educational systems and institutional organizations of science

¹⁶ See: Tymieniecka, Anna-Teresa. (2000). Book 4 of the *Impetus and equipoise in the life-strategies of reason. Logos and life*, Analecta Husserliana C, 70. Dordrecht: Springer, pp. 304, 306.

¹⁷ See: Tymieniecka, Anna-Teresa. (1999). *Life Scientific Philosophy, Phenomenology of Life and the Sciences of Life: Ontopoiesis of Life and the Human Creative Condition*, Analecta Husserliana C, 59. Springer Science & Business Media, p.11.

and other sociocultural activities. In this, Plato's (Dualist) Type of cosmology (i.e. all-encompassing knowledge) currently dominates (or dictates) in the global sociocultural life, while Aristotle's (Organicist) Type falls into a disadvantage state of deep stagnation through the relation of global scholarly community. The urgent task, therefore, is to rehabilitate the genuine significance of Aristotle's supersystem of knowledge as the autonomic (one of the main Three) Type of rationality and Type of cosmology – (*Organon*)Kosmology – of the Functionalist naturalism essence.

In fact, this is an incredible moment in the world cultural history that two (Greek) thinkers of genius – Plato and Aristotle, founders of the modern types of rationality – appeared in the same place (Athens) and time (4th century BC, in the cultural period of Classical Greece), and even cooperated with each other (one is a teacher of another). The incredibility of the moment is that these two greatest thinkers have created the two (polar to each other) supersystems of knowledge that are precisely of cosmological character, for they realize the comprehensive (all-embracing) knowledge with respect to the surrounding tangible (visible) world (cosmos or Kosmos). Significantly, besides the specific contents of their cosmologies (and the archetypes of rational knowledge), they indeed are the founders of the main modern types of mentality and scholarly endeavours – the Types of rationality. Further on, essentially, in applying these both polar types of rationality – mankind has at its disposal the truly all-encompassing mightiness regarding the rational cognition of the world.

In Ancient Greece, in the Classical Period, in the time of rational knowledge origin – naturally coexisted and peacefully cooperated the independent (different) systems of knowledge. For instance, in respect to the concepts of soul – Javier Y. Álvarez-Vázquez states the synchronous coexistence of the “Platonic soul-body dualism” (reduced to and based on the notion of “intelligible, eternal sphere”) with “the reductionist materialism of the pre-Socratic natural philosophers” (reduced to the fundamental elements, “such as earth, water, fire, and air”), and that at the same time Aristotle developed “a radically new conceptualization of the soul”.¹⁸ However, further, during the long Middle Ages – European Scholastic philosophers have realized the synthesis of the polar means of Aristotle's entelechial naturalism and Plato's dualist idealism (mathematical physicalism) into the integral forms of medieval ontotheological thought. In turn, in the next historic cycle (era) – the new European thinkers (Bacon, among them) have carried out the straightening of all the rational knowledge into one philosophy and one science (“the new scientific method”), and wherein Aristotle's Organicist (Functionalist) naturalism as the whole (super)system and archetype of comprehensive (all-encompassing, cosmological) knowledge – the teleological physics of Stagirite had been ‘splashed out together with a bath water’.

¹⁸ See: Álvarez-Vázquez, Javier Y. (2016). “Animated Machines, Organic Souls: Maturana and Aristotle on the Nature of Life.” *International Journal of Novel Research in Humanity and Social Sciences*. Vol. 3, Issue 1, pp: 67–78.

It was not so much significant in respect to the current Sensate (in the term of Pitirim Sorokin) type of the sociocultural supersystem, since its emergence in the XVIth-XVIIth centuries, and its periods of ascent and thriving dominance, but is really significant at the present period of its natural decline and the result of ongoing global crises in social and cultural spheres. Moreover, the persistence of the situation (of the lasting belief of learned men exclusively in unipolar and monolinear foundations of sociocultural development) and the continued lack (in the contemporary scholarly milieu) of the new foundations of science and alternative types of rationality – all this attaches to the whole situation the increasingly dangerous significance. Indeed, while it is evident and understandable – nevertheless modern scientific community still stubbornly continues to rely heavily on the rational principles (of scholarly endeavours) of the XVIIth century – now, during the time of crises and new global challenges of the XXIst century! Really, there can be only one reason (in full accordance with famous Francis Bacon’s judgment) – this is, in respect to modern scholars, “a mark of supreme cowardice”, i.e. that “the spell of antiquity, of authors and of consent has so shackled men’s courage that (as if bewitched) they have been unable to get close to things themselves.”¹⁹

All the more it should be noted the profound statements of J.M. Schmidt²⁰: that “the interest of modern natural science was reduced to functional and causal explanations of all phenomena for the purpose of commanding nature”; and that “the one-sidedness and theory-loadedness of our modern natural-scientific view of life should henceforth be counterbalanced by lifeworld-practical Aristotelic categories.” [Schmidt, 2009, p.83] Substantially, the scholar proposes the concept of the natural existence of the two kinds (types) of science:

1. Aristotelian science derives its notions, principles, and concepts from human self-experience within a lifeworld perceptible by the senses and bases its explanations of different natural phenomena and technical processes on the paradigm of goal-oriented striving and manual production of means for certain purposes.
2. Modern science is guided by the secular interest in command of nature and thus selectively observes and investigates only those aspects of the world which can be measured and weighed and brought into relation with each other in a mathematically exact way. [Schmidt, 2009, p.92]

In a similar (and broader – Triadologic) way, Biocosmological Association (BCA) mainly focuses on the cultural heritage of Aristotle, but essentially as the (super)system of all-encompassing rational knowledge (*OrganonKosmology*); and the archetype of Organicist rationality. Another main scope of the BCA activity is the study of Integralist forms of knowledge, and which are understood as the syntheses of

¹⁹ See: Bacon, Francis (2000). *The New Organon*. Edited by Lisa Jardine and Michael Silverthorne. Cambridge: Cambridge University Press (first published 1620 as *Novum Organum*), p. 69.

²⁰ See: Schmidt, Josef M. (2009). “Is homeopathy a science?--Continuity and clash of concepts of science within holistic medicine.” *Journal of Medical Humanities*. 2009. Jun; 30(2):83–97.

both polar Types – Aristotle’s and Plato’s, but done on their own, Integralist cosmological foundations. Paradoxically, as it is stated above – Aristotle’s (Father of Science) supersystem of knowledge – *OrganonKosmology*, taken as a whole (and substratum for the contemporary Type of Organicist rationality) – has been lost to the modern scientific community. Naturally, therefore, BCA strives to reveal (rehabilitate) Aristotle’s true *OrganonKosmology* – the comprehensive (super)system and Type of science and philosophy taken as a whole. A cornerstone, to repeat this key point once again – Aristotle’s approach is the autonomic comprehensive (one of the Three) Type of knowledge. Essentially, Aristotle’s *OrganonKosmology* is fully independent from Plato’s Dualist cosmology, and that the latter (as the supersystem of knowledge and archetype of rationality) is basically polar (opposite) to Aristotle’s Entelechial Hylemorphism, and, in general – to the Organicist Type of knowledge of Stagirite. Significantly, both Types equally have the comprehensive quality (although, are opposite and incompatible with each other); and both equally are essential for the world science, philosophy, and culture in general. Emphatically, we stress the present urgency of moving back to the original texts of both Greek geniuses – aiming at the rehabilitation and reinstatement the initial and originative existence of the two independent polar (opposite to each other) great cosmologies’ initial existence – Aristotle’s and Plato’s – that gave birth to the two essential atemporal Types of rationality (of Aristotle’s Organicist Naturalism – Entelechial Hylemorphism; and of Plato’s Idealist Dualism that further brought about modern mathematical physicalism).

1.1. Modern time of “the new inquisition” and “a new intellectual apartheid”

Naturally, it was not always that (Plato’s – Static and Monolinear) way, as we have in the modern time – i.e. the existing dominance (or dictate, “the new inquisition”²¹, or “a new intellectual apartheid”²²) of the One philosophy and One science over all the alternative sources. For instance, as it was stated above, in Classical Greece, the polar (and integral) rational world-views (cosmologies), like Plato’s Idealism, with Aristotle’s Naturalism, or Democritus’ Materialism (and other) – they have been able to coexist and cooperate peacefully for centuries. However, later in history, in the Medieval age, naturally (due to the cyclic – Spiral Triadic – way of sociocultural evolution) – European scholiasts, in their ontotheological constructing, had developed the mingling (integration of) both the concepts and notions of Aristotle and Plato, so that, later – scholars discontinued to distinguish between the rational cosmological (all-encompassing) constructions of Aristotle and Plato. That is, thence – European (global) researchers started to treat Aristotle (a pure water pagan and naturalist) as a theological scholar, i.e. who (ultimately) had been enrooted (based) in the Dualist (Transcendent, External) mode of thinking (Type to

²¹ See: Wilson, Robert Anton. (1987). *The New Inquisition: Irrational Rationalism and the Citadel of Science*. Falcon Press, Phoenix, Arizona, USA.

²² See: Christian, David. (2002). “Science in the Mirror of «Big History».” In: Albert Van Helden (auth.), Ida H. Stamhuis, Teun Koetsier, Cornelis De Pater, Albert Van Helden (eds.) *The Changing Image of the Sciences*. Springer, Netherlands. Pp. 141–170.

rationality) that is entirely alien to Aristotle, but is the case Plato's Dualist Type of mentality.

Therefore, paving further the Monolinear way of treating the reality – the scholars of Renaissance and Modern European (and, soon, global) culture has had no more obstacles to understanding Aristotle as a theological (“supernatural”, “metaphysical”) thinker, i.e. who has no relation to directly the natural studies. As a consequence, at least from the XIX-th century – Aristotle (Father of science; and Father of Organicist cosmology) – his *Organon* Kosmology was thrown out of contemporary scholarly endeavors (‘splashed out together with a bath water’). In turn, correspondingly – his basic notions and terms had been translated into the new language – of the New Age, and thus they were assigned new meanings – to fit the values of the New (Dualist, Sensate) epoch, now of the Monolinear and Unipolar significance, and which essentially has the opposing – to the Aristotelian – External (*from without*) Type of grounds and purposes for cosmological world-outlook and sociocultural development.

2. Second cornerstone – Aristotle's philosophy has its own language and the apparatus of indispensable notions, terms and concepts

This is our second cornerstone (for our BCA activity, in general; and for the purposes of this study) – Aristotle's *Organon* Kosmology has its own language, outside of which the understanding of Aristotle's naturalist (Entelechial, Hylemorphist, Organicist) approach is absolutely impossible. Indeed, Aristotle's philosophy has the principle of *hylemorphism* in its foundation. However, when the term “matter” (which modern meaning is “physical substance... that which occupies space and possesses rest mass, especially as distinct from energy”²³) is used to stand for Aristotle's *hyle*, which is a purely Aristotle's term and (in the definition of F.E. Peters²⁴) that “does not have its origins in a directly perceived reality – as is true in the case of extension or magnitude (*megethos*, q.v.) – but emerges from an analysis of change (*Phys. I*, 190b-191a). In this case (of using “matter” instead of *hyle*), as we clearly see – Aristotle's conceptual constructions become really unavailable for understanding. One more conclusion of F.E. Peters is essential [p. 89]:

Hyle, then, is the primary substratum of change (*hypokeimenon*, q.v.; *Phys. I*, 192a), the “thing” that receives the new *eidos* (*Meta.* 1038b; for the Platonic antecedents, see *genesis*). But to call it a “thing” is misleading. *Hyle* is like a substance (*tode ti*; see *Phys. I*, 190b, 192a), but it is not such because it lacks the two chief characteristics of substance: it is neither a separate existent (*choriston*, q.v.) nor an individual (*Meta.* 1029a).

In other words, *hyle* is not the indifferent matter (and elementary material particles) that are used for constructing – *from without* (due to the applications and

²³ See: http://www.oxforddictionaries.com/us/definition/american_english/matter

²⁴ See: Peters, Francis E. (1967). *Greek Philosophical Terms: A Historical Lexicon*. New York: New York University Press.

integration of Mathematics with all areas of Science), but the elementary Functionalist organs, which are closer in meaning to the conception of “universal functional blocks” introduced into science by the Russian physiologist Alexander M. Ugolev²⁵. The latter have the significance of “letters” in “alphabet”, but which act by themselves – *from within* – are teleodiven (have the specific potencies and act by virtue of their telic inherent forces), thus uniting with other *hyletic* elements in accordance with the general *telos*, but doing this by themselves (self-dependently), thus entering (and Functionally contributing their potencies) to the new integrity – new emerging Functionalist organs, or, in metaphor, “words”; then, subsequently – the emergence of sentences, further – texts, books, data bases, and so on, ultimately merging into the countless flow of information – flow of life. In this approach, *hyletic* elements (Functionalist organs, “functional blocks”) can be exemplified in the physiological phenomenon of mRNA (messenger RNA) that is the large family of RNA molecules that convey genetic information from DNA to the ribosome, where they specify the amino acid sequence of the protein products of gene expression. In turn, each mRNA is the sequence of nucleotides (that are arranged into codons), and each nucleotide is the monomer that is constituted of a nitrogenous base, a five-carbon sugar (ribose or deoxyribose), and at least one phosphate group; and each yielding molecule consists of its essential atoms (and each atom – of its essential subatomic particles, and so forth), but all are the *hyletic* elements (Functionalist organs, or Functionalist things) that are equal in their significance (on all the levels of the *Kosmist* hierarchic reality).

In all cases, essentially, *hyle* is “the primary substratum (*hypokeimenon*)” of the naturalist (heterogeneous, telic) change, i.e. which is driven *from within*; while matter cannot be “the primary substratum of change” in principle, for, “matter” is used as the homogeneous (mechanistic) material *from without*; driven by the decision of a human consciousness that acts Dualistically, and which (dualistically and permanently) is battling against a chaotic aggregate of tangible things and forces of the surrounding (external) material world, aiming at their ultimate subordination and reconstruction.

In a similar vein, when the term “form” (which semantically points to the outer “visible shape or configuration of something”²⁶ under study) replaces Aristotle’s *morphe* which meaning stems from *eidōs* (which meaning is both “appearance, constitutive nature, form, type, species, idea” [Peters, 1967, p.46]; and which, indeed, as it is proposed by E. Stein – “Aristotle’s *morphe* (*μορφή*, *forma*) may be considered the root of individual essence.”²⁷ (p. 90); then (in both cases, in respect to *hyle* and

²⁵ For instance, see his (and in co-authorship) works: Ugolev A.M. (1990). “The concept of universal functional modules and the further development of the theories of the biosphere, ecosystems and biological adaptations,” [In Russian]. *Zh Evol Biokhim Fiziol.* 1990 Jul-Aug; 26(4):441-54; Ugolev A.M , Ivashkin V.T. (1992). “Theory of universal functional blocks and fundamental biomedical problems,” [In Russian]. *Klinicheskaia Meditsina*, 70(2):8–14.

²⁶ See: http://www.oxforddictionaries.com/us/definition/american_english/form

²⁷ See: Baseheart, Mary Catharine. (1997). *Person in the World: Introduction to the Philosophy of Edith Stein*. Springer, Netherlands.

morphe, when replaced by “matter” and “form”) – all this makes the study of Aristotle's philosophy (and his Organicist Type of rationality) absolutely meaningless and pointless. An interesting comment, in this regard, is given by Gareth B. Matthews, concerning the sincere utterances of Thomas Aquinas, that “Thomas was struck in reading Aristotle's *Physics* how a term like *morphe*, whose obvious meaning is the external shape or contour of an object, is used in graded ways to mean any property of a thing, then its constituting essential element. All this in the first book of the *Physics*.” [1992, p. 92]²⁸. Herein, we can conclude (propose) that Saint Thomas Aquinas treated (and used) Aristotle's conceptual constructs mainly from theological dispositions (i.e. from Plato's, and not from the Aristotelian – Organicist and naturalist – theoretical foundations themselves, as they originally are); and, in fact, that Thomas did not understand the true essence of Aristotle's naturalist constructions.

In general, we agree with the conclusions of renowned scholars – John Herman Randall Jr. and David Charles – who express doubts as to whether “Aristotle can survive translation into the Latin substantives of the scholastic tradition”. J.H. Randall stresses that modern scholars “have come at Aristotle from the standpoint of the later medieval developments and problems” [Randall, 1960, p.iv]; and that the early modern scientists (including Bacon, Descartes, and Kant) had “discarded Aristotle in rebellion against his religious interpreters.” Randall also seriously doubts, “whether it is possible to state his (Aristotle's. – K.K.) fundamental functionalism in the Latin tongue.” (Ibid.) In turn, David Charles argues that Aristotle, in his view, is not “the type of Aristotelian essentialist they (modern scholars. – K.K.) attack.” [Charles, 2000, p.3] Significantly, we likewise ought to pay attention to the conclusion of John Monfasani²⁹:

In translating history, one should wish to replicate the *res* of the original, not the *verba*. But in translating scientific texts, especially Aristotle, one must follow the Greek as closely as possible within the limits of literate Latin, neither adding or subtracting anything lest the translator substitute his understanding of the material in place of Aristotle's or of readers more insightful than the translator. [Monfasani, 2006, p.291]

Following this valuable advice, we firstly should focus on the significance of Aristotle's keyword notions of *organon* (*organikon*). Already Francis Bacon, in his the *Novum Organum*, published in 1620 – he takes the title from Aristotle's *Organon*, meaning the “logical works” of Stagirite (and, thus, regarding consciousness objects and implying his proposed – already Dualist – radical departure from the traditional method of scientific inquiry). On the contrary, in essence, Aristotle's *organon* has the

²⁸ See: Matthews, Gareth B. (1992). *Thought's Ego in Augustine and Descartes*. Cornell University Press.

²⁹ See: Monfasani, John (2006). “George of Trebizond's Critique of Theodore Gaza's Translation of the Aristotelian 'Problemata'.” In: De Leemans P. and Goyens M. (eds.), *Aristotle's Problemata in Different Times and Tongues*, Leuven University Press, pp. 275–294.

universal significance, meaning the “tool” (“function”) and relating to every thing of the real world (cosmos), and not exclusively to the objects of human consciousness. As it is stated by Mariska Leunissen³⁰:

The term *entelecheia* was coined by Aristotle, and designates a completed state resulting from an internal movement towards this state; see Ritter (1932; 1934) and Johnson (2005, 88–90). The traditional reading of *organikon* as “having organs” or “being composed of organs” (see, e.g., Ross 1961, 51, 313; Hamlyn 2001, 85) must certainly be wrong: elsewhere in the Aristotelian corpus the term *organikon* (coined by Aristotle; see Byl 1971, 132) always means “instrumental” and there is no reason to assume it means something different here. (P. 53.)

3. The cornerstone significance of Aristotle’s notion *entelecheia*, which cannot be translated as “actuality”

In the light of this fact it is incorrect that, for instance, the Dictionary.com defines *entelechy* as “a realization or actuality as opposed to a potentiality.”³¹ At the same time, many authors disagree with the opposition between potentiality and actuality; including Aristotle himself, the author of the foundational potentiality/actuality theory. In his philosophy, potentiality and actuality are principles of a dichotomy (Bipolarity of a thing) which Stagirite used to analyze motion. In turn, the modern word “motion” semantically points chiefly to the movements in the external environment, as (following the "oxforddictionaries.com") these are “the laws of planetary motion,” or “a cushioned shoe that doesn’t restrict motion,” or “flowing blonde hair that was constantly in motion,”³² etc. On the contrary, Aristotle treats *kinesis* as the processes of actualizing the potentials, in its modes of growth, alteration, and locomotion; and in realizing the ways of change or movement (between the two opposites), or the processes of growth and decrease, or generation and corruption. Appreciably, “change is the very key to Aristotle’s understanding of physical bodies.”³³ [Bogaard, 1979, p.14] In general, Aristotle’s *kinesis* has basically the internal (inherent) essence, of incremental – mainly qualitative – changes (within a whole process and its cycles and phases, from origination to genesis, maturation and completion; and the way back).

Stagirite defines “change [*kinesis*] as the progress of the realizing of a potentiality, *qua* potentiality,…” (*Phys.* III, 201a13-14)³⁴. By the way, the translator (P.H. Wicksteed) used the term “potentiality” for the word “ἀλλοιωτόν” that means

³⁰ See: Leunissen, Mariska. (2010). *Explanation and Teleology in Aristotle's Science of Nature*. Cambridge University Press,

³¹ See: <http://www.dictionary.com/browse/entelechy>

³² See: <http://www.oxforddictionaries.com/definition/english/motion>

³³ See: Bogaard, Paul A. (1979). “Heaps or Wholes: Aristotle’s Explanation of Compound Bodies,” *Isis*, Vol. 70, No. 1 (Mar., 1979), pp. 11–29.

³⁴ The translation is taken from: Aristotle. (1957). *Physics*, Volume I: Books 1-4. Translated by P. H. Wicksteed, F. M. Cornford. Loeb Classical Library 228. Cambridge, MA: Harvard University Press.

“changeable.” Significantly, the term “ἀλλοιωτόν” refers to the potentiality of change (= ἀλλοίωσις) and not just to potentiality (the Greek “δύναμις”). Thus, a better translation for *kinesis* could be ‘becoming’. At any rate, Aristotle’s *kinesis* had essentially the internal (acting *from within*) meaning, and cannot be replaced (translated) by the word “motion”. Likewise, F.E. Peters stresses that Aristotle’s definition of *kinesis* means “the actualization [*entelecheia*] of a potentiality [*dynamis*] qua potentiality.” [p.103]

Therefore, Aristotle’s notions (aforementioned; and that are under study): *hyle*, *morphe*, *organon*, *entelecheia*, *kinesis*, *dunamis*, *energeia*, etc.; and which substantially have the natural internal (*from within*) essence; and which all point to the priority of internal Hylemorphist forces; and what is contrasted to Plato’s external Dualist (epistemological) approach, i.e., in this relation – we always have the controversy between the *immanent telic* causes and the *transcendental random* causes. Especially, the attention should be focused on Aristotle’s notion of *entelecheia* that has the cornerstone significance. We fully agree with Will Durant who, showing “The Story of Philosophy” [1926]³⁵, essentially concludes that “*Entelecheia* – having (*echo*) its purpose (*telos*) within (*entos*); one of those magnificent Aristotelian terms which gather up into themselves a whole philosophy.” [p.69] In a similar manner, Wilhelm Windelband, in his “A history of philosophy” [1914], comes to a conclusion:

Being is that which comes to existence in the processes of Nature. This self-realization of the essence in the phenomena, Aristotle calls *entelechy*.

The central point of the Aristotelian philosophy lies, therefore, in this new conception of the cosmic processes as the realization of the essence in the phenomenon, and the respect in which it is opposed to the earlier explanation of Nature consists therefore in carrying through in conceptions the teleology which Plato had only set up as postulate, and developed in mythical, figurative form. (p.140)³⁶

However, returning to Will Durant’s definition of *entelecheia*, that it is “having (*echo*) its purpose (*telos*) within (*entos*)” – we must stress that *echo* (*hexis*) does not have merely the meaning of “having”. We agree with Pierre Rodrigo [2011], who (referring to the *Nicomachean Ethics*) points to the essence of Aristotle’s concept of *hexis*, that “stable disposition (*hexis*) is defined by its acts (*energeia*) and by its objects (*kai hōn estin*)” (IV, 4, 1122 b 1).³⁷ Thereby, the significance of *hexis* can be assessed as similar to *energeia*, hence – Aristotle’s *entelecheia* is constituted both of *telos* (the intended effect and result of activity) and *hexis* (the activity – *energeia* –

³⁵ See: Durant, Will. (1962). *The Story of Philosophy: the Lives and Opinions of the Greater Philosophers* [1926]. Time Reading Program Special Edition (Time Inc., New York).

³⁶ See: Windelband, Wilhelm. (1914). *A history of philosophy: With especial reference to formation and development of its problems and conceptions*. 2nd ed., trans. J.H. Tufts, London: Macmillan & Co., Ltd.

³⁷ See: Pierre, Rodrigo. (2011). “The Dynamic of Hexis in Aristotle’s Philosophy,” *Journal of the British Society for Phenomenology*, 42:1, 6–17.

itself), which is aimed at the achievement of the *telos* (effect or result that is meeting the given need of the natural thing-organism). William M. Ritter, who pays considerable attention to “the relation of Entelecheia to *energeia*” (in his work, entitled “Why Aristotle invented the word Entelecheia”³⁸) – he therein rightly wonders: “Why did he (Aristotle. – **K.K.**) feel the need of a new term (*entelecheia*. – **K.K.**)? Why was not *energeia*, a well-established Greek word meaning actuality, good enough?” (pp. 379 and 380). Nevertheless, in the modern English-language scholarly milieu – it is generally understood that “*energeia* and *entelecheia* are nearly identical.” (as it is noted by W.E. Ritter, p.379). For instance, F.E. Peters considers that “Aristotle normally uses *entelecheia*, which is probably his own coinage, as a synonym for *energeia* (q.v.)” (p.57); however, he himself acknowledges that “*ergon* is the function of a capacity (*dynamis*) and so its completion and fulfillment (*telos*, q.v.)”, thus “the state of functioning (*energeia*) “tends toward” the state of completion (*en-telecheia*),” (*ibid.*)

Another important issue (as we see it from the etymological definition of W.Durant) is that Aristotle’s *telos* cannot be translated by the English “purpose” (or, even, by “end”). In respect to Aristotle’s approach, and speaking about his *telos*, F.E. Peters stresses the importance that “the doctrine of teleology is basic in Aristotle: it appears in his earliest works (see *Proptrepticus*, fr. II) and it finds its completion in the *Metaphysics*” [Peters, 1967, p.192]. Peters argues (concerning Aristotle’s knowledge) that all is reduced to teleological “*physis* (Nature. – **K.K.**), which has its own purpose (*telos*) as well as being a source of movement (*Phys.* II, 198a, 199b),” [*ibid.*] In turn, W.M. Ritter insightfully concludes, in respect to *telos*, “although “end” is commonly given as its equivalent it seems that for one difference *telos* never meant end as of a stick or a road, a very common meaning of our word.”; and that “the Greek word *telos* has quite different associations from the English word ‘end’.” (p.380) In his work, Ritter concludes “the significant fact that *telos* is not the original word for which “purpose” is substituted.” [p.382]; and, in general, arrives at a profound conclusion on *entelecheia* “as wholeness rather than purpose”, as well as, referring to Aristotle – “that the *ontos* of ontology and of ontogeny of later times must be one and the same when a particular person is considered” (p.400); and that “the basic kindred between ontology and ontogeny, clearly seen (though not directly specified) by Aristotle, recognizes the ontological element in that *entelecheia*” (p.393).

Among recent research, in light of the issues under study – the works of Javier Y. Álvarez-Vázquez, Josef M. Schmidt, and Fernando Moya have drawn the attention. J.Y. Álvarez-Vázquez contributes an important study on the direct relatedness of Aristotle’s knowledge (*Organon*Kosmology) with Maturana’s theory, in their congenerous reference to the Organicist Type of rationality. [Javier Y. Álvarez-Vázquez, 2016] F. Moya studies the “Epistemology of Living Organisms in Aristotle’s Philosophy” and states that “For Aristotle, living entities are exemplars of

³⁸ See: Ritter, WM. E. (1932). “Why Aristotle invented the word Entelecheia.” *The Quarterly Review of Biology*. Vol. 7, No. 4 (Dec. 1932), pp. 377–404.

substance being”; and that “this means that they show a unity of matter and form on the one hand, and of potency and act on the other, in contrast to the duality shown in these respects by accidental beings, exemplified by artefacts.”³⁹ J.M. Schmidt aims at the disclosing of ground that would be ready “to conceive the scientific character of homeopathy – in a broader, Aristotelian sense.” [Schmidt, 2009] The author underlines that “Aristotle conveyed this term of “hypothetic necessity” to nature and separated it from the “mechanically” acting necessity to which modern physics confines itself.” [p. 91]

The same – “hypothetic necessity” (or natural virtual need; or “the internal need”) is the key notion in the theoretical constructions of Russian physiologist Petr K. Anokhin, the author of the General theory of functional systems. In general, P.K. Anokhin’s Functionalist systemic approach is really close to the modern expression of Aristotle’s teleological physics (Functionalist naturalism; based on the “*from within*” teleological aetiology of natural reality and its methodology of exploration). Anokhin’s new alternative new conceptual system includes the substantiated notions of “the functional system”, “the results of action” (as an independent physiological category that is equal to Aristotle’s “*telos*”), “reverse afferentation”, “the prediction and examining of the results of action”, “acceptor of the results of action” (the central notion that points to the telic, dynamic and cyclic essence of real processes), “conditioned (Internal) Inhibition”, the development of A.A. Ukhtomsky’s “theory of dominant”, etc.⁴⁰ Certainly, all this is a challenging, special and actual topic for a prompt exploration within the BCA studies.

Essentially, in the *Physics*, translated by Hardie and Gaye (and taken from *The Works of Aristotle*, edited by W.D. Ross⁴¹, 1930) – we see the valuable translation of Aristotle’s definition of motion (*kinesis*):

Def. *The fulfilment [entelecheia]*⁴² *of what exists potentially in so far as it exists potentially, is motion* – namely, of what is alterable *qua* alterable, *alteration* : of what can be increased and its opposite what can be decreased (there is no common name), *increase* and *decrease* : of what can come to be and can pass away, *coming to be* and *passing away* : of what can be carried along, *locomotion*. (*Physics*, Book III, 1, 201a10-14)

As is evident from this passage, ultimately, “*entelecheia... is motion [kinesis]*”, while the modern meaning even of “motion” is a “process of changing position”, “rise and fall”, “power to move”, “a prompting from within”, etc.⁴³ – all this clearly illustrates that “motion” cannot be a synonym to “actuality”, in principle. Another

³⁹ See: Moya, Fernando (2000). “Epistemology of Living Organisms in Aristotle’s Philosophy.” *Theory in Biosciences*. Vol. 119, Issues 3–4, pp. 318–333.

⁴⁰ See: Anokhin, Petr K. (1974). *Biology and Neurophysiology of the Conditioned Reflex and Its Role in Adaptive Behavior*. Oxford, Pergamon Press.

⁴¹ See: Aristotle. *Physica*. Hardie, R.P., and Gaye, R.K. (trans.), in W.D. Ross (ed.), *The Works of Aristotle*, vol. II, Oxford, 1930.

⁴² “Fulfilment”, herein, refers to Aristotle’s original word *entelecheia*.

⁴³ For instance, see: <http://www.thefreedictionary.com/motions>

Aristotle's significant statement is that "Nature has been defined as a 'principle of motion [kinesis] and change' [μεταβολής – μεταβολισμός]⁴⁴, and it is the subject of our inquiry." (*ibid.*, 200b12-13). The essential statement, herein (and which is the continuation of Aristotle's judgment), that "We must therefore see that we understand the meaning of 'motion'; for if it were unknown, the meaning of 'nature' too would be unknown." (*ibid.*, 200b13-15) Thus, both judgments of Stagirite clearly show that Nature is the distinctive quality of things, which have *within* themselves the principle of *kinesis* (*entelecheia*), and that cannot be separated from the things themselves; and, essentially, if "the *entelecheia*... *is kinesis*" – self-realization of their activity (self-actualization and self-development of their inherent potentials) – we cannot therefore forget about the "self" (their "selves", i.e. their intrinsic potencies and powers – their *δυναμεις*), then "*entelecheia*" never can be identified with "actuality".

All the more, due to Aristotle's conception – that "the soul is the first *entelecheia* of the body" – the thing's *entelecheia* falls as much onto actuality, as to its/her/his potentiality (for, the soul cannot be present only in actuality, and (at the same time) be absent in potentiality). As well as a kind of stating that "substance is actuality" is a clear contradiction in reasoning.⁴⁵ However, for instance, in J. Barnes' translation of *De Anima* (412a21-23),

But substance is actuality [**entelecheia**], and thus soul is the actuality [**entelecheia**] of a body as above characterized. Now there are two kinds of actuality [**entelecheia**] corresponding to knowledge and to reflecting.
[Barnes, 1984]

Essentially, Helen S. Lang⁴⁶ refers to Aristotle's theory of potentiality and actuality. She stresses "the active orientation of potency toward actuality", and that it is crucial to the account of "things that are by nature." [p.47] Therefore, in Aristotle's theory, "what is potential is not thereby passive: in natural things what is potential is caused by its proper actuality because it is actively oriented toward it." [p.64] H.Lang concludes that "this active orientation of the potential for the actuality that completes it lies at the heart of the order and teleology of nature." [Ibid.] Likewise, the author argues that "this position stands in sharp contrast not only to Plato but also to later philosophy, including the Stoics and Philoponus." [Lang, 1998, p.64] Another major moment in her work is that the scholar stresses an important thing that "although the term «teleology» is regularly applied to Aristotle, it is a modern one, and is quite definitely fixed in meaning by contemporary use." (p.36) Thus, due to this

⁴⁴ F.E. Peters (in his "*Greek philosophical terms*", 1967) defines μεταβολε as "Aristotle's most generic term for passage from one state into another, whether on the level of substance where the *metabole* is called *genesis*, or in one of the three categories of quality (see *pathos*, *genesis*), quantity, or place, where the *metabole* is called *kinesis*; see *Phys.* V, 224a-225b, and *kinesis*; for the matter implied by the various changes, see *hyle*." (pp. 116-117).

⁴⁵ Other evidences to support the notion of an inadequate use of Aristotle's terms and concepts are given in author's works (Khroutski 2015, 2016).

⁴⁶ See: Lang, Helen S. *The Order of Nature in Aristotle's Physics: Place and the Elements*. New York, Cambridge University Press, 1998.

misinterpretation, “Aristotle’s teleology is often identified with his account of «final causes» as if, apart from them, the rest of his physics (or philosophy more generally) were not teleological.” (p.274). Indeed, essentially – all the Four causes of Aristotle’s aetiology (as we see their original meaning: *hyletic, organic-morphogenetic, generative and Functionalist-telic*) are equally teleodiven and subdued to the natural inherent telic forces.

Conclusion

Two Greek geniuses, Plato and Aristotle (and their great contributions to the rational systems of knowledge) – evidently have become the key juncture in the world cultural history. It means that their scholarly (super)systems of rational knowledge (although which are opposite to each other), but they were basically taken and used as the foundations for the general (global) cultural (educational and scientific) activities and development, thus essentially serving as the archetypes of the entire Types of knowledge (Types of rationality, or mentality, or cosmologies). In other words, Aristotle’s and Plato’s supersystems of knowledge have become essential and universal (as a backbone) for the atemporal (ahistorical) Types of rationality, i.e. that are active in all eras and epochs. Significantly, Aristotle’s (Organicist) type is the Type of rationality wherein the real (main) causes and forces act *from within*; while Plato’s (Dualist) type is the Type of rationality wherein the real (main) causes and forces act *from without*. These Two (opposite to each other) Types of cosmological (all-encompassing) knowledge correspond accordingly to the dynamic Triadic (Bipolar, cyclic, self-evolving and ascending) way of sociocultural evolution; and to the static progressive (Unipolar – Monolinear) way of development.

The crux is, however, that during the last 5 centuries of the Modern epoch – Aristotle’s (genuine whole) Organicist approach (his *OrganonKosmology* and Functionalist naturalism) has been lost (rather, ‘splashed out together with a bath water’), while the contents of his all-encompassing *OrganonKosmology* were badly misinterpreted (in order to suit Plato’s Dualism). In the result, we, now in the XXIst century – still perform our scientific and philosophical activities on the foundational principles solely of the XVIIth century, that are basically Dualistic, and ultimately are reducible chiefly to Plato’s foundations that are unipolar, static (non-cyclic), and monolinear.

Such a situation is absolutely impossible in our XXIst century and our current age that is challenging for new universal (but rational, thus understandable for everyone) foundations, primarily which are capable to realize the effective forms of Integralist development (evolution). In this way, evidently, in respect to the genuine significance of Aristotle’s supersystem of knowledge – we see the urgent task of the fullest rehabilitation of his *teleological physics*, and clearly evaluating Stagirite’s *OrganonKosmology* as the autonomic (independent) scholarly approach that represents (and rationally substantiates) one (of the main Three) Type of rationality (and Type of cosmology) – of the Functionalist naturalism essence. In realizing this approach, we claim that Aristotle’s philosophy has its own language and the apparatus of indispensable notions, terms and concepts, which urgently needs to be

restored, starting with the notion *entelecheia* and the reinstatement of its genuine meaning (which is completely absent in modern English translations of Aristotle). We really need to agree with the conclusion of Anna Makolkin that “Aristotle is more than relevant to the current reality – he is urgently needed to lead us away from the pathway of our own destruction.” [Makolkin, 2013, p.686]

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