

All-Embracing (Triune) Medicine of the Individual's Health: A Biocosmological Perspective

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Abstract

Modern biomedicine focuses on a limited concept of etiology, namely that illness has a cause or set of causes based on our physical condition and environment. This notion of etiology does not include all of the causes, particularly the intentional purposeful driving forces – what Aristotle would call the final cause; but it focuses on the formal, efficient, material causes. Modern biomedicine actually needs a universal theory that could explain the personal evolution of each individual. A new cosmology is needed to supersede the current "scientific method", – we need a Biocosmology¹ that recognizes that all Earth's processes, including personal and collective evolutionary processes are naturally the product of, and the inseparable integrated part of the one whole Cosmic evolution. Growing from the observations of Pitirim Sorokin, the Bio-sociocultural reality exists in the three-dimensional essence – three sociocultural supersystems: Sensate, Integral, and Ideational (author's conforming notions: AntiCosmist, ACosmist, RealCosmist). Additionally, author introduces and discerns the notions of 'Eastern-complementary' and 'Eastern-alternative' medicine. While Sensate (AntiCosmist) and Ideational (RealCosmist) supersystems are polar opposites, they always synchronously symbiose and are both equally active during the Integral (ACosmist) – Intermediate (basic) cycle. Applying this Triune (All-embracing) approach to the individual's health issues, we have that Western Medicine and both Eastern-alternative Medicine and Biocosmological Medicine are polar opposites, while the current Integral medicine realizes the integration of principal ingredients from both Western and Eastern medicine.

"For, truth is rightly named the daughter of time, not of authority. It is not wonderful, therefore, if the bonds of antiquity, authority, and unanimity, have so enchained the power of man, that he is unable (as if bewitched) to become familiar with things themselves." *Francis Bacon (from "Novum Organum", 1620)*

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Introduction: The need of an 'Evidence Based Philosophy and Ethics'

We need (as I have argued, Khroutski, 2001–2008), along with the progress of modern scientific (i.e. modern conventional Western) medicine, including its main foundation of evidence based medicine (EBM), an 'evidence based philosophy and ethics' (EBPE) for *Bio*-medicine as the all-embracing science.

Using a medical language, – we currently are experiencing 'a disease' whose condition includes the 'Cosmological insufficiency' of our global cultural evolution. Our 'cultural organs' responsible for the organization of an effective exploratory activity, particularly for medical aetiological disclosing of the causes of all the existing diseases are insufficient.

Indeed, on the one hand, at present we are enjoying the modern (Western) bio-medicine that uses hi-tech approaches and is based on the scientifically proved facts, for, – we daily benefit with respect to the maintenance of our health from numerous achievements of evidence based medicine (i.e. – from the modern "scientific" or physicalist biomedicine). In general, modern medicine has brought us to the high level of our capabilities for treatment of diseases: A. Of healing – restoring to health – from acute diseases, particularly infectious disease; and B. Treatment – management – of chronic diseases: i.e. CNID – chronic non-infectious diseases, and CNTD – chronic non-traumatic diseases.

'Global Aetiological Paradox'. Despite the success of modern hi-tech medicine in the treatment (of acute) and management (of chronic non-infectious and non-traumatic) diseases, modern biomedicine is unable to determine the aetiology of chronic diseases (CNID and CNTD). Because of this modern medicine can not develop a healing approach that enables complete recovery.

I believe that this is a human rights abuse.

The core of the theory of causation that is lacking in the aetiology of modern medicine was provided by Aristotle. My core argument is that the theory of causation originated by Aristotle was based on the aetiology on the whole. However, the aetiology of modern medicine makes insufficient reference to Aristotle. Now, intentions of the human being are replaced by the significance of the causal precedents to a disease emergence. Modern medicine does not consider the "final cause" – *causa finalis* in biomedical research. Although modern philosophers and scientists always use some of the 4 causes identified by Aristotle, in the historical process they have placed Aristotle's basic principles "upside-down".

"To Throw the Baby out with the Bathwater"

The conclusion of the American author and philosopher (objectivist) Ayn Rand is really noteworthy: "If there is a philosophical Atlas who carries the whole of Western civilization on his shoulders, it is Aristotle. He has been opposed, misrepresented, and – like an axiom – used by his enemies in the very act of denying him. Whatever intellectual progress men have achieved rests on his achievements." (1963).

Likewise, the finding of an eminent American pragmatist philosopher Prof. J. H. Randall (1960) is valuable, – he disclosed that the early scientists (including Bacon and Descartes, and Kant) had discarded Aristotle in rebellion against his religious interpreters, although (as Professor Randall points out) their scientific achievements had, in part, an unacknowledged Aristotelian base and were carrying out the implications of Aristotle's theories.

Indeed, the gist of the 'global aetiological paradox' boils down to the evident fact – modern biomedicine has radically reduced aetiology: It does not use at present the full set of the known active natural (cosmic) forces (causes); i.e., notwithstanding its inability to grasp and explore the essence of the chronic diseases (CNID and CNTD), – modern medicine has deleted Aristotelian *causa finalis* and *entelecheia*. At the same time, a great paradox is that these (purposeful and whole-organizing) causes, in reality, – is the main essential property of a living subject. Entelechy is the actuality – 'self-process' (ontogenetic process) – of the realization of a (living) subject's immanent essence during its/her/his entire ontogenesis. In some modern philosophical systems entelechy is a vital force that motivates and guides an organism toward inherent self-fulfillment.

Another great paradox is that we have the natural sciences' (evident) truth that all living forms (all life processes) are absolutely universal in that they are ultimately reducible to the same basic molecules of DNA. They have other common structures and functional reactions. Likewise, this discovery of DNA has disclosed the evidence (reality) of the psychosomatic unity of a living subject – natural evidence of the genetic determinism (i.e., that genes – tangible molecules of DNA – determine both physical and behavioral phenotypes), together with psychological and environmental determinism. For instance, basically, the differences in mental faculties between humans and chimps are almost entirely genetic. Likewise, regarding genetic factors, we might find the facts (for instance, in Wikipedia, in the topic "Intelligence quotient") that genetic influences on traits like IQ grow with age (and not become less important): "Heritability measures in infancy are as low as 20%, around 40% in middle childhood, and as high as 80% in adulthood".

However, modern biomedicine still lacks both the full aetiological search and universal scientific approaches. Modern biomedicine needs a universal theory – that could explain the phenomenon and process (ontogenesis) of the entire human's life (the individual's ontogenesis).

Global Aetiological Paradox Calls for the Cosmological Substantiation of Modern Biomedicine

On the contrary, still, modern medicine is based on the fundamental physical principles (which are natural, but which relate, in principle, to the non-organic world). Likewise, modern biomedical theorizing is fully man-made, i.e. – is the entire product of human reason and, hence, – is unnatural or artificial (not determined by the order of nature). As a result, the present situation shows an extreme scientific pluralism and relativism, – that "reflections on the meaning of the complex dynamical nature of liv-

ing systems show an overwhelming multiplicity in approaches, descriptions, definitions and methodologies" (Van de Vijver 2003, p.101).

As already stated above, we now rightly praise evidence-based medicine (evidence based healthcare), but, paradoxically we pass over in silence that modern medicine totally lacks its own realistic (evidence based) philosophical principles – 'evidence-based truths – *realistic philosophical foundations*'. Such realistic philosophical principles could build on a needed theory of the universal essence of biomedicine. This would include theory of the individual's health during her/his entire life span or ontogenesis. Inasmuch as aetiology (etiology, aitiology, – from $\alpha \iota \gamma \iota \alpha$, *aitia*, "cause"; and - $\lambda \omicron \gamma \iota \alpha$, -logia) – the study of causation, or origination – is the first issue of cosmology, and inasmuch as we have the '*global aetiological paradox*' in modern medicine, – we actually need the advancement of new cosmological foundations in biomedicine.

A key point is that Aristotelian aetiology is the expression of his fundamental cosmology. Aristotle's cosmos is exactly "*bio-*" cosmos – i.e. organic, whole, hierarchical *Cosmos*, in which every (living) entity has its inherent place and destination in the one whole (organic) self-evolving cosmic world. Substantially, likewise, modern (rational) aetiology started exactly from Aristotle's theorizing based on his cosmological conception of four main natural causes – *material, formal, efficient* and *final* (likewise, he distinguished accidental and essential causation).

However, in modern medicine (in modern science on the whole, with its basic relation to the so-called "scientific method"), – we do not meet the name of Aristotle and the references to his originative influence on the development of the whole issue. In medicine, for instance, aetiology refers exclusively to the causes of diseases or pathologies that refer to the tangible factors (mainly of the surrounding, i.e. external world) like infectious pathogens or various traumatic (of any physical origin) influences.

'New Cosmology' instead of the "New Scientific Method"

This example – of the expulsion of Aristotle, founder of the modern aetiology and the "philosophical Atlas" for the entire Western rational cultural edifice, – this example shows clearly that in the Modern era we need to deal basically with the *new cosmology* than a new "scientific method".

In other words, exactly the cosmological foundations (that are inherent to Aristotle's philosophy) had been overturned in the beginning and during the evolution of the current (post)Modern era. What had been radically changed – firstly, these were exactly the cosmological foundations, while the scientific method was (and is, and will be) one the same (invariable, uniform) in all times, being constituted of the three main structures (stages):

1. INPUT: of the empirically tested and rationally organized data;
2. CENTRAL PROCESSING: intellectual processing of these data by using this or that approach and method (that developed and applied from the cosmological disposition of a scientist);

3. OUTPUT: of the results of scientific (practical) work, which are open for the empirical and rational testing and are realized in the forms of rational construction of theories; or the advancement of methodologies for practical activity, or in any other 'product' to be used in the effective practical activity.

Aristotelian Cosmology is Quite Antipodal to Modern Astrophysics

Really, Aristotle's cosmos is quite different (opposite, polar) to the modern treatment (notion) of cosmos that has the astrophysical meaning (of the empty space that is filled with material objects and physical processes). The latter comprises a fully *anti-thetical* (*antipodal*) significance to Aristotle's cosmos. Indeed, Aristotle's cosmos is substantially *finite, qualitative and hierarchically differentiated*. Aristotle's "cosmos" (precisely in its metaphysical meaning) is substantially more than a planetary model and is quite distinct from the modern concept of Universe (infinite, quantitative and homogeneous, where space, time, matter, and cause are absolute and uniform).

On the contrary, in Aristotle's Cosmos there is no space (only place) and everything ever is the whole combination (integration) of matter and form (*hylomorphism*), wherein any change (movement and development in Cosmos) is based on the entire and inseparable set of the main causes – i.e. on the Four Causes: material, formal, efficient, final. And the final cause – *causa finalis* – has the decisive significance – all entities in the world are basically moved and are (self)evolving due to their inner immanent (natural) goals. Aristotle made the teleological explanation the most fundamental of the four interacting and integrated ways of explaining nature.

In our modern understanding, the material cause (*causa materialis*) means "material composition" of the things under research); the formal cause (*causa formalis* – "the structural-functional organization"); the efficient cause (*causa efficiens* – "common physical causality"); and the final reason (*causa finalis* – "purposeful or telic causality"). For instance, a human being's building (material) elements are atoms, molecules, cells, tissues – *causa materialis*; s/he is constituted of organs and systems of organs (like cardiovascular system), each is the unique (essential) composition of the needed atoms, molecules, cells and tissues – for the effective realization of its evolutionary (organic) function – *causa formalis*; in turn, each organ or system of organs experiences and reacts to physical influences (for instance, the extent of oxygenation or the level of glycemia) from within (internal environment) and from without (surrounding environment) – *causa efficiens*; on the whole, however, s/he is the individual with the purposeful adaptive behaviour ("here and now") and the inherent telic self-realization (self-individuation, as every cell of the body does) during her/his entire life span (ontogenesis) – *causa finalis* and *entelecheia*.

The Decisive Significance of the Use of 'Essential Metaphor'

I propose a *Bio-realistic* (Biocosmological – neo-Aristotelian) approach that puts into practice universal philosophical and scientific exploration. In this approach the role of the so-called '*essential metaphor*' takes on the decisive value. The starting point, herein, is the evident universality of the entire living world on Earth. Hence, we

can simplify our conception and explanation of the universal world by transposing the already explored and verified scientific data and laws from one sphere (level) of life processes into the other level wherein we have actual issues for the resolution.

For instance, there is the evident reality of the triune synchronous activity (but with the successive domination) – of the three autonomous nervous (sub)systems within a whole organism, that are integrated into the one vegetative (super)system: the parasympathetic, sympathetic and metasymphathetic (sub)systems. This is a valuable clue for the understanding of natural (normal, healthy) processes with respect to the individual's ontogenesis or social history on the whole.

The Original Notion of Cosmology

At any rate, we are to restore the original notion of 'cosmology'. This field of exploration naturally deals with four main issues:

1. A study of the Universe in its wholeness (including life processes) – for the resulting presentation and development of a complete ("global") outlook, i.e. fundamental rational representation about the world as a whole;
2. A definite rational resolution of the issue about active (driving) forces in the cosmic whole where we ask: which of these driving active forces cause wholesome evolutionary processes in relation to conscious subjects, including ontogenesis of each person and the ascending of cycles-stages of the evolutionary process of social and ecological development?
3. A definition of fundamental (universal) laws in respect of both physical (Non-Organicistic) phenomena and processes, and equally in relation to life (Organicistic) phenomena and processes that would refer universally to all spheres of life (biological, ecological, anthropological, psychological, personalist, social, culturological, etc.);
4. Elucidation, in the accepted cosmological sphere, of the place and role of the human person in current evolutionary processes of the one cosmic universal evolution of the life on Earth.

In this light, it is necessary to recognize modern "astrophysical" representation of cosmology (as the section of modern astronomy and physics, that studies properties and evolution of the material Universe) – as a natural scientific field, but, in its current dominating status, – only as a certain successive cycle-stage (of the Western civilization) in the evolution of the one global culture.

Indirect and Direct Arguments for the Actuality of Biocosmology

The aforementioned global paradoxes in biomedicine (and science on the whole) are the clear (although *indirect*) arguments for the actuality (and the urgent need) of adequate cosmological exploration and the advancement of proper cosmological (philosophical) foundations for the cultural (scientific) present-day activity.

In turn, we have the evident *direct* argument of the need for new cosmological bases in the global cultural development. Indeed, "cosmology" – from the realistic standpoint – is ever Biocosmology. In a straightforward way, the evident truth is that

the Earth itself (and, hence, – all the Earth's processes, including life evolutionary processes and the individual's ontogenesis as well) – all and at all times are naturally the product (and the inseparable integrated part) of the one whole Cosmic evolution. Therefore, logically if we have organic evolution of the life on Earth (which is the product and integrated unit of the one whole Cosmic evolution), – then the Cosmos is actually the organic whole (any other statement is contradictory, i.e. false).

Hence, our modern ('scientific') separation of Earth from Cosmos (Nature-natural from Cosmos-cosmic) is one more artificial construction and artificial termination (of the one whole evolution of the world culture) by modern Western philosophy and science. As a matter of fact, every process of life on Earth is essentially Cosmic. (This Cosmic nature of every process is independent of whichever ontological standpoint we prefer: astrophysical, theological, mystical, panspermia, or self-origination, etc.)² Every life (Bio-) process on Earth always originates from Cosmic matter and energy, always is integrated into the whole Cosmic processes, always is the product of the one Cosmic evolution, and always is the inseparable unit of the Cosmic whole, i.e. – always is the Biocosmological process. Therefore, equally, – the human's (the individual's) ontogenesis is essentially the inseparable unit of the one self-evolving organic Cosmos, essentially the product of the universal Cosmic evolution and naturally is subject to universal Cosmic laws.

16 Universal Cosmic Laws (Bio-Realistic Fundamental Principles)

Modern physics is based on the natural fundamental (cosmic) principles like gravity, electromagnetism, affinity, etc., while *Bio*-sciences, paradoxically, still lack their own natural (i.e. Cosmic – universal – underlying every life phenomenon or process) principles. Yet Organicistic universal principles (laws) are quite evident and easy for disclosure (especially, by using the method of 'essential metaphor').

Author highlights 16 universal principles (i.e. realistic fundamental laws, of the caliber like "gravity" for physics or "affinity" for chemistry), i.e. that underlie (refer directly to) or relate indirectly each life process on the Earth, including the individual's wholesome ontogenesis. First of all, the aforementioned global paradoxes (as 'indirect') and the 'direct' argument itself serve as a valid basis for the advancement of the fundamental *Cosmist* and *Biocosmological* principles for biomedicine (and any other science that deals with life processes) – every life process on Earth (including the individual's ontogenesis) has the *Cosmist* origination and naturally is the subject for *Biocosmological* exploration.

Third is the *Biocosmological* realistic universalism, first of all, – the structural-functional universalism, that is a natural sciences truth at least since the discovery of the structure of DNA by Watson and Crick. Fourth is the *Biocosmological realistic principle of the unity of all four main cosmic forces (causa) – materialis, formalis, effieience, finalis*, – but which all are universalized by the whole organizing activity of the *causa finalis*. Fifth is the *Biocosmological realistic self-(macro)evolutionism* – every subject of life is the self-(macro)evolutionary process, including as much the entire biological evolution, as each subject's (the individual's) ontogenesis or social history, – each subject's ontogenesis is the self-dependent emergent evolution.

Sixth is the *Biocosmological realistic macro-evolutionary cyclic reappearance of life processes* (a kind of triadicity), which essence is that diametrically opposed, but successive cycles-stages – like Systole – Diastole – NewSystole, or Awake – Sleep – NewAwake activity, etc. – substantively realize the ontogenesis of every living subject (biological, ecological, personalist, sociological), overruling each other by turns. Seventh is the *Biocosmological realistic Evolutionary Process (EvoProcess)*, which signifies both the real (evident, positive) phenomenon of the one whole cosmic evolutionary process of the life on Earth (which is demonstrated by natural sciences) and the (meta)naturalistic (*intuitive*) fundamental principle that serves as a basis for the realistic cognition of the world and the integration of knowledge in the course of constructive (rational) theorizing. Eighth is the *Biocosmological realistic autonomy of Evolutionary Process* – of its independent development and autonomous increase (in complexity of organization). Substantially, EvoProcess self-develops irrespective of subjective interpretation (by a person) of its origin and essence. Moreover, human consciousness is exactly a means – tool-function – for the EvoProcess, inasmuch as a person (the individual) is the product (as a matter of fact) of the Cosmic EvoProcess, but not vice versa.

Ninth is the *Biocosmological realistic special evolutionary status of a person*: since the biospheric emergence of human being – species *Homo sapiens* – the further self-development of Evolutionary Process is realized by the intentional, constructive, creative intermediation of man in developmental processes: biological, ecological, personalist, sociological. Undoubtedly, modern man defines and regulates all processes of current evolutionary development of the Earth. Substantially, herein, a man in EvoProcess is the macrocosm (self-dependent expedient organ in the whole Cosmos), as well as Man is basic and equal constituting category in relation to Nature (Biosphere) and Society.

Tenth is the *Biocosmological realistic evolutionary personalism – BioCosmological "universal personalist law of the evolution"*. This principle (law) discloses the truth that from the very evolutionary emergence of a human being (*Homo sapiens*) – the climax of biological evolution – the essence of the Cosmic (macro)evolutionary process on Earth (its self-ascending development) consists in the increase of the degree of human free creative (personalist) life activity, during her/his entire ontogenesis. The eleventh is the *Biocosmological realistic "cephalization" of EvoProcess* – «cephalization» is a realistic fact (proved by natural sciences) that signifies the progressive increase of the so-called index of cephalization during biological evolution and the further progressive development and complexification of conscious human (cultural) activity during the ontogenesis of every conscious subject of life (a person, society, civilization, global sociocultural life, etc.).

Twelfth is the *Biocosmological realistic self-identity of every subject of life* – that is a direct rational conclusion from the fact of the cosmic origin and integrated essence of every process of the life on Earth; this truth is confirmed by biological data – every molecule, cell, biological organ, organism has the predetermined inherent functionalist destination (that is realized by the subject it/her/himself), as well as sociological and psychological investigations (the main psychological theories: by Freud, Pavlov,

Watson, Jung, Ukhtomsky, Maslow, etc.,) – disclose the internal determinancy (driving forces) of vital activity of a person.

Thirteenth is the *Biocosmological realistic law that states the cornerstone meaning of the Basic Cosmist Evolutionary Functionality* of each subject of life (but, firstly, of a person) – *BCEF* that is an analogy of Aristotle's *entelecheia*). *BCEF* realizes a new type of reductionism – *Cosmist (BioRealistic) reductionism* – universal reduction of the natural wholesome life activity of a living subject to its/her/his Basic Functionality (but in the due correlation to the ontogenetic evolution of a subject). Indeed, *EvoProcess*, from the realistic point of view, – is the all-embracing self-evolving (macro)organism of Earth's life, while every subject of life on Earth (in its/her/his due place and time) is ultimately the self-dependent organ (function) of *EvoProcess* (like every cell in a human organism has the inherent specific function, and which is realized on its own during the entire ontogenesis).

Fourteenth is the Biocosmological realistic principle of oneness of the two autonomous poles (*bipolar unity*) – of *RealCosmist and AntiCosmist poles – Oneness, Synchrony and Equality of the two polar centers of life activity*. Based on Aristotle's thinking we recognize the real existence of a bipolar sociocultural world, both poles of which are based and integrally constructed on their own (opposite – polar) cosmological foundations; for example Aristotelian cosmology and its antipode – modern Western cosmology (that is quite polar – anti-Aristotelian – *AntiCosmist*). Another example comes from the physiological sphere, e.g., – the evident universal synchronous functioning of the two poles – parasympathetic and sympathetic autonomic (sub)systems – of vegetative involuntary nervous (super)systems. Likewise, we have the polar spheres (and cycles) of Awake activity and Sleep processes within the given organismic wholeness.

The Biocosmological type of Duality ("Zweiheit") likewise is analogous to Pitirim Sorokin's "law of polarization", basically signifying the twofold essence of a life process. Thus, substantially, the universal essence of this principle means constant (synchronous) existence of the two cosmological poles in every sphere of life, including sociocultural processes. Fifteenth is the *universal realistic principle of the Triadicity of life processes*: of successive cyclic change (by turn) of a period of the domination of one of the poles (*RealCosmist or AntiCosmist*) to the cycle of domination of the other pole, but which always is realized through a natural Intermediate organic (autonomous) cycle that is the basis for the realization of a transition from one pole (hence, of the certain cosmology and derived integrated sociocultural sphere – Sorokin's "supersystem") to another organic whole – opposite pole or "supersystem" (and its inherent cosmology).

Finally, sixteenth is the *principle of Five-term spiral macro-evolutionary turn of a life cycle*. Naturally, a "three-stage evolution" is a half of the complete spiral turn and, thus, two halves naturally realize a full spiral turn that consists of five autonomous (macro)cycles. Indeed, inasmuch as we always have three autonomic spheres: Two active poles (but one is ever the predominant) – *RealCosmist and AntiCosmist* (which, in metaphor, are the macro-cycles of *Awake-* and *Sleep-*processes), and the Third *ACosmist Transitional* state (organic cycle of development, which is the basis for the realization of a transition from one to another pole's dominance), we have naturally, in

every turn of a living subject's macro-evolutionary spiral, – Five successive autonomous macro-evolutionary cycles. Applying again the method of 'essential metaphor', an example of circadian life (activity) rhythm might be given: Taking as the initial (1) a cycle of Awake expedient activity, we further naturally have the successive (2) Transition from Awake to Sleep; the next (3) is the Sleep processes; the subsequent is (4) the Transition from Sleep to Awake activity; and, eventually, (5) the new Awake expedient activity emerges.

In this exploratory perspective, however, we are to recognize, firstly, the incredible scientific contribution (in the historical, sociological and culturological fields of research) by Pitirim Sorokin – the eminent Russian-American sociologist and thinker. By the 1930-s, Sorokin had realized a really titanic empiricist work (for instance, – he and his assistants processed more than 100.000 scientific sources on the research topics). Sorokin had made a startling discovery – the disclosure of the *three-dimensional* (and *three-stage cyclic*) – evolutionary dynamic essence of a sociocultural reality. His other essential conceptions are: "law of polarization"; "autonomy in social (super)systems" and basically inherent self-regulation of sociocultural systems (Sorokin's notion of the "*immanent determinism of a sociocultural system*"); his famous "integralism" principle; the basically immanent inherent interrelations between Culture and Personality, and other. Substantially, however, Sorokin's main philosophical-ethical ideas in this realm have not received due attention and study.

Bipolar and Three-Dimensional Sociocultural World

Firstly, Pitirim Sorokin had revealed these great laws in his *magnum opus* – *Social and Cultural Dynamics* (1937–1941). In this work, Sorokin had unveiled the three-dimensional and evolutionary dynamic essence of a sociocultural reality – the synchronous existence of the three essential types of sociocultural reality – three vitally necessary sociocultural supersystems: Two polar ("ideational" and "sensate") and one intermediate or transitional – ("integral") type, as well as their inherent self-regulation and natural alternation in the dominance (i.e., the interchange of their dominating activity, while all three universal types of sociocultural supersystems are always and synchronously active, i.e. all three always synchronously symbiose in the integral active form).

In this light, Sorokin's basic generalization is likewise significant, – that each of the three super-systems embraces in itself the corresponding type of the constituting basic cultural systems. They are, according to Sorokin "language, science, philosophy, religion, the fine arts, ethics, law, and the vast derivative systems of applied technology, economics, and politics". Therefore, as Sorokin stated, the Sensate supersystem is made up of: sensate science, sensate philosophy, sensate religion of a sort, sensate fine arts, sensate ethics, law, economics and politics, along with predominantly sensate types of persons and groups, ways of life and social institutions. Likewise, the Ideational and Integral supersystems consist respectively of Ideational and Integral types of all these systems.

Although Pitirim Sorokin explored sociocultural reality, it is important to highlight that his achievements are essential for the true evolution of biomedicine – the

attainment of its own universal theory, first of all, – of a *Bio*-medical theory that is capable of resolution the issues both of ailment (bodily or mental disorders) and health ("a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity", due to the WHO's definition of Health in the 1948). Primarily, Pitirim Sorokin has substantiated, in essence, the (cosmological) foundations for the entering a new scientific 'cosmos' – of applying the three-dimensional dynamic (evolutionary) approach to the rational (scientific) exploration of the actual world. Basically, he advanced the scientific (and philosophical) comprehension of the triune essence of a sociocultural reality – every sociocultural organization exists synchronously in the three universal autonomous forms. However, now, we are to unfold this great principle into a more apprehensible rational form.

Initially, it is relevant to conduct a comparison between the basic notions of P.A. Sorokin's theorizing and the key ideas of author's BioCosmological conception (this idea is implemented in the form of a comparative table):

Table 1.
Comparison of the basic notions

<i>In the theory of P.A. Sorokin (three main types of sociocultural supersystems)</i>	<i>In metaphor</i>	<i>In the BioCosmological conception</i>
<i>Sensate</i>	<i>Sleep</i> rocesses of organic reconstruction and growth	AntiCosmism (<i>Humanistics</i>)
<i>Integral</i>	<i>Transition</i> (Awakening, or the transition from Awake to Sleep)	ACosmism (<i>Holistics</i>)
<i>Ideational</i>	<i>Awake</i> goal-directed activity	RealCosmism (<i>Realistics</i>)

'Eastern-Complementary' and 'Eastern-Alternative' Medicine

First of all, there are obvious distinctions (deep contradictions) between the notions of "complementary medicine" ("that is used *together with* conventional medicine") and "alternative medicine" ("that is used *in place of* conventional medicine") due to the NCCAM definitions³. However, in the present Western culture, alternative medicine means any healing practice "that does not fall within the realm of conventional medicine" and is opposed to the evidence based medicine. Therefore, the abbreviation and notion "CAM – Complementary and Alternative Medicine" refers both to the forms of complementary and alternative medicine: biofeedback, diagnostic evaluations, acupuncture and the other forms of reflexotherapy; the "Biologically Based Practices" (herbal remedies – phytotherapy, nutritional supplements, hirudotherapy, apitherapy, etc.), the forms of "Mind-Body Medicine" (meditation, hypnosis, Trager approach, prayer, lifestyle changes counseling, therapies that use creative outlets such as art, music, or dance, etc.), the methods of "Manipulative and Body-Based Practices" like massage and manual therapy; both types of "Energy medicine" – Biofield therapies (like Qi Gong and Reiki) and Bioelectromagnetic-based methods (different physical fields, Bioresonance therapy, etc.); as well as the so-called "Whole Medical Systems" that include homeopathy, chiropractic, naturopathy, Yoga,

Ayurveda, Traditional Chinese Medicine, etc.

On the whole, the two cornerstone features of the proposed Integral (synonyms: Integrative, Integrated, CAM, Eastern complementary) medicine are:

1. Holistic (Transcendent) cosmological foundation of the medical practices;
2. The Integrated practical approach – use of the elements (methods, techniques, etc.) from the both poles (Western and Eastern) of medical activity for the realization of the given form of Integral medicine:
 - A. From the modern conventional (Western "scientific") medicine basing on the factual "evidence" of safety and efficacy of a given practice or medicine, and including the "conventional" diagnosis of a patient;
 - B. From a 'Bio-realistic' (Eastern holistic) medicine – basing primarily on its philosophical and methodological foundations that produce the specific (complementary) healing methods and practices.

Substantially, therefore, a mere use of the complementary (or of alternative medicine) methods on the basis of modern Western (dualistic, physicalist – AntiCosmist) cosmology will bring about, of course, a kind of *integrated* (interdisciplinary) approach, but which should not correspond to the realm of the proposed category of Integral medicine.

'Eastern-Alternative Medicine'

At the same time, evidently, we are to distinguish the essence of the 'pure' forms of alternative medicine – "Whole Medical Systems" – like Traditional Chinese Medicine or Ayurveda traditional medicine, which are based on their own (but similar) philosophical and methodological foundations that are originated from the exploration of the observable natural laws of the universe (cosmos). In other words, they both primarily and categorically are based on the laws of nature (or cosmos – are Biocosmological in essence), but not on the man-made laws that are produced by a human mind (which, therein, is cosmologically opposed to the physical nature-cosmos-universe). Indeed, these forms of the 'Eastern-alternative medicine'⁴ had realized (in the ancient times) the evidence (are built on the cosmological foundations) of the organic unity of man with the world. Thus, they have introduced into the global culture the methodologies that basically treat a man as the inseparable part and the product of the Earth's one common cosmic evolutionary life-process.

Indeed, these forms are essentially 'Eastern- alternative', for, they use both the opposite cosmological foundations (rejecting dualistic-physicalist world outlook, but accepting holistic-organicist relation to the whole world-cosmos) and the autonomous (derived) systems of diagnostics and treatment of the patient. In turn, in this approach, homeopathy (firstly proposed by German physician Samuel Hahnemann in the end of XVIII-th century) might be likewise referred to the 'Eastern-alternative medicine', inasmuch as, apart from the symptoms of the disease, – homeopaths essentially examine the patient's physical and psychological state (her/his constitutional features and the biotypological constitution on the whole) in recommending their remedies. In other words, therein, a remedy is selected on the totality of symptoms (unhealthy as well) but, basically, starting from the person's constitution (i.e., her/his immanent health condition).

Summing the aforesaid, a cornerstone moment is that the forms of Eastern-alternative medicine are based on the radically distinct (polar, opposite) cosmologies which primarily state the wholeness of the man (her/his body-mind-consciousness) with the surrounding world (nature-cosmos-universe). In other words, Western-conventional medicine (science, philosophy on the whole) separates (disintegrates) mind and body, man and world, nature and cosmos; while Eastern-alternative medicine unites (integrates) all these categories as the elements of the one whole common cosmic evolutionary universe. To the point, in the original sense the term "universum" means "vertere" to "unus" – "turned to one" – this universal basic element in the Eastern "Whole Medical Systems" means exactly the immanent constitution of an individual.

In fact, Traditional Chinese Medicine (TCM) is largely based on the philosophical concept that the human body is a small universe – microcosm – the set of sophisticated systems, and that these systems are naturally (uniquely inherently dynamically) interconnected – balanced – for the maintenance and execution of the healthy whole functioning of the man (her/his body, mind, spirit – in the process of integrated inter-relations with the environment). In the same way, Ayurveda states that a human being is the inseparable part of nature (cosmos) and, on this basis, – reveals the three primary forces (fundamental energies, innate for every living being) that govern inner and outer environments of the man ("Vata, Pitta and Kapha"). Ayurveda's central idea is, therefore, that suppression ('from without') of a human being's natural urges (i.e. the inherent potentials 'within' her/his organism) almost certainly lead to illness.

The second general finding is that the examined "Whole Medical Systems" (Ayurveda, TCM, homeopathy) are basically the sciences of life – are health-centric in principle. In other words, the disease state of a man is treated as the imbalance of her/his natural constitution and, hence, – the healing procedures are aimed at the reestablishment of the immanent constitutional (CosmoBio-typological) balance of the individual. Indeed, basic notions (principles) of the Eastern-alternative medicine firstly refer to nature (cosmos) – natural laws; while the Western-conventional medical theory and practice is based on the laws (conceptual constructions) that were proposed by human mind which activity was (is) realized in the dualistic opposition to the surrounding physical (objective) world. Naturally, Eastern-alternative medical major aim is the maintenance (or restoration in the case of health disturbances) of the unique essential balance of the man's natural wholeness – her/his dynamic, but inherent integration between the environment and her/his body, mind and consciousness.

The third key point is that 'Eastern-alternative' medicine is a form of 'Constitutional Functionalist Health-centric' medicine, while Western conventional medicine realizes a 'dualistic and anatomical' methodology that unifies the research (objective) data within its physicalist, subjective-objective approach, – at the cost of the loss of individual's real unity with the world. Really, Western philosophy and science separates its/her/his mind from the body, a man from the surrounding world and divides (disintegrates) the physical body to structural-functional parts. On the contrary, 'Eastern-alternative' medicine is primarily constitutional and functionalist, for, herein, – a man ever has the given (by Nature – Cosmos) invariable constitution (CosmoBio-typology) that is characterized by the individual unique combination of

physical, mental and emotional characteristics (and, herein, the task of restoring the individual's immanent balance of vital forces is absolutely impossible without the primary identification of her/his basic individual constitution). Substantially, likewise, 'Eastern-alternative' model of medicine is basically concerned with function. For instance, a spleen in the TCM is not the anatomical part of body with the specific physiological function, but primarily has the essence of the 'functional organ' that is related to transformation and transportation within the body, as well as the mental functions of thinking and studying.

In view of the aforesaid an evident similarity between the principles of both proposed categories of medicine – 'Eastern alternative' and Biocosmological – is clearly revealed. First of all, these are the primary significance of immanent vital (driving) forces that are functionally determined. They are explicit in the Eastern notion of "individual constitution" or BioCosmological "Basic Cosmist Evolutionary Functionality". The next basic correspondence (equivalent) is the two aforementioned fundamental "Biocosmological realistic principles" – of 'Bipolar unity' that is in line with TCM's central "the balance of yin and yang"; as well as the universal *Triadicty of life processes* of the BioCosmological conception is in accord with Ayurvedic fundamental principle of the triune dynamic interrelations between the "Vata", "Pitta" and "Kapha" – always present in one and all.

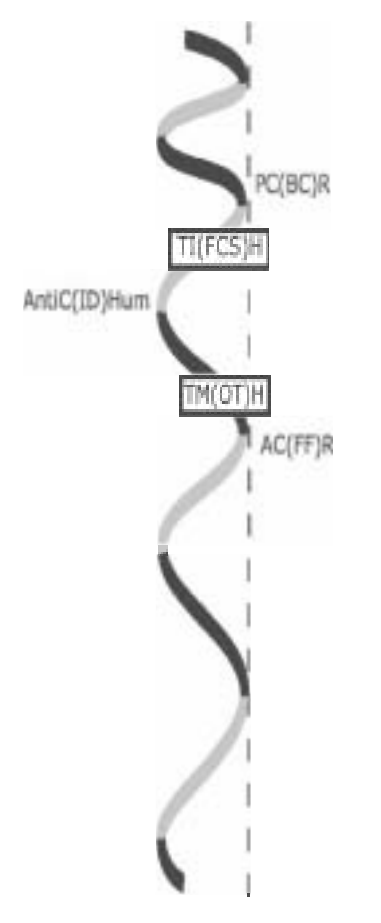
Finally, the BioCosmological *principle* of the *'Five-term spiral macro-evolutionary turn of a life cycle'* (on the global cultural level) naturally opens the perspective of treating 'Eastern-alternative' medicine as the ancient, but similar form to the proposed (for the future development of) rational Biocosmological medicine. In other words, both RealCosmist forms of medicine – Eastern-alternative and Biocosmological – are the natural cycles (and the products) of the RealCosmist culture. The latter was originated in the ancient times and brought about the powerful forms of medicine (effective so far) which are truly realistic, although, at the same time, – irrational, i.e. which are not reducible to the universal rational categories, those based on the empirical evidence, rigorously substantiated, logically coherent, and verifiable. Substantially, new RealCosmist foundations currently are realized already on the basis of the entire (colossal) empirical data and the achievements of logical reasoning of the preceding – Modern era and the on-going (post)modernist development – global cultural evolution.

To make this thesis more lucid, a reason is to represent the scheme that is entitled "The global spiral evolution of the world culture (philosophy, science)". The gist is that the universal 'Five-term spiral', with respect to the global cultural evolution, – naturally finishes in the current times its full 'Four-term' ascending circle and, thus, brings about the natural start of the 'Fifth cycle', i.e., simultaneously, – enters and makes a start for the First – RealCosmist – cycle of the new macro-evolutionary ascending spiral. In this route, 'Eastern-alternative' forms of medicine, ancient and modern (basically, with reference to their common cosmological foundations) – Ayurveda, TCM, homeopathy – naturally relate to the RealCosmist axis of global cultural evolution. The present general perspective, however, is the construction of the new Biocosmological (PersonCosmist) medicine that will be strictly rational (hence, truly universal), utilizing the entire (colossal) amount of (post)modern empirical data

and accumulated logical principles (and the entire created apparatus) of rational reasoning.

Table 2.

The global spiral evolution of the world culture (philosophy, science)

	<p><i>Designations:</i></p> <p>AC(FF)R – Ancient Cosmist <i>Realistics</i>, (<i>A-cycle</i>) with its climax in the achievements of ancient Greek rational philosophy (Greek universalism, Cosmobiology), especially in the philosophy of Aristotelian immanent essentialism (<i>Fundamental Functionalism</i>);</p> <p>TM(OT)H – Transcendent Monistic <i>Holistics</i>, mainly realized in <i>OntoTheology</i> of the Middle Ages culture; this is a macro-cycle of <i>egress</i> (Falling Asleep) from Cosmism to AntiCosmism, from <i>A-cycle</i> (Awake) – to <i>S-cycle</i> (Sleep) of the world organic (cultural) evolution;</p> <p>AntiC(ID)Hum – AntiCosmist (<i>Idealistic</i>, <i>Dualistic</i>) <i>Humanistics</i> – of the priority of an individual human reason in the world organization; herein, AntiCosmism also means Absolute Anthropocentrism – a <i>S-cycle</i> (of Sleep processes) in the world organic development;</p> <p>TI(FCS)H – Transcendent Integral (ingress) <i>Holistics</i>, realized at present chiefly on the basis of a modern functionalism and system approach (in the domain of <i>Complex Sciences</i>); herein, a special place (in the process of reverse <i>ingress</i> from AntiCosmism to RealCosmism – the Awakening of the world organism) is occupied by Russian Organicism (Functionalism);</p> <p>PC(BC)R – PersonCosmist (Biocosmological) <i>Realistics</i> or RealCosmism – an <i>A-type</i> (Awake) of global culture – the development and dominance of the forms of universal philosophy and science), on the basis of rehabilitation of Aristotle's universal realism (immanent teleological essentialism) and his cornerstone notions of "hylomorphism", "causa finalis", "entelecheia", and "eudamonia".</p> <p>«RealCosmist axis» is marked by the red dotted line.</p>
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Main Thesis

In the light of the stated above, – author's main claim is that we actually need to advance and realize (develop into the effective forms) the triune nature of biomedicine, and that the triune *Bio-medicine* is precisely capable of implementation the all-embracing medical theory and practice, primarily dealing with the subject-matter of the Individual's health but essentially covering the entire range of issues in respect to the person's well-being.

At the present point, the crux of the issue is the definition (by revealing the essential characteristics) of the three cosmologically autonomous types of biomedicine.

Naturally, in the light of the aforesaid, they realize the triune essence of the *Bio*-socio-cultural world, and, in the author's proposal, – accordingly represent the forms:

- A. Of the current dominating Western ("conventional") medicine;
- B. Of the Integral (Integrative, Integrated, CAM, 'Eastern-complementary') medicine that has the Intermediate (Transitional) role in the global ascending evolution;
- C. Of the 'Bio-realistic' medicine – ancient and modern forms of the 'Eastern-alternative' medicine and the proposed BioCosmological medicine.

Triune Universal (All-Embracing) Bio-medicine

Their characterization (and comparison) might be drawn in the form of a comparative table, in relation to the various criteria of their characterization. This table is entitled as "*Triune Universal (All-Embracing) Bio-medicine*" (see Table 3).

Table 3.
Triune universal (all-embracing) bio-medicine

<i>Type of Medicine / Criteria</i>	Western (conventional) medicine	Integral (Eastern-complementary) medicine	Bio-realistic (Eastern-alternative and BioCosmological) medicine
<i>Cosmological basis</i>	AntiCosmism (<i>Humanistics</i>) – 'Ontological Pluralism'	ACosmism (<i>Holistics</i>) – 'Metaphysical Dualism'	RealCosmism (<i>Realistics</i>) – 'Cosmological Monism'
<i>The main cosmological driving force</i>	' <i>Causa efficiencie</i> '	' <i>Causa formalis</i> '	' <i>Causa finalis</i> '
<i>The type of essentialism</i>	<i>Transcendental subjective</i> (dualistic) essentialism – realization of the a priori abilities of human reason to construct (and before that to adapt to) the world	<i>Transcendent harmonising</i> essentialism – Absolute-determined, harmonizing forces that are realized by a person	<i>Immanent teleological</i> essentialism – subject's and the individual's goal-directed inherent needs, intentions and activities (uppermost, of its/her/his ontogenetic entelechy)
<i>The ultimate, true reality-value</i>	<i>The human's Transcendental (a priori)</i> abilities (<i>reason</i>) that realizes survival (adaptation to) and development (construction of) the surrounding material world	<i>The Absolute</i> – a <i>Transcendent substance</i> that determines the harmonic order of the given (" <i>in situ</i> ") life phenomenon and the surroundings	<i>The Universal (Organic) Hierarchical Cosmos</i> wherein every life subject self-realizes its/her/his individual's constitution and immanent telic Basic Cosmist Evolutionary Functionality (BCEF)
<i>Type of universality</i>	Universal in the physicalist – reductionist – relation, or the subjective transcendental 'atomization'	Universal due to the wholesome integration of an Individual into the given milieu – " <i>in situ</i> "	Universal in the praxeological evolutionary relation (of the subject's ontogenetic self-realization)
<i>Basic rational philosophy</i>	Platonism, British Empiricism, French rationalism, German Idealism (Kantianism), American Pragmatism	Thomism, Modern integralism (including systems science), as well as the ontologies that are the ground for the modern Integral medicine	Ancient Indian, Chinese and Greek philosophies – of RealCosmist essence, Aristotelism, Russian Organicism (Functionalism). After the year 1917 – Russian

..... All-Embracing (Triune) Medicine of the Individual's Health

			philosophy was realized by the exiled (living abroad) Russian thinkers
<i>Position of a subject in the cosmos</i>	Outside (<i>without</i>) the material (physical) cosmos	<i>Integrated</i> into the given organic wholeness (the wholeness of the given mind-body-milieu)	Inside (<i>within</i>) the organic (self-evolving Organicistic) Cosmos
<i>Gnoseology The kind of the philosophical bases of science</i>	'Epistemological Dualism' Rational, but non-realistic (transcendental, idealistic)	'Gnoseological Monism' Realistic, but non-rational (transcendent)	'Biocosmological Pluralism' Realistic and rational
<i>Exploratory essence</i>	<i>Bio-logical</i> , reducible to the physicalist structural-functional units or the 'Transcendental subjective' experience of a person	<i>Bio-philosophical</i> , all the units are integrated by the 'Transcendent Absolute' (God, Matter, Spirit, System, Information, Field, Energy, Pattern, etc.	<i>Bio-realistic</i> , reducible ultimately to the individual's constitution and subject's (personalist) 'ontogenetic entelechy' and the operative (just-in-time) goal-directed 'causa finalis'
<i>The basic topic of reference (primary issue of research)</i>	The <i>physical-chemical</i> structures and their (causal) interactions; as well as the <i>Human's</i> (anthropocentric) needs (rights) that are opposed to the surrounding world, and which satisfaction (on the physical, societal and spiritual levels) is the highest goal	The <i>Holon</i> , i.e. the organism, person or society (in turn, each is a unit of the Hierarchy), – its/her/his/ harmonious condition and wholesome contribution to the integral well-being and the sustainable development of the holarchy (supersystem) under exploration	The individual's constitution and subject's (the individual's) 'ontogenetic entelechy' (BCEF) and the derived 'causa finalis' – goal-directed and purposeful life processes and behavioral activities
<i>Regarding the position of an explorer</i>	A kind of 'external' (causal) epistemology	Subject of cognition by virtue of her/his primary direct spiritual relation to the Transcendent substance is included into the systemic integrity, equally with the object of cognition	A kind of 'internal' (teleological) gnoseology
<i>Exploratory interrelation of an explorer with the world</i>	<i>subjective-objective</i> , which is the dominating form in the current (global) scientific milieu	'Subject–Absolute–Objective'	'Subject-Subject' – from the 'Cosmist Organicistic Hierarchical' standpoint
<i>The leading method (mechanism) of exploration</i>	'Explanatory'	'Understanding'	'Definitive'
<i>Methodology</i>	Physicalist–(Bio)Logical (Scientism)	Integrativist (Holistic, Systemic), founded on a Transcendent basis	Bio(Cosmo)Realistic-Functionalist and CosmoBio-typological
<i>Anthropology Ethics</i>	Anthropocentrism <i>Deontologism</i> – anthropocentric and society-centric – Ethics of inner personalist Obligation for the realization of extrinsic societal Duty. Herein, the reverse side of the medal is always the individualist hedonism	Anthropoholism 'Moral holistic utilitarianism' – deliberate transcendent harmonization of interrelations of the man or society with the world, doing it "in situ" and "just-in-time"	Anthropo(Person)Cosmism <i>Eudamonism</i> – PersonCosmist teleological self-realization of the one's virtual (inherent specific) talents – Ethics of universal Personalist Love and Happiness

In Conclusion

The basic idea is simple – to restore Aristotelian aetiology in its full meaning, i.e. of the integrated wholeness of all four causes (material, formal, efficient and final) but with the leading role recognized for the *causa finalis* (and entelecheia). At the same time, this requires that we rehabilitate Aristotle's cosmology on the whole, i.e. his treatment of the world (cosmos) as exactly "bio-"cosmos – i.e. organic, whole, hierarchical cosmos, in which every (living) entity has its inherent place and destination in the one whole (organic) self-evolving cosmic world. Aristotelism (Aristotelian cosmology) will actually reinstate the natural unity of philosophy and science (metaphysics and physics), for, they both naturally belong to (reflect) one the same universal (organic) world.

My main thesis is: The time has come to realize a natural form of *Triune* (and *Three-dimensional*) medicine that exists *synchronously in the three autonomous realms* (*AntiCosmist*, *ACosmist* and *RealCosmist*) which (in the integrated Organicistic mode) realize the *all-embracing* knowledge and possibilities (perspectives, vectors, trajectories) – aimed at the actualization of the individual's wholesome evolutionary (ontogenetic) health.

Encountering these complex tasks (in the proposed Biocosmological perspective of development), research and discussions are growing – particularly through regular scientific meetings on the topics of Biocosmology, in Novgorod Velikiy, Russia. The first seminar is planned in the July, 2010. The main idea, herein, is to apply Biocosmology (firstly, the three-dimensional cyclic evolutionary approach) to all spheres and levels of the exploration of living processes (biological, ecological, anthropological, personalist (personological), sociological, culturological, philosophical, ethical, etc.), including the launching of the initial stages for a true medicine (as the universal all-embracing science). This goal naturally includes and integrates all three autonomous directions (spheres) of scientific research (exploration of the reality), but which are organized by common ideas and ultimately integrated in relation to the Individual's health.

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Notes

1. The type of '...'-brackets, or the typing from capital letter is used for the designation of author's own terms, metaphors, expressions, etc., whereas "..."-type – for citing and the use of generally accepted words. As regards "Bio-" (that is taken from Gk. *bios* "life"), it signifies, herein, – all forms, levels and processes of life: biological, ecological, personalist, sociocultural, and evolutionary.

2. In a brief definition of these terms, – "astrophysical cosmology" is a branch of modern physics that aims at the understanding of the (physical – non-organic) universe; it is shaped through both mathematics and observation in the analysis of the universe in its largest scale. Likewise, this cosmology supports the idea of the self-origination of the life in cosmos. In turn, theological cosmologies begin by positing the existence of a God – the Transcendent substance – who created and maintain the universe. Mystical cosmology also is based on a concrete Transcendent foundation but which often provides a rigorous rational (systemic) analysis and description of the universe, as we have it in the case with Ervin Laszlo's Akashic Field – the field that unifies all things. Panspermia is the hypothesis that "seeds" of life exist already all over the Universe and, hence, life on Earth had been originated through these "seeds".
3. With respect to the proposed Integral medicine, these and other quotations are taken from the site of the NCCAM – National Institutes of Health (USA), National Center for Complementary and Alternative Medicine: <http://nccam.nih.gov/health/whatiscam/overview.htm> ; together with the references to Wikipedia articles.
4. Ayurveda is regarded to be the oldest (more than 5.000-year-old) system of natural healing that has its origins in the Vedic culture of India. At the same time, as it is considered, Tibetan medicine and Traditional Chinese Medicine both have their roots in Ayurveda. Likewise, Early Greek medicine (that has evolved in the modern forms of Unani that is based on the teaching of Hippocrates, Galen and Avicenna) also embraced many concepts originally described in the classical ayurvedic medical texts dating back thousands of years.

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