

## BOOK OF ABSTRACTS

*7th International seminar on Biocosmology  
concurrently with the 44<sup>th</sup>-ISCSC-conference*

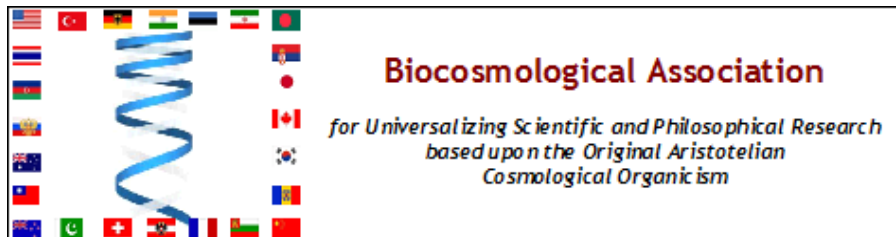
***“Biocosmological approach to civilizational studies”***

*co-organized by  
The International Society for the Comparative Studies of Civilizations,  
Monmouth University and Biocosmological Association*



*June 11-15, 2014, Monmouth University  
Long Branch, New Jersey, USA*





## CALL FOR ABSTRACTS

### VII International Seminar on Biocosmology (7ISBC) Monmouth University, New Jersey, June 11-14, 2014 (concurrently with the 44-th ISCSC-Conference)

Developing the Biocosmological (neo-Aristotelian) approach in contemporary scholarly knowledge, the Seventh meeting of the Biocosmological Association (7th International Seminar on Biocosmology - 7ISBC) will take place in New Jersey, the U.S., at the Monmouth University, in June 11-14, 2014.

The title of the 7ISBC: *“Biocosmological approach to civilizational studies”*

7<sup>th</sup> BCA-gathering is conducted jointly and concurrently with the 44<sup>th</sup>-conference of the International Society for the Comparative Study of Civilizations (ISCSC).

One of the main topics of the 7ISBS is the rehabilitation and development of Pitirim A. Sorokin’s (who is one of the founders and the First President of the ISCSC) Triadologic approach in civilizational and sociocultural studies. As it is well-known, P.Sorokin had discovered and substantiated the Three autonomic and synchronous types of sociocultural supersystems, and their essential Organicist - dynamic cyclic - interrelations, i.e. “the super-rhythm of Ideational-Idealistic-Sensate phases”.

Substantially, Sorokin’s Triadology profoundly correlates with (rather, although still implicitly, is founded on) Aristotle’s philosophical (super)system of knowledge which originally has the significance of scientific Organicism.

Essentially, Sorokin’s Triadology is in full accord with the Biocosmological approach and BCA-agency. The formula of the Biocosmological (neo-Aristotelian) activity is **Bio-4/3-1**, reflecting its foundation on Aristotle’s Organicist (Hylomorphist) Bio-physics and Bio-metaphysics; Four-causal aetiology (with the chief meaning of inherent goal-driven causes), Triadologic (dynamic cyclic) and Functionalist telic gnoseology and methodology; bio-socio-Kosmist anthropology and socioculturology; and the leading significance of the contemporary Integralist (holistic and co-evolutionary) realm of sociocultural activity and sphere of scholarly endeavor. A key point is that Triadologic methodology (in the Biocosmological approach) gets the universalizing (for all spheres of life) significance.

Any other Integralist (of holistic, systemic, complex sciences essence), especially which correlates with Aristotle’s Naturalist Organicism - is appreciated and encouraged.

The special significance is devoted to the development (in the Integralist perspective) of truly Holistic Eastern systems of knowledge (as Confucianism, Taoism, Buddhism, Shintoism, Hinduism), which are the

natural foundations for establishing and constructing contemporary (super)systems (cosmologies) of Integralist scholarly activities.

Those who are interested in this event are invited to send their applications (informing the author's names, affiliations, preliminary titles), and less than 200 words descriptions of their contributions to the address below.

#### **Abstract**

*Deadline for Abstract Submission* (to the addresses below) - April 30, 2014

The abstracts should not exceed 2 pages, and must include:

1. Title of the contribution;
2. Names, academic titles, affiliation (departments, institutes/universities, and cities of authors), email address of corresponding author;
3. Key words (3-5);
4. Text (Font - Times New Roman, single spaced, size - 14, margins - 2 cm).
5. Language (of the whole Seminar) is English.

*Full papers* of presentations (in the form of scholarly essays) are kindly invited to be prepared and sent to Dr. Konstantin Khroutski, editor of the journal "Biocosmology - neo-Aristotelism" - for their reviewing and the further publication.

With kindest regards,

Yoo, Kwon Jong, Ph. D.  
President, the Society of Mind Studies  
President, the Biocosmological Association  
Professor, Dept. of Philosophy, Chung-Ang University,  
84 Heukseok-ro, Dongjak-gu, Seoul, 156-756 KOREA  
e-mail: [ykj111@cau.ac.kr](mailto:ykj111@cau.ac.kr), [ykj111@gmail.com](mailto:ykj111@gmail.com),

Dr. Konstantin S. Khroutski, Ph.D.  
Secretary of the Biocosmological Association - <http://en.biocosmology.ru/>  
Editor, "Biocosmology - neo-Aristotelism"  
Institute of the Medical Education,  
Novgorod State University after Yaroslav-the-Wise  
Veliky Novgorod, Russia  
E-mail: [konstantin.khrutsky@novsu.ru](mailto:konstantin.khrutsky@novsu.ru), [biocosmology.nv@gmail.com](mailto:biocosmology.nv@gmail.com)

## **7ISBC Program**

### **VII International Seminar on Biocosmology (7ISBC)**

*(concurrently with the 44-th ISCSC-Conference)*

**June 11-14, 2014, Monmouth University, Long Branch, New Jersey**

### ***Biocosmological Approach to Civilizational Developments***

**First day (June 12)**

**Opening Session (1):** Chair: *Xiaoting LIU*

**General issues: Biocosmology, neo-Aristotelism , Triadology and the contemporary civilizational studies (part1)**

15 min.	Welcome Address: <i>Kwon Jong YOO (Seoul, Korea; BCA President)</i> Congratulatory Address: <i>David J. ROSNER(New-York, the USA, ISCSC President)</i>
30 min.	<i>Kwon Jong YOO (Seoul, Korea; Chung-Ang University):</i> Contemporary issues of Neo-Confucianism and civilizational studies: Biocosmological aspects
30 min.	<i>Konstantin S. KHROUTSKI (Veliky Novgorod, Russia; Novgorod State University):</i> Rehabilitating Pitirim Sorokin's grand Triadologic concept: A Biocosmological approach

**Session 2:** Chair: *Kwon Jong YOO*

**General issues: Biocosmology, neo-Aristotelism , Triadology and the contemporary civilizational studies (part2)**

30 min.	<i>Xiaoting LIU (Beijing, China; Beijing Normal University):</i> The Neo-Aristotelism and contemporary culture
30 min.	<i>Paul BEAULIEU (Montreal, Canada; School of Management Sciences, University of Quebec):</i> The core binding cosmological universal force in societal and civilizational organisms: A comparative analysis of Pitirim A. Sorokin's Triadology and Rudolf Steiner's Threefoldness perspectives
30 min.	<i>Milan TASIĆ (Vranje, Serbia, University of Niš):</i> On the knowledge ability of the world: From intuition to Turing machines and topos theory

**Session 3:** Chair: *Konstantin S. KHROUTSKI*

**Neo-Aristotelian (Organicist) issues of contemporary social and cultural development**

30 min.	<i>Nargis NURULLA-KHODZHAEVA (Dushanbe, Tajikistan; Technological University of Tajikistan):</i> Community as a sociocultural anti-structure in Central Asia: In the light of neo-Aristotelism
30 min.	<i>Koji TACHIBANA (Kumamoto, Japan; Kumamoto University):</i> The interdisciplinary analysis of Aristotelian wisdom in ethics, politics, and natural sciences
30 min.	<i>Xiuhua ZHANG (Beijing, China; China University of Political Science and Law):</i> A Comparative Study on Organism between Marx and Whitehead

<p><b>Session 4:</b> Chair: <i>Milan TASIĆ</i>  <b>Biocosmological (neo-Aristotelian) approaches to tackling the contemporary civilizational issues (part1)</b></p>	
30 min.	<i>Tatiana BYSTROVA (Yekaterinburg, Russia; Ural Federal University):</i> Integrity as a criterion of civilization
30 min.	<i>Ming WONG (Boston, MA; Biocosmological Association):</i> Bio-cosmology and its six presentations
30 min.	<i>Vitaliy SHOLOKHOV (Denver, CO, Metropolitan State University of Denver):</i> Studying Pitirim Sorokin's position on normative ethics in sociology and civilizational studies
<p><b>Session 5:</b> Chair: <i>Nargis NURULLA-KHODZHAeva</i>  <b>Biocosmological (neo-Aristotelian) approaches to tackling the contemporary civilizational issues (part2)</b></p>	
30 min.	<i>Du JIANG (Beijing, China; Beijing Normal University):</i> The Artificial Factor and Natural Link in Spiritual Practice: Seeing from Technê
30 min.	<i>Stephen MODELL (Ann Arbor; MI, University of Michigan):</i> The Meaning of Aristotelian Causation for Molecular Era Medicine & Public Health
30 min.	<i>Ho Young LEE (Seoul, Korea; Chung-Ang University):</i> Biocosmological Philosophy of Dai Zhen
<p><b>Session 6:</b> Chair: <i>Koji TACHIBANA</i>  <b>Biocosmological (neo-Aristotelian) approaches to tackling the contemporary civilizational issues (part3)</b></p>	
30 min.	<i>Hongkyu HA (Seoul, Korea; Yonsei University)</i> Erving Goffman's Dramaturgical Model and its Implication for Confucian Ethics
30 min.	<i>Sergey N. GRINCHENKO (Moscow, Russia; Institute of Informatics Problems of the Russian Academy of Sciences):</i> Civilizational progress with cybernetic positions
30 min.	<i>Chuang gen HUANG (Beijing, China; Beijing Normal University):</i> A Research on Aristotelian 'Phronesis' and Its Contemporary Value
<p><b>Session 7:</b> Chair: <i>Stephen MODELL</i>  <b>Biocosmological (neo-Aristotelian) approaches to tackling the contemporary civilizational issues (part4)</b></p>	
30 min.	<i>Henry LINDNER (Scranton, PA; Biocosmological Association)</i> Cosmism over Spiritualism; Philosophy over Science; Cooperation over Coercion: What We Must Do to Create a Healthy Human Society
30 min.	<i>Anna MAKOLKIN (Toronto, Canada; Toronto University)</i> Oscillations between barbarism and civilization
30 min.	<i>The day's summary, general discussions</i>
<p>(45 min) <b>Closing Session (8):</b> Chairs: <i>Kwon Jong YOO &amp; Konstantin S. KHROUTSKI</i>  <b>General Summary, Conclusions, Organizational Issues of the BCA and Future Prospects</b></p>	

## Contemporary issues of Neo-Confucianism and civilizational studies: Biocosmological aspects

Kwon Jong YOO

*Chung-Ang University, Seoul, KOREA*

*Email: [ykj111@gmail.com](mailto:ykj111@gmail.com)*

**Abstract.** Confucianism, a long cultural context or a civilization of the East Asia, has developed and constructed a typical understanding of the human life and mind. What is focused and highlighted for civilizational approach from the viewpoint of Confucianism is its typical understanding of the human mind and life. These two things had been regarded as a core of the civilizational sustainability by most Neo-Confucian scholars and thus this is still delivered to recent generations of the East Asian societies as an important lesson for not only education but also reproduction of the society.

This study shows the theoretical structure of the Neo-Confucianism which keeps the life and the mind of every individual as the most important thing among the things in the world or the universe. The reason why the Neo-Confucianism developed such theory is thought that the universe or the world is an immense complexity which flows or is dancing along with the human beings' activities that are endlessly generated by consciousness, desire, willingness, and customized pattern of activities of life. From the Neo-Confucian viewpoint all the things in the world/universe including human beings are interwoven in a huge network and the human beings have only the power and qualification to move the world/universe to the direction they want. Thus it is the most stressed to keep anthropocosmic state with other things. Neo-Confucianism has developed and elaborated a system of truth and a affiliated methodology how to such anthropocosmism in every individual's activities in daily life.

Three principles of the anthropocosmism are discussed in this study. This is, in other words, a systemization of the Neo-Confucian anthropocosmism with the three principles. The principles are related to life, body, and mind, but each of them is in fact an open way to the things in the world/universe which is altogether a system of complex. The Neo-Confucian key position is to make this world a cosmic or harmonized state by controlling the human beings' activities and ultimately aims to establish a firm base for the sustainability of the world and the human beings.

This strategy of the Neo-Confucianism has a meaningful connection not only to the Biocosmological thinking but also to the civilizational studies, which treat not only comparison between different civilizations for inter-understanding but also consideration how to enhance the civilizational resolution of the global problems. In this study the reasons why to be thought so are discussed and at the same time how to control the ways of human beings' life and their attitudes to the world/universe is also discussed by transformation of the Neo-Confucian principles of anthropocosmism to the modern civilizational coping with the exacerbation of global problems.

## Rehabilitating Pitirim Sorokin's grand Triadologic concept: A Biocosmological approach

Konstantin S. KHROUTSKI

*Novgorod State University named after Yaroslav-the-Wise, Veliky Novgorod, RUSSIA*

*Email: [Konstantin.Khrutsky@novsu.ru](mailto:Konstantin.Khrutsky@novsu.ru)*

**Abstract.** The author's work attempts to rehabilitate Pitirim A. Sorokin's Triadologic approach to civilizational and sociocultural studies. Sorokin's Triadology means the discovery and substantiation of the three types of sociocultural (super)systems (in the work, they are given the abbreviation - T-SCSS). Each T-SCSS is essentially autonomic, in its whole and all-embracing organization, but heterogeneous (and reducible to its own foundational principles or "ultimate true realities", in Sorokin's term). All the Three T-SCSS (called by Sorokin as "Sensate", "Ideational" and "Integral") are always synchronously active, but dynamic and cyclic (taking the dominance by turns) in their interrelations. The well-being of the world (life) is impossible without this natural dynamic (evolutionary) cyclicality. In general, Sorokin's scientific activity is essentially characterized (especially that this truth had not come to light for Sorokin himself) as the contemporary representation of neo-Aristotelism (Aristotle's Naturalist Organicism - Biocosmology). It is argued in the work that at present the concept of the T-SCSS can be extended into the more broad notion of 'cosmology', and, thence - to the Triadologic (cosmological) construction of knowledge (substantiating Three forms of scholarly endeavors: Positivist, Organicist, and Integralist). This approach already is realized in the agency of the Biocosmological Association (BCA, launched in Veliky Novgorod, in 2010).

BCA treats the Aristotelian philosophy as the autonomic (super)system of rational scholarly knowledge (and which truly is the foundation of the entire modern scientific edifice). In other words, Biocosmology (neo-Aristotelism) means a kind of 'cosmology' or 'kosmology' (if to refer to the Ancient "Kosmos" - the notion of the world-whole and the Organicist world order). In this approach, Aristotle's science and philosophy evidently stands as a rational supersystem of knowledge that is fundamentally autonomic - fully reducible to Aristotle's Biocosmist (Hylomorphist) world outlook; Organicist physics and metaphysics; Four-causal-aetiology (with the leading role of teleodiven causes); Functionalist telic methodology; bio-socio-Kosmist anthropology and universalizing Bio-sciences (of all types: natural, social and human, formal, applied); and Noospheric global sociocultural development and co-evolution. In fact, this is Aristotle's original, but a radically new approach in the contemporary scientific milieu. A reason is, therefore (as it was considered in the BCA) - to distinguish it (from the commonly accepted variants) by the use of the neologism 'Aristotelism' (for "Biocosmology - neo-Aristotelism").

A key proposal is to advance a new scientific - Triadologic - approach in civilizational studies (relying on the Biocosmological foundational principles). The primary task is, however - to overcome the existing 'cosmological insufficiency', which is firstly the misinterpretation of the true (of scientific Organicism) meaning of the Aristotelian philosophical (super)system. Essentially, Aristotle's great scholarly potential is urgently needed for the contemporary global scientific community. In the work, the notions Aristotle-1.0, Aristotle-2.0, Aristotle-3.0 and Aristotle-4.0 are proposed which signify that, at



present - for the third time in global cultural history - the significance of Aristotle's scientific Organicism is lost from the modern cultural agenda, and the (urgently needed) potential of the contemporary (neo)Aristotelian scholarly cognition is accumulated (now) in the interior of the Russian scientific tradition (of Russian Cosmism, Organicism, Functionalism, Cyclism, Pulsationism, etc.). This great potential is ready for use by the global culture (and scholarly community), now, actually - for the construction of the Integralist era in the world evolutionary development. In the latter relation, three science-oriented approaches for the civilizational studies and sociocultural evolution are characterized in the presentation.

Summarily, modern civilizational crises are the man-made crises which causes are reducible to the contemporary 'cosmological insufficiency' (present-day inability of the science to rehabilitate, develop and follow the Organicist laws of Nature (Biocosmos). Primarily, we need to rehabilitate the significance of Aristotle's philosophical (super)system of scientific Organicism and develop the realistic (Naturalist) basic principles - of the inherent Changeability (Immanent causality and Teleodrive evolution), Bipolarity, Triadicity, Dynamic Cyclicity (Spiral evolutionary development), Heterogeneity and the Hierarchical pattern of the natural world, etc. These Natural Organicist principles embrace the entire multiplicity of life forms, including the civilizational (equally of global evolution) processes.

The natural world is one, and, naturally - the science is one. At the same time, inasmuch as sociocultural reality is Triadic and Triadologic- science equally is Triadic and Triadologic. Rather, modern science is Triune, i.e. scholarly endeavors are realizable in the Three autonomic, synchronously active forms (in the Biocosmological Association's practice and P.Sorokin's notions: Sensate/AntiKosmist; Ideational/RealKosmist; and Integral/AKosmist. The Triune formula is advanced of their significance for the resolution of contemporary actual issues: 50-(Positivist/Sensate) /10-(Organicist/Ideational) /40-(Integralist/Integral), in toto - 100%.

In the general course, the Integralist development of Asian holistic philosophical systems (which are the natural resource for the contemporary building of the Integralist world) is the great potential and main direction of scholarly endeavors (in the presentation it is characterized as the "third" science-oriented civilizational approach). A cornerstone moment, likewise, is that precisely civilizationists (inasmuch as this field of knowledge is basically built on the Organicist principles) - can push forward the Triadologic Organicist (neo-Aristotelian - Biocosmological) principles and substantiate them in the general scholarly sphere of cultural knowledge.

As the main conclusion we can say that Pitirim A. Sorokin has discovered (in the sociocultural sphere) that the World (Kosmos) and its sociocultural evolution basically is driven 'from within' (by the inherent causes - "immanent causality"), and not 'from without'. Still, however, the foundations of our modern (of the 21st-century) scholarly activity refer to the opposite (of the 17th-century) foundational idealistic principles of Dualism and Anthropocentrism (and its mathematical physicalism), thus placing Sorokin's essential scientific Organicism (and its cornerstone "immanent causality") beyond the scope of modern scholarly sense of concern and attention. Under such conditions (of civilizationists' and other scholars' persisting inability to see the realistic causing factors of civilizational development), crises-conflicts-clashes-wars are inevitable. The time is, therefore, to draw correct - Realistic - conclusions and proceed to doing right things.

## The Constructiveness and Its Theoretic Foundation

Xiaoting LIU

*College of Philosophy and Sociology, Beijing Normal University / Center for Science and Humanity Studies, Beijing 100875, CHINA*

*Email: [xiao-tingliu@263.net](mailto:xiao-tingliu@263.net); [liuxiaoting@bnu.edu.cn](mailto:liuxiaoting@bnu.edu.cn)*

**Abstract.** Nowadays, with the development of human civilization, we have already entered the age of globalization and formed some global consensus, especially, are modifying some criterions of classical Axial Age and establishing some new norms. The constructiveness is such a new criterion and wisdom of praxis which is formed at present by development of human civilization.

The constructiveness is opposed with the destructiveness or negativity. Its premise is to accept the present status of things, and the constructiveness as a criterion and norm can promote the perfection of things and the upgrade of system by non-intense negative way. Seeing from the basic way, the constructiveness is not producing rupture of situation, but a negotiator's or constructive attitude. Here the destructiveness and negativity mainly show their belligerence, and both enable present activities to stop or to turn intensely, then lead to the collapse of whole. On the contrary, the constructiveness enables the whole thing to exist continuously and improve by adjusting the order of activity. Therefore, the constructiveness is different from the Destructive Philosophy with belligerence and destructiveness which possesses the principle of finality and the characters of radical Strong Program. The constructiveness possesses the characters of finiteness and flexibility, so it is a Constructive or Mutually Beneficial Philosophy with the Weak Program. That is to say, the constructive principle is just a Learning of Peace.

The rise of constructive criterion in the contemporary times is a fundamental point of change of human worldview on intercourse, because it concerns the aim and starting point of intercourse. Do we pursue the whole co-existence or individual intentions when we engage in human activities? If our activities are based on human co-existence, that is a constructive. So far, the majority of progresses of human civilizations are based on extreme high costs. Also, proposing the constructive principle of peace is based on the historical lesson of human struggles with blood and fire, as well as the whole advance of consciousness of human civilization in contemporary era. The constructiveness admits the diversity of things and the unity of all things, the polybasic co-existence, mutual benefit and co-win, and priority of others. The circle of co-existence, in which anything has its own rights, especially asks for stronger human beings self-restraint and improving weaker human position, and emphasizes sharing responsibilities.

The constructive source can be found in the thoughts of both Aristotle and Confucius. Hence, for promoting the constructive practice, we have to sufficiently utilize various resources of thoughts and cultures of mankind, engage in constructive education, set up constructive ideas and thinking, explore multiple effective approaches and ways to achieve constructiveness.

*Keywords: constructiveness; globalization; civilization; Neo-Aristotelianism*

## Core Binding Cosmological Force in Societal and Civilizational Organisms: A Comparative Analysis of Pitirim A. Sorokin's Triadology and Rudolf Steiner's Threefoldness perspectives

Paul BEAULIEU

*School of Management Sciences, Department Strategy and Social Responsibility, University of Quebec in Montreal, Montreal (Quebec), CANADA*

*Email: [beaulieu.paul@uqam.ca](mailto:beaulieu.paul@uqam.ca)*

**Abstract.** The threefoldness nature of the cosmos has always been one of the core elements of the prevailing worldviews in human collectivities since the end of the last ice age. This is only recently, at the beginning of our actual civilizational period, oriented to the development of human consciousness (individual and collective), that cosmology lost the triadic perspective. Since the dominance of the positivist-materialistic doctrine spread through the scientific and philosophic fields of knowledge, physical cosmology established its quasi-total scientific hegemony and cosmology coming from religious institutions lost their interpretative effectiveness.

To bring back life as the focus of research in the domain of cosmology, new paths of knowledge need to be investigate in order to rediscover the structure of the foundations of life that animate the realization of human beings and the cosmos. The study of the triadicity's dynamics involved in societal and in civilizational evolutions of humanity represents a potential for contributions to the bio-renewal of cosmology.

To support the analysis of the tri-unity of the sociocultural realities and of the civilizational processes of societies, the living nature of the integral reality (our cosmos) is postulated as basic evidence. A process dynamic perspective is efficient for the interpretation of the interactions of the three major human subsystems embedded in civilizations, societies and organizations. As observed by a long historical chain of metaphysical thinkers, humanity is a living collective organism embedded in a living cosmos where intelligent formative-forces structure and transform its involution and its evolution.

A comparative analysis of Pitirim A. Sorokin's triadology of the evolution of sociocultural systems' mentalities with Rudolf Steiner's threefoldness of societal dynamics brings to light core structural elements of the evolution of humanity. Both social and cultural thinkers, they consider the tri-unity of social reality as an essential characteristic for the explanation of civilizational evolution. Civilizational periods are structured from the involution/evolution of formative-forces that impulse humanity's progression toward a rational finalization. The threefold dynamics of societies forms and transforms on a continuous basis the social human relations and pulls progressively humanity to a state of self-consciousness where the egoistic perspective centered on the agent give place to an ecosystemic and holistic-integral consciousness of societal realities. The role of the core binding universal force of altruistic love in societal and civilizational organisms is identified as the foundational movement of humanity's evolution. The altruistic love impulses the orientation toward unification between the three major subsystems of societies and into the formative unification of humanity in a harmonized organism.

Sorokin spent a decade investigating the transformative effect of the social force called altruistic-love and its role for the future evolution of humanity. Steiner made an extensive investigation of the

objectively knowable nature of the active Cosmic Logos and its embedded attractive universal structuring-forces. They both took a social position based on an active engagement for the advancement of humanity.

In light of the comparative analysis of these two future oriented human endeavors three lessons should retain the attention of the Biocosmology's scientific community: a) the objective knowledge and investigation of life (in itself) should be the focal point of research; b) The Russian Biocosmological research impulse (based on the cosmist movement of the late XIX century) needs to be oriented toward the investigation of the suprasensible formative-forces of life if it wants to contribute to humanity and to the realization of the Russian Idea; c) Biocosmology, as a scientific community, needs to emancipate itself (evolutive-bifurcation), assumes its difference and creates its own scientific institutions of legitimation.

## On the knowability of the world: From intuition to Turing machines and topos theory

Milan TASIĆ

*Faculty of Education, University of Niš / Department of Social Sciences, Vranje 17500, SERBIA*

*Email: [esse.homo.mtd@gmail.com](mailto:esse.homo.mtd@gmail.com)*

**Abstract.** Is an entire (Biocosmological) image of animate and inanimate nature can be built on the notion of discrete quantities-objects and their relations - in essence? Just as its thoughtful reflection in consciousness (as knowability of what exists), which would mimic some (sufficiently complex) mechanical device, in the manner of “artificial intelligence”? We have so that the notion of Turing machine, derived on this basis, has been “extended” to an abundance of (convincing) arguments in our time that it can truly be achieved to a high and highest extent, so it seems that the term “program” has grasped with more happiness our intuition, than is the case, say, with the concept of natural number at all.

We present here summarily the ontological points of view - from Thales to Hegel - on the being, from an intuitive picture on it as “one and many”, to the set-theoretical one, where parts-components enter the wholes, realizing mutual relations in it, while preserving their originality, and which is approached to a high degree just the mathematical theory of topoi (of category). In favor of is the position of Alain Badiou: “Mathematics is ontology and so on, so this theory can be seen as an exact (mathematical) expression of the general principles set by biocosmology: the universality of life-processes (organicism), three-dimensionality (of sphere of activity) and four-causality of causes (in the sense of Aristotle).

On the epistemological level, it would be an image of knowability of world “for us” - if not “per se” - achieved in concepts, and, as (only) more or less reliable through programs, models. From that place it should be foreseen “the fundamental (universal) laws” in the nature, such as laws of evolution, etc., as well as the human ability, before the temptations of the elements of the world (environmental, demographic, etc.), to find favorable outcomes for himself.

*Keywords: Biocosmology, notion, Turing machine, program, topos theory*

## Community as a sociocultural anti-structure in Central Asia

Nargis NURULLA-KHODZHAEVA

*Institute of Oriental Studies, Russian Academy of sciences, Moscow; Technological University of Tajikistan (Dushanbe), TAJIKISTAN*

Email: [Nargis.nurulla@gmail.com](mailto:Nargis.nurulla@gmail.com)

**Abstract.** The long-lasting Central-Asian history was designed on the base of delicate communal and inter-communal balance. Its distinction characterized by capacity to recognize historic-social synchronization between Zoroastrian spheres (*Ahura Mazda* and *Angra Mainyu*), between nomads and settled and use all those settings for the good; furthermore Islamic culture strengthened and combined contradictions of Farsi-speaking Tajiks and Turkish-speaking people and shape phenomenon of bilingualism-biculturalism. The last one did not fit in pro-European administrative nationalistic frames, but it survived partly in the ancient cities of the region (Samarkand, Khojand, Bukhara).

However current Central Asian region presents to the world (and it is first time during of its long history) is messy at best and it is incoherent at worst. Modern man in Kazakhstan or Tajikistan is driving itself into a kind of insulator that Cartesian culture displays as innovative subjectivity. It's not similar to Avicenna's theory on self-awareness or "Flying man". Recent polls show growing unease with the moral climate in all over 5 Central-Asian republics. I do believe that situation could be improved if people recall common communal vales, without nationalistic orientations. In the presented work I do accent on neo-Aristotelian sociocultural anti-structure - or other words local territorial (neighborhood) community.

Local community (*mahalla*, *guzar*, *jamoat* and etc.) is proficient on surprising paradox - it can maintain distance among its members and can unite them. In such context two main things are survived - morality and preservation of perspectives.

For individual the validation of fitting to local community is communal gathering (it is not a formal stadium-squares crowd). It is family-communal (partly religious) assembly where individual does not even seek to have a line between public and private, between participant and spectator. Such sociocultural essential events - as marriage, childbirth, death and etc. - are touch virtually all members of family (including distant relatives) and members of local community. From one side communal occasions could create conditions for distinctive timeout in routine life of people and supply by required ideals that push people to certain directions. From other side community could assist to generate feelings of distance (and alternative way) from all formal procedures that introduced by state today.

Such approach could facilitate to depict people as *social animals* which are able to maintain functional group based on agreed moral norms regulations. It was accented in the works of some evolutionary biologists that proposed that disengagement of people from groups of primates and further prosperity of human societies went further due to people's ability to transfer\store\adopt certain sociocultural norms and institutions.

Requirement for anti-structure is recorded in CA evolutionary history, and with its "recognition" (as Charles Taylor pointed) we could assist to diagnose on disorder and ways of rehabilitation of CA states.

“Centrality” of the region does not exclude civil adoption of someone’s proficiency; however it cannot accept aggressive insertion of such. The main development direction for CA states may be not national but a local version of postindustrial society based on judicious use of communal capacity and within the legal systems of innovations will form a real Civil society.

## Moral Neuroscience and Aristotelian Practical Wisdom in the 21st Century

Koji TACHIBANA

*Faculty of Letters, Kumamoto University, Kumamoto, JAPAN*

*Email: [koji-t@kumamoto-u.ac.jp](mailto:koji-t@kumamoto-u.ac.jp)*

**Abstract.** In the last three decades, moral neuroscience has risen rapidly and become more popular. Focusing on traditional moral theories, such as deontology and utilitarianism, its research front has moved forward and has come to show that human morality is partly, but most importantly, based on emotion as well as reason. This evidence is very exciting as these philosophical moral theories emphasize the impersonality of human morality, namely morally general rules. Although there is a certain difference between deontology and utilitarianism: the former calls such rules “duties”, while the latter “the greatest happiness of the greatest number of people”, they both share in common an assumption that impersonal general rules provide moral rightness. Moral neuroscientists have investigated the neural correlates of such rules and claim that our moral judgments are not delivered solely from such rules. This leads us to reconsider what human morality really is.

Moral neuroscientists appear to not, however, refer to the other major moral theory, virtue ethics, of which Aristotle is the father. Virtue ethics is the theory that regards human morality as “practical wisdom (phronesis)”. Practical wisdom is a kind of personal character traits that is embedded within a human being rather than being an impersonal general rule. Due to its restoration since the 1950s by G.E.M. Anscombe, P. Foot, and other (mainly) Oxford moral philosophers, virtue ethics has become the third major moral theory and has influenced many related fields, such as epistemology and biomedical fields, and also our society.

In this presentation, focusing on virtue ethics, I explore how we should consider human practical wisdom and morality in the 21st Century. First, I consider why current moral neuroscientific research focuses solely on deontology and utilitarianism and not on virtue ethics. I show that there is no legitimate reason why virtue ethics is excluded, and therefore, there is scope for investigating the potential of using moral neuroscience methods for virtue ethics. Second, by schematizing virtue ethics, I define three of its features, namely, virtue, practical wisdom, and happiness. Third, I examine whether each feature is suitable for advancing neuroscientific research on human morality. From these three features, I show that the concept of practical wisdom is the most suitable for neuroscientific investigation. Finally, I propose four methods of examining human practical wisdom neuroscientifically. I conclude that the virtue ethical concept of practical wisdom is useful for considering what human morality is in the 21st Century, which will, in turn, shed light on how we should consider human practical wisdom.



## A Comparative Study on Organism between Marx and Whitehead

Xiuhua ZHANG

*School of Marxism, China University of Political Science and Law, Beijing 100888, CHINA*

*Email: [xiuhuaz@cupl.edu.cn](mailto:xiuhuaz@cupl.edu.cn)*

**Abstract.** Marx and Whitehead as modern thinkers, they all studied Hegel's dialectics and theory of totality, and possessed the thoughts of holism and organism.

*Firstly*, Whitehead pays attention to organism of cosmology, and he thinks the universe is composed by many events or actual occasions and in process of becoming which they are correlative in the cosmos. Therefore, Whitehead regards his own philosophy as philosophy of organism. That is why C. Robert Mesle calls Whitehead's philosophy as process-relational philosophy. Carl Marx possesses thought of social organism, and he sees society as self-organization, open, becoming, complex system. Moreover, Marx's interpretation of history materialism is based on thought of social organism. The structure of social organism is expressed with classical formula in *Preface to the critique of Political Economics* by Marx. Plekhanov creatively interpreted Marx's theory of social organism.

*Secondly*, Marx and Whitehead all emphasize the internal relationship in organism. Whitehead's process-relational philosophy puts any actual occasion or event in the relations of universal wholeness, and interprets them by process dialectics. Marx not only analyses the structure of social organism but also discussed the movement mechanism of social organism, namely, paradoxical movement between productivity and productive relations, economic base and superstructure as well as class struggle and social revolution, in order to promote change and development of social organism.

*Thirdly*, Marx and Whitehead all argue that organism has its own order and law. Whitehead discusses how to actualize the harmony of cosmos in the perspective theory of civilization of cosmos. Marx discloses the rule of social development in the perspective of materialist conception of history, and tries to answer how to realize social order of justice, equality, freedom as well as liberation of mankind.

*Fourthly*, Marx and Whitehead all criticize metaphysics of abstract substantialism and way of thinking of dualism. Whitehead considered actual occasion for self-feeling, self-prehension, self-selection, self-becoming, self-creation, self-realization, self-enjoyment in the generic empiricism and principle of subjectivity, and regards actual occasion as subject and object in the conception of superject. Marx explores real human beings how to self-change, self-development, self-actualization by engaging in practice activities of economy, politics and culture in order to shift from a member of class to individuality in the community of free association.

*Finally*, in the perspective of philosophical view, Marx and Whitehead following Aristotle all insist the standpoint of organism, holism and theory of process. However, Whitehead's ontology is cosmology of theism, and emphasizes meaning and value of God for actual occasions and cosmos. Marx's ontology is historical existentialism of atheism or philosophy of praxis, and highlights the creativity and power in practice from actual human beings with purposes, so he opposes interpretation of social organism from positions of theism, transcendentalism and pure naturalism.

*Keywords: Marx; Whitehead; organism; dialectics; process*

## Integrity as civilization criterion

Tatiana BYSTROVA

Ural Federal University and the Institute UralNIIproject RAASN, Yekaterinburg, RUSSIA  
Email: [taby27@yandex.ru](mailto:taby27@yandex.ru)

**Abstract.** Throughout the history of mankind integrity was and remains the key civilization indicator. A settlement, a city, an ensemble, a system of things - phenomena referring to the idea of whole, existing in public and professional consciousness.

If integrity is considered as something deliberately produced by human being (in such case cut off from natural organic forms) it certainly appeared not earlier than the period cities and urban culture began to arise. Being the culmination of human thought evolution the concept of integrity is treated as sacral or philosophically comprehended in different forms over human history, including periods of destroying that integrity in objective reality.

The aim of the report in fact relates rather to figuring out the algorithms people *intentionally* use to achieve integrity than to its characteristics. In contrast to natural organic forms integrity is a phenomenon based on and supported by human efforts. Equally people can destroy integrity wittingly or not if it doesn't make sense any more. In other words integrity is organized through idea (word), materialized and supported through certain actions.

A human has not been able to create originally organic forms by means of technical devices at least till present time when technological progress makes it more real to achieve such level of shaping. But people can save their own nature and the environment they live in by organizing integrities similar to those organic objects the nature consists of. There is an amazing coincidence people from different epochs and from different regions demonstrate analogous actions concerning the subject of the article. But for all that the scale of the products can be rather different from a single thing to multilevel systems and, most likely; the scale is defined by a set of external circumstances, from climate to characteristics of a material, from technologies to policy.

Early cities and proto-cities (Mesopotamia, Northern India, the "Country of Towns"<sup>1</sup> in the South Ural steppe, Syria, Anatoly) fix integrity at material and subject aspects. All the cities were constructed not spontaneously but following the detailed plan designed in advance. The idea of cosmos is a prototype of the idea of integrity but unlike the huge Universe a human can make his own world complete if he understands his needs and goals and is guided by the idea of isomorphism between the Universe and a city. A combination of organic and technical becomes not only a basis for viable settlement but what is more it becomes the key indicator of civilization.

Movement from integrity to mechanical set results in creation of aloof from the human race and even harmful environment that is destroying both body and spirit because it's performing under different laws. New concept of integrity is just taking its first steps but the practice of creating town-planning, architectural and design objects is rapidly progressing. We suppose Spanish architect Calatrava demonstrates an approach closely related to the idea of integrity (p. 1951).

---

<sup>1</sup> Here we mean more than twenty settlements with similar geographical positions and domestic rules of life which were founded during the Bronze Age in South Ural steppe region.

The architect often says he uses a human body as a starting point of projects; however, it's not reproduced literally. At the same time S. Calatrava refuses considering construction technologies as the main source of architectural creativity. The leading principle when organizing forms is movement from whole to parts.

If compare the idea of integrity architects of early cities had with the same idea modern authors have we can point out some common features.

1. Focusing on surroundings: from city as a whole to encircling pieces of architecture with water. However Calatrava pays close attention to cultural context of a place as opposed to ancient builders. But if regard town as the second nature there is no that striking difference. In addition the architect emphasizes the value of human being freedom [6] as the most significant part of organizing the integrity itself; we haven't studied that existential aspect yet because it demands to use psychological data, though it is the subject of future research.

2. Working at design in order to produce forms close to natural ones. Using of linear geometry and fractal elements allows to get the results where biomorphic closely bounds up with technical.

In contrast to outdated approach innovative one noticeable in Calatrava's works focuses on increasing dynamism of architectural forms.

## References

- Bultman C. Ist Santiago Calatrava ein organischer Architekt. URL: <https://www.academia.edu/Download> Дата обращения 28.01.2014
- Bystrova T. Development of Aristotle's Theory of Forms in Architecture // Biocosmology and the individual Development. The 4 International Seminar of Biocosmology and The 3 International Conference of Comparative Studies of Mind. Dec. 14-15, Chung-Ang University, Seoul, Korea. 2012. 15-16 pp.
- Daley S. A Star Architect Leaves Some Clients Fuming. Santiago Calatrava Collects Critics as Well as Fans // The New York Times. 24.09.2013. URL: [http://www.nytimes.com/2013/09/25/arts/design/santiago-calatrava-collects-critics-as-well-as-fans.html?\\_r=0](http://www.nytimes.com/2013/09/25/arts/design/santiago-calatrava-collects-critics-as-well-as-fans.html?_r=0) Дата обращения 30.01.2014.
- Definition Organische Architektur // Volcania. Organische Architektur. Eine Sammlung. URL: <http://volcania.wordpress.com/definition-organische-architektur/> Дата обращения 3.03.2013.
- Kuchenbrod M. Max Weber: Die okzidentale Stadt des Mittelalters als schöpferisches Aktivitätszentrum. URL: <http://www.matkuch1.de/tutcity.htm> Дата обращения 20.04.2014.
- Santiago Calatrava - An interview. By Aude-Barras On // The Ground. URL: <http://www.thegroundmag.com/santiago-calatrava-an-interview-with/> 2.02.2014
- Van der Ree P. Mensch und Natur als Inspirationsquelle. Ursprung, Entwicklung und Aktualitaet der organischen Architektur. URL: <http://www.organische-architektur.org/pags/docs/77.1336550571.pdf> Дата обращения 16.03.2013.
- Бацалев В., Варакин А. Тайны археологии. URL: <http://www.bibliotekar.ru/taynyArheologii/8.htm> Дата обращения 07.04.2014.
- Бердяев Н. А. Человек и машина (проблема социологии и метафизики техники). URL: [http://krotov.info/library/02\\_b/berdyayev/1933\\_384.html](http://krotov.info/library/02_b/berdyayev/1933_384.html) Дата обращения 6.04.2014.
- Бодрийяр Ж. Город и ненависть. URL: [http://www.ruthenia.ru/logos/number/1997\\_09/06.htm](http://www.ruthenia.ru/logos/number/1997_09/06.htm) Дата обращения 13.03.2013.
- Бонгард-Левин Г. М. Древнеиндийская цивилизация. М.: Наука, 1993. 320 с.
- Быстрова Т. Ю. Эволюция органической архитектуры: трактовки и модификации. Ч. 1; Ч. 2 // Академический вестник УралНИИПроект РААСН. 2013. № 1. С. 37-44. № 2. С. 45-50.

- Веселова С. Б. Формирование городов. URL: [http://www.kuchaknig.ru/show\\_book.php?book=168798](http://www.kuchaknig.ru/show_book.php?book=168798) Дата обращения 20.04.2014.
- Виноградов Н. Б. Культурно-исторические процессы в степях Южного Урала и Казахстана в начале II тыс. до н. э. (памятники синташтинского и петровского типов) Автореф. дисс. ... д-ра историч. наук. М., 2007. Режим доступа: [www.archaeolog.ru/files/vinogradov.doc](http://www.archaeolog.ru/files/vinogradov.doc)
- Глазычев В. Л. Античная система расселения (переживание Ойкумены) // Сайт Вячеслава Леонидовича Глазычева. URL: [http://www.glazychev.ru/publications/articles/1979\\_antic\\_systema\\_rasselenia.htm](http://www.glazychev.ru/publications/articles/1979_antic_systema_rasselenia.htm) Дата обращения 12.02.2013
- Мисонжников Я. Калатрава // Tutdesign. Блог о дизайне. 18.09.2010. URL: <http://tutdesign.ru/cats/object/1001-kalatrava.html> Дата обращения 19.04.2014.
- Смирнов С. А. Антропология города. URL: [http://anthropology.ru/ru/texts/smirseal/ancity\\_1.html](http://anthropology.ru/ru/texts/smirseal/ancity_1.html) Дата обращения 21.03.2013.
- Сорокин П. Социокультурная динамика и эволюционизм. URL: <http://www.sorokinfond.ru/index.php?id=1299> Дата обращения 20.04.2014.
- Черных Е. Н., Лебедева Е. Ю., Кузьминых С. В. и др. Каргалы. Археологические памятники. История открытия, эксплуатации и исследований. Т.1-3. М.: Институт археологии РАН, 2002.

## Bio-cosmology and its six presentations

Ming WONG

Allston, Boston, MA

Email: [drmingwong@gmail.com](mailto:drmingwong@gmail.com)

**Abstract.** In the theory of “what is life” by Schrodinger, there were the concepts of aperiodic crystal, quantum statistics, high negative entropy. According these concepts, we develop out the Bio-cosmology. According Bio-cosmology, it creates the new interpretation on the entity of the world: The presentations of incomplete crystal (Conventional physics), and the presentations of complete crystal and beyond (advance thermodynamics, which behind the conventional physics); basic on that, we deliver out six kinds of entity of the world:  $(S^-)^{-2}$ ,  $(S^-)^{-1}$ ,  $(S^-)^0$ ,  $(S^-)^1$ ,  $(S^-)^2$ ,  $(S^-)^3$ ; and the theories to present these entities: 1) For  $(S^-)^{-2}$ ,  $(S^-)^{-1}$ , they might be presented by classic Newtonian and general Newtonian---conventional cosmology (QM/MM); 2) For  $(S^-)^0$ ,  $(S^-)^1$ ,  $(S^-)^2$ ,  $(S^-)^3$ , they might be presented by advance thermodynamics which actually is Bio-cosmology (QM/AT). Under these ideas, medicine is classified into: 1) scientific medicine, 2) EBM, 3) and philosophical medicine. Scientific medicine, EBM present out parts of incomplete crystal of life, while philosophical medicine presents out the complete crystal of life. For the completeness of presentation of life, philosophical medicine is much more complete than scientific medicine, EBM.

**Keywords:** *aperiodic crystal, quantum statistics, high negative entropy, Bio-cosmology.*

## Studying Pitirim Sorokin's position on normative ethics in sociology and civilizational studies

Vitaliy G. SHOLOKHOV

*Metropolitan State University of Denver, CO*

*Email: [sholok37@gmail.com](mailto:sholok37@gmail.com)*

**Abstract.** Pitirim A. Sorokin proves the necessity of the existence of sociology as an independent, generalizing science. P.A. Sorokin believed that the real foundation of the social system is expressed in culture. More precisely, it includes the elements of meaning, values and norms. The structure of social life by P.Sorokin is studied with the help of the social sciences: ethics, aesthetics, state and law, linguistics, etc. Ethics - the science of morals. Essentially, this is a normative science. Naturally, among other features, a person must be an altruist, believe in the creative power of love, and so on. Ethics is the last real hope (from Sorokin's point of view) for salvation of mankind.

Pitirim Sorokin poses the question (these quotations are translated from Russian): "Is ethics a normative science and is it possible at all to realize this way?" In his work he concluded: "normative judgments should be based on assessment, which is not the domain or content of normative judgment, but is actually theoretical (i.e., studying things like they are) judgment. Accordingly with this statement, any normative science is a function of theoretical disciplines, and as such, exists only in theory."<sup>2</sup>

Sorokin's ideas found understanding and development among his students. Willard Van Orman Quine, in the book "Web of Belief"<sup>3</sup> showed that in addition to self-evident truths - theories, observations and experiments - another dominant factor for a rigorous science is hypothesis. Science of Ethics can be built as on the hypothesis of linearity (of being), as on the foundation of synergy and cybernetics, i.e. founded on the factual existence of non-linearity of being. The latter is essentially related to the property of self-organization - of matter and (non-substantial) substantial forms of life. From the perspective of non-linearity hypothesis, we get the idea (and understanding) of the Integral approach of Pitirim Sorokin.

In his work "Three major trends of our time" (1962) Sorokin presented the idea of universal training of specialists as a priority because they would have the necessary human qualities to address the pressing time for global problems. Even before the Second World War, Harvard Research created the specialists from the standpoint of science ethics, which studies the properties (virtues) of a human being.

This experience (started in Harvard) was reproduced in many countries, aiming at the preparation of highly qualified specialists. Thus is precisely the example of the Moscow Physics and Technology Institute (MIPT) which was founded in 1947, wherein students were trained as universal specialists capable of solving acute problems in the fields of science and technology.

The research group of Dr. V.G. Sholokhov and S.N. Grinchenko, as well as their students, M.E. Pekker and L.P. Yakovenko, held a sociological study in 1969 of the two sample groups drawn from the 3rd course students at MIPT. All of them were asked to give the mutual evaluation of their intrinsic virtues. The list of properties (virtues) that reflects a set of requirements that have been established (and

---

<sup>2</sup> Sorokin, P.A. (1994). *Public sociology textbook. Articles of different years.* Moscow . "Science". P.232.

<sup>3</sup> See: W.V. Quine, J.S. Ullian (1978). *The Web of Belief.* The McGraw-Hill, 2nd edition.

practiced more than twenty years) for the MIPT students, aiming at the training of multilateral specialist for their vocational work includes intelligence, perseverance, diligence, punctuality, ability to follow through, wit/ingenuity, resourcefulness, intuition, emotion, sensitivity, awareness, education/encyclopedic knowledge, manners, concentration, sociability, penetration, intolerance of shortcomings, and the ability to perceive the new.

The report provides results of the survey and some of the consequences associated with the ability to generalize the results (obtained from the study of problems) that arise in sociology.

## The Artificial Factor and Natural Link in Spiritual Practice: Seeing from Technê

Du JIANG

*College of Philosophy & Sociology, Beijing Normal University, Beijing 100875, CHINA*

*Email: [duj0207@gmail.com](mailto:duj0207@gmail.com)*

**Abstract.** As a self-contemplation action, Spiritual Practice is the self-referential process of spirit. As an individual's pure holistic perceptual intuition, it can be realized by the way of hesychasm or meditation. Another approach is to internalize the effect of the individual's action.

Concerning the most common Spiritual Practice in our daily life. Only a few is talented with his ultimate duty and the ability of keeping spiritual harmonious, while most of us getting to know by studying or painful experience. Seeing from the perspective of existentialism, an investigation of those most common Spiritual Practices appears to be important.

### **I. As an openness to oneself, Spiritual Practice is an activity of pursuing the reality.**

The End/Goal: the intersection of discussion on practice and technê. In Aristotle's view, any activity of human points to an end. Practice/Action has an intrinsic end or goodness, "*the action performed is an end simply. For acting well is an end, and one's longing is for this end.*" We may say that practice is a closed loop circle. In contrast, in a general sense, making/producing activity aims at getting an extrinsic thing made. Once we get the product the procedure stopped.

Spiritual Practice treating the essential of one man a spiritual existential individual. So the target of spirit activity ought not to be any extrinsic goodness but the spirit itself. It aims at pursuing continuous extraction of spirit, until completely self-sufficient and independent, namely a free state. That is not only a procedure of spiritual individual finding and opening to the self, but also a truth-seeking process in which the spirit treated itself as the others.

### **II. Technê as the artificial factor of Spiritual Practice.**

Introducing technê into Spiritual Practice. In *Nicomachean Ethics*, technê was stated as "a state concerned with making, involving true reasoning, ... concerned with the variable"(1140a20) Usually, technê is about tangible things and artworks. Now back to the perspective of Spiritual Practice, since the object of doing is its variable self, we may extend our comprehension on *the thing can be made*, which means spirit itself as the matter of making. Then the Spiritual Practice turned to make the shielded and unrevealed part of spirit clearly. Hence, in a very special way, technê entered practice.

The making of artwork. In that particular field of technê, Spiritual Practice is one kind of artistic creative activities. That also means that the ultimately pure artistic creation is the creation of spirit.

The individuality of Spiritual Practice calls for environmental design. The fundamental characteristic of Spiritual Practice is protect and keep the individual in freedom. To enter the status of Spiritual Practice, one usually need a specific physical-mental environment as guidance, which is designed and realized by technê. For during the progress from the status of un-action to action (A.K.A. crossing the border of Spiritual Practice and entering into it), the spiritual individual is still unable to get rid of the constraints of its body completely, and need guidance of specific senses "stimulus". The link of



environmental design is no doubt can be seen as a warm-up stage of practice. In the long history of practice, various kinds of Spiritual Practice combined with specific environmental design gradually getting stabilized, and formed different social landscapes.

### **III. Technê as the intermedia and means of Spiritual Practice.**

To get free, inherently requires the spiritual individual escaping from the bondage of body. Seeing from Spiritual Practice, the individual freedom lies in the spiritual's ability of bring specific things out of the state of concealment. That specific thing can be either tangible thing in the outside world or a specific spiritual pattern. The former can be found in counterparts in various myths of ancient civilizations, such as the creative ability of gods and Immortal beings; while the latter can be represented as the generation of awareness, ideas, and inspirations and so on. Thus, technê, the logos-applying-action has become the intermedia of spirit's action of exteriorize itself.

*Keywords: Spiritual Practice, Technê*

## The Meaning of Aristotelian Causation for Molecular Era Medicine & Public Health

Stephen M. MODEL

*Epidemiology, and Health Management and Policy, University of Michigan School of Public Health; Ann Arbor, MI*

*Email: [mod@umich.edu](mailto:mod@umich.edu)*

**Abstract.** To date the Biocosmological debate has turned on the notion of a personal functionality that human beings are born with and which defines their individual potentials and susceptibilities, but it is unclear how the functionality operates. Generally it is appreciated that as they grow and opportunities open up, people may overcome initial hardships and rise up the ladder from physical needs to address the array of social demands they experience, ultimately driving towards some form of self-realization if prior demands have been satisfied. Triangular or foundational models of reality inevitably beg the question of whether the impetus for growth is arising from the ground up or the top-down.

Is the process of personal realization causal or teleological - leading to the spontaneous budding of a person with time, or the drawing out what is already there? To address this question, it is helpful to embrace both classical wisdom - the Aristotelian causes - and modern systems-level biology. In doing so, the need arises to go beyond simple monolithic views of mechanism. A focus on Aristotelian efficient cause, for example, will lead to knowledge of a person's genotype and genetic mutations, both of which outline various psychobiological strengths and weaknesses detected via genetic testing. The modern correlate of final cause might look at various developmental constraints on the species or individual. At the prenatal level, the developing individual is bombarded by both positive (nutritional) and negative (stress-related) factors. The effect of these impacts unfolds once the individual is born and later in life in terms of susceptibility to chronic illness.

Modern medicine and public health are currently moving in unparalleled directions - taking into account the whole genome and total environment - that are making the next phase of "medical" (larger sense of the term) development possible. In an inexplicable way, the stream of developments is presaged and described by the four Aristotelian causes placed together. Modern meets classical to outline the layers of mechanism involved in human genesis, health and disease, and to show what kinds of tests, predictive, diagnostic, and beyond will become possible in a revolutionized era of medicine and public health.

## Dai Zhen's Philosophy of Body, Mind and Goodness

Ho Young LEE

*Chung-Ang University, Seoul, KOREA*

*E-mail: [wesyuzna@gmail.com](mailto:wesyuzna@gmail.com)*

**Abstract.** Philosophy of Dai Zhen (1724-1777). He was a philosopher and eminent evidential scholar of the mid-Qing era. As a direct result of Dai Zhen's influence, important Confucian concepts and ideas have undergone philological study that has proved fruitful in text critics, and has proved equally productive in the context of Chinese moral philosophy.

The moral philosophy of Dai Zhen can be summarised as "fulfil desires and express feelings." Because he believed that life is the most cherished thing for all man and thing, he maintains that "whatever issues from desire is always for the sake of life and nurture." He also claimed that "caring for oneself, and extending this care to those close to oneself, are both aspects of humanity.

According to Dai Zhen, Dao(道), besides having the functions of creative activity and ordering, is further distinguished by its function of "making the nature" things, that is, by making things what they are. He asserted that the yin and yang comprehends the five agencies just as the five agencies comprehend the yin and yang. It is because of the various forms of distribution that the five agencies and yin and yang take that things become what they are.

Since a person has desire and feeling, he also develops cunningness and intellect within him; and, since a person's nature is manifested in cunningness and intellect, he develops like and repugnance for beauty, ugliness, right, and wrong.

The essential point that Dai Zhen wanted to make is that nature is due to Dao or the Dao of heaven and that the individual natures of things and men are describable in terms of their vital forces and their refined existence - mind and intelligence. Goodness as the great thing shared in common by all things in the world. Dao gives rise to everything; Dao individualises everything as everything; and, finally, Dao orders and harmonises everything with everything else - all these are connoted in the use of the term "goodness."

Dai Zhen defines nature (性) as "allotments from yin and yang and the five elemental forces." Each thing, animate or inanimate, follows its own allotment to assume a particular form, and each completes its own nature.

Dai Zhen compared moral growth to physical growth: just as blood and vital forces, desire food and drink as nourishment to grow, the knowing mind desires learning to enlarge itself. When the body develops, it "begins by being immature and small, but ends in wisdom." Growth is an extension and an expansion.

As a conclusion, human physical body and activities of life is ethical base of philosophy of Dai Zhen. He regards the cause of activities for life is the function of mind, desire and feeling and he claimed that it is the prime concern of his moral philosophy.

He set up a strong monastic moral philosophy base on the individual desire and feelings to establish human body as the moral subjectivity.

## Erving Goffman's Dramaturgical Model and its Implication for Confucian Ethics

Hongkyu HA

Yonsei University, Seoul, KOREA

Email: [hajeremiah@gmail.com](mailto:hajeremiah@gmail.com)

**Abstract.** This essay introduces Erving Goffman's dramaturgical model developed in his famous books *The Presentation of Self in Everyday Life*(1959) and *Interaction Ritual*(1967), and seeks to search for its implication for Confucian ethics in an effort to find the relevance of Confucian ethics in the contemporary society which is no longer characterized by familial or communal life.

Confucian philosophy is primarily constituted of a set of ethical ideas oriented toward practice. It is the common truth about Confucianism that it is basically a virtue ethic comprised of such basic virtues as *ren* (仁, benevolence), *yi* (義, rightness, righteousness), and *li* (禮, rites, propriety). These virtues are considered as leading or guiding ethical action. Here I would like to stress that *li* is not just one of virtues, or action-guiding principle. The *li*, usually translated as 'rites,' 'propriety,' 'ceremony,' 'decorum' and 'manners,' focuses on rules of proper conduct. The Master said, "someone who does not understand the observance of ritual propriety (*li*, 禮) has no way of knowing where to stand" (20, 3). The *li* is the most distinctive feature of Confucian ethics for "the emphasis it gives to rituals as providing much of the distinctive substance of human life, as a necessary dimension of moral self-cultivation, and as contributing to the aesthetic dimension of the good life" (Wong, 2006: 196). Thus, we can say that the virtue of *ren* as a moral ideal of community, for example, cannot be realized in its complete sense when understood only as something separate from and independent of *li*. Ethics is a system of rules embodied in practice on the level of which truth, goodness and beauty are spoken for.

One of the major complains from modern Western moral theorists is that Confucian ethics lacks a focus on individuals' moral worth and their rights to such goods as liberty and equality. Thus, frequently, Confucian ethics is interpreted as its subordinating the individual to the group. However, such views on Confucian ethics derived from the dualistic understanding based on the clear distinction between the public and the private spheres of existence, ignoring the social nature of human beings. Such a view, as Hall and Ames(1987) properly argue, is "weighted in favor of the notion of individual absoluteness which suggests that they have difficulty making an appropriate case for social interdependence without challenging the viability of the notions of freedom and autonomy"(152). "*Ren*, the highest human excellence, must be given expression in interpersonal endeavors. Rituals (*li*), necessary for self-cultivation and the ordering of society, are communal activities" (Rosemont, 2004: 59-60).

A sociologist Goffman, takes what he calls 'interaction order' as a primary domain of inquiry' which allows us to take into account both the individual and the collective. In his first book *The Presentation of Self in Everyday Life* (1959), he develops the perspective that the self is a dramaturgical product of social interaction. Using the metaphor of 'theater,' the dramaturgical perspective suggests that human beings are like actors performing before the audience on a stage. From this perspective, he is concerned with "the way in which the individual in ordinary work situations presents himself and his activity to others, the ways in which he guides and controls the impression they form of him, and the kinds of things he may and

may not do while sustaining his performance before them” (xi). The self does not derive from its possessor and it is not something presumably existing inside people’s minds. Rather it is a dramatic effect arising from a scene in which the self is being produced and maintained through proper performance. The self is a moral object in the interaction ritual. In the interaction order, i.e. a domain of activity where face-to-face interaction transpires, individuals have a moral right to expect others’ respect, but at the same time they must meet others’ expectations in order to participate in it. As a team, moreover, individuals must act as if they have accepted certain moral obligations. It is crucial for the maintenance of the collaborative performance that each participant should possess the dramaturgical skills and exercise them in presenting his own part.

Individuals living in our urban secular world are sacred beings in the sense that they are allotted a kind of sacredness that is displayed and confirmed by symbolic acts. In the second essay of *Interaction Ritual* (1967) ‘The Nature and Deference and Demeanor,’ Goffman explores how individuals can hold their sacredness during an interaction, emphasizing that human self is constituted out of moral nature of ‘rules of conduct’ to which the individual is obliged to conform to sustain social life. Here Goffman is not concerned with ‘substantive rules’ consisting of law, morality and ethics, but ‘ceremonial rules’ which are a conventionalized means of communication by which the individual expresses his social character or conveys his respect for the other participants in the situation. The rules of conduct are organized into “codes which guarantee that everyone acts appropriately and receives his due” and are incorporated in “a system of etiquette”(55, 114). The rules of conduct are infused into all areas of activity and attachment to rules leads to a constancy and patterning of behavior. Individuals enter a communication when they act according to such rules of conduct, for the rules of conduct represent a way in which selves are confirmed. For the individual, the rules of conduct are both obligations and expectations. While obeying such rules, the individual is morally constrained to conduct himself, and simultaneously expects that others are morally bound to act according to the rules in regard to him. Through the obedience to rules, guided by ceremonial obligations and expectations, the individual is able to keep himself as a worthy-of-respect person and to affirm the sacred quality of others. Since individuals cannot conduct themselves in other’s presence without guidance of and attachment to those rules, the rules of conduct function just like social cement, which binds the participants in the interaction. However, when rules of conduct are broken, co-actors are put in danger of becoming discredited, and the social order that is maintained during interaction is also jeopardized.

Goffman deals with the importance of the rules of conduct in social life by emphasizing that the social self is actually constituted out of moral rules to which the individual attaches himself in order to act as a social person. As he obeys the rules, he can expect that others are also morally bound to abide by the rules. In this way, the rules of conduct bind the actor and the recipient together, which are “the bindings of society” (90).

### References

- The Analects of Confucius: A Philosophical Translation*. Translated by Roger T. Ames and Henry Rosemont, Jr. New York: Ballantine Books.
- Bovone, Laura. 1993. “Ethics as Etiquette : The Emblematic Contribution of Erving Goffman.” *Theory, Culture & Society*. 10 (4): 25-39.

- Goffman, Erving, 1959, *The Presentation of Self in Everyday Life*, New York, London, Toronto, Sydney and Auckland: Doubleday.
- \_\_\_\_\_, 1967, *Interaction Ritual - Essays on Face-to-Face Behavior*, New York: Pantheon Books.
- Kupperman, Joel. 2004. "Tradition and Community in the Formation of Character and Self." in Kwong-loi Shun and David B. Wong (eds). *Confucian Ethics*. Cambridge: Cambridge University. pp. 103-123.
- Hall, David L. and Roger T. Ames. 1987. *Thinking Though Confucius*. Albany: State University of New York Press.
- Rosemont, Jr., Henry. 2004. "Whose Democracy? Which Rights? A Confucian Critique of Modern Western Liberalism." in Kwong-loi Shun and David B. Wong (eds). *Confucian Ethics*. Cambridge: Cambridge University. pp. 49-71.
- Wong, David. 2006. "Chinese Philosophy: Ethics" in *Encyclopedia of Philosophy*. 2<sup>nd</sup> edition. Thomson Gale.

## Civilizational progress with cybernetic positions

Sergey N. GRINCHENKO

*Institute of Informatics Problems of the Russian Academy of Sciences, Moscow, RUSSIA*

*Email: [sgrinchenko@ipiran.ru](mailto:sgrinchenko@ipiran.ru)*

**Abstract.** Pitirim Sorokin notes that "the physical sciences study *inorganic* phenomena, biology explores the *organic* world, the social sciences consider *supraorganic* phenomena" [Sorokin, 1992]. The question arises: whether this exhausted the list of possible scientific views on the above triad of "worlds"? The answer - no, not exhausted! - is based on *integrated informatics- cybernetic concepts*. With its position each of the "worlds" that make up the triad - and "lifeless", and "living", and "personal-production-social" - is a self-controlling hierarchical system [Grinchenko, 2004, 2007]. The complexity of these systems is different, growing from the first "world" to the third, - but they are very closely linked and coevolve. According to the modern point of view, the system - is "a combination of interacting elements organized to achieve one or more goals" [Systems Engineering]. In our case, adaptive behavior (implementation of immanent activity) of representatives of all hierarchical components of each system in the triad is organized according to the algorithms of search optimization (of energy character *target* criteria: extreme type, equality and inequality). That is realized the Aristotelian principle of *causa finalis*, positioning concept within the "biocosmological" representation about the Universe [Grinchenko, 2010].

Multi-tiered hierarchical system of modern Humanity has evolved through a number of appropriate steps. Denoted by the term "*meta-evolution*" process of consecutive increasing of levels/tiers number of the system during its formation. Meta-evolutionary development correlates with a permanent complication of people create and master informational, infrastructural-communicational and productional-working technologies [Grinchenko, 2007; Grinchenko, Shchapova, 2013]. It is a process of *monotonically increasing of potential hierarchical complexity and diversity of civilizational system*.

Necessary to distinguish the process of new tier forming in monotonous process of the hierarchical system *meta-evolution* from functioning process (of adaptive behavior) representatives *already* formed tiers, which is *basically non-monotonic and suggests search yaws*. Recent lead to both an increase in complexity and diversity of such structures and to their facilitation, as well as depletion of their ensembles. A similar process can be called *evolutionary-cyclic* (as well as search-optimizational), not forgetting to exclude from it the phenomenon, initiated by meta-evolutionary process.

As a consequence, the concept of "civilizational progress of Humanity" should be split into the concept of *meta-evolutionary progress* and the concept of "everything else", or *evolutionary-cyclic progress*. Last paired with *evolutionary-cyclical "regress"* reflects the complexity/simplification and improvement/degradation processes in the development of certain elements of Humanity - except of meta-evolutionary component of the system complication.

With the proposed positions meta-evolutionary progress is not going to some kind of conscious (by person? by Nature?) goal, but quite regular process of linear Humankind's expansion. The fact that the main spatial-temporal characteristics of this process amenable to mathematical calculation, shows direct dependence of the most common stages of history Civilization from the fundamental laws of Nature.



## References

- Grinchenko S.N. System Memory of Life. (as the Basis of his Meta-evolution and Periodic Structure). Moscow: IPIRAN Publisher, Mir Publisher, 2004. 512 s. (in Russian).
- Grinchenko S.N. Meta-evolution (of inanimate systems, animate and social-technological nature systems). Moscow: IPIRAN Publisher, 2007. 456 s. (in Russian).
- Grinchenko S.N. Teleological approach to modeling the Universe // Electronic Journal "Biocosmology - neo-Aristotelism», Vol.1, No.1, Winter 2010, pp. 44-60 - <http://www.biocosmology.ru/elektronnyj-zurnal-biokosmologia-biocosmology-neo-Aristotelism/postupivsie-stati/vol-1-no-1-winter>
- Grinchenko S.N., Shchapova J.L. Information technology in the history of Humankind. M: New Technologies Publishing, 2013. 32 p. (Supplement to the journal "Information Technology». № 8/2013).
- Systems Engineering. Lifecycle processes. ISO / IEC 15288-2005, Section 4.17.
- Sorokin P.A. People. Civilization. Society. M. Politizdat Publishing, 1992. 543 p.

## A Research on Aristotelian “Phronesis” and Its Contemporary Value

Chuangen HUANG

*College of Philosophy and Sociology, Beijing Normal University; Beijing 100875, CHINA*

*Email: [huanggen870813@gmail.com](mailto:huanggen870813@gmail.com)*

**Abstract.** According to different research subjects, Aristotle, the encyclopedic philosopher in Ancient Greek, divided “wisdom” into three dimensions which include theoretical wisdom, practical wisdom and technical wisdom. While the first one taking the highest immobile substance as its subject is the ultimate value of theoretical reason, the last one means technical activities of the lowest men. Different from aforementioned two parts, as the purpose of practical reason, practical wisdom or phronesis is concerned with human character or conduct. As the pioneer in the area of practical philosophy, Aristotle had paid much attention to phronesis in many writings. However, Aristotle always indicated phronesis by techne analogy which confused the boundary of them two that he had distinguished through end in itself or in other. So, there were many thinkers to rethink the relationship in the history of philosophy.

Generally speaking, phronesis always yielded to theoretical wisdom in western traditional philosophy. Accompanied by the disintegration of rationalism, phronesis was degraded to technical wisdom. In other word, the whole history of philosophy could be secularization and utilitarian orientation of phronesis, both of which are the two extremes in the development of phronesis and contrary to the original intention of Aristotle. Therefore, the re-explanation of Aristotle’s phronesis is very necessary for our age of technology. More than anything, I think that the reexamining maybe beneficial to the overcoming of the arrogance of contemporary technical wisdom. The main reason is that the primary mission of Aristotle’s phronesis is to inquire the ways for fulfilling the rational reason and political characters rather than to discuss the theory or knowledge about some object. To be more exact, phronesis concentrates on the good life and friendly behavior. However, accompanied by the development of science and technology in contemporary era, technical wisdom is becoming the supreme wisdom which is criticized by Herbert Marcuse and Heidegger, whose purpose is to recover the metaphysical dimension of phronesis.

So, this paper will firstly expound the connotation of Aristotle’s phronesis. Then, the development process of its meaning is traced back in main thinkers’ thought. The last part of the paper is to reveal the contemporary value of Aristotle’s phronesis. On the whole, the paper will just display an example of the classical wisdom. In order to better development of civilization, we must pay attention to rethinking the current embarrassment and drawing rich nutrition and acquiring the motive force from ancient sages.

*Keywords: Aristotle; Phronesis; Technical wisdom; Contemporary Value*

## Cosmism over Spiritualism; Philosophy over Science; Cooperation over Coercion: What We Must Do to Create a Healthy Human Society

Henry H. LINDNER

Scranton, PA

Email: [hlindner1@yahoo.com](mailto:hlindner1@yahoo.com)

**Abstract.** The Cosmos is a self-existing, self-evolving organism that strives to produce higher levels of complexity, intelligence and self-awareness. We humans are intelligent primates that acquired language; we are the Cosmos become linguistically self-aware. Linguistic ideas (memes) and ideologies (memeplexes) dominate our thought and behavior. They are forms of life that reproduce by spreading to other minds; those with the best reproductive and defensive strategies become dominant, even if they cause their hosts to harm themselves, their offspring, outsiders, or the environment. Spiritualism is a false theory of the relationship between consciousness and Cosmos. It is the core mental virus that contaminates our understanding of the Cosmos and ourselves, and thus is the direct or indirect source of our intellectual and social pathologies. It implies a false psychology that justifies coercion. It produced religions, and then produced Science in order to protect itself from philosophy. Science is cognitively deficient, leaving us powerless to detect and eliminate false memes and memeplexes. In order to cleanse our minds of linguistic viruses, to understand the Cosmos and ourselves, to eliminate our psychosocial pathologies and to achieve our potential as a species we must rediscover and reassert philosophy as the basis of human society.

*Keywords: civilization, Cosmology, Cosmos, evolution, language, philosophy, religion, Science, spiritualism, space.*

## Oscillations between barbarism and civilization

Anna MAKOLKIN, Professor, Ph.D.

*University of Toronto, Toronto, CANADA*

*Email: [anna.makolkin@utoronto.ca](mailto:anna.makolkin@utoronto.ca)*

**Abstract.** Commenting on the political turmoil in the 16th-century Florence, Niccolo Machiavelli (1469-1527) came to a conclusion that wisdom had a cyclical nature and mode of expression, analogous to the biological processes. This is what he wrote in his “History of Florence”:

provinces pass from order into confusion and afterward reoccur to a state of order again. Having been reduced by disorder, and sunk to their utmost depression, unable to descend lower, they of necessity, reascend (Book V,1094:204)

Order and confusion, being the expression of collective wisdom, point out to a nearly BIOLOGICAL social rhythm.

The Machiavellian theory of cycles would re-surface again, a couple centuries later in the Vican corsi/recorsi-paradigm, but both actually being the versions of the Aristotelian concepts of Change, the Universal Phenomena, displayed both in nature and in Culture and defining the cyclicity of human wisdom and periodic ascents to civilization.

This paper explores the Aristotle-Machiavelli-Vico triadic paradigm and applies it as an analytical tool in the assessment of cultural history. It was clear to Aristotle that we invariably come back to our cultural parents, rediscovering anew their accomplishments and conclusions. Throughout history, humanity had to re-invent Culture and Civilization numerous times - from the Sumerians, Babylonians, Egyptians, Hebrews, Greeks and Romans to modern Europe and America. The phases of civility were repeatedly succeeded by barbarism. We shall dwell on the ephemeral spirit of wisdom and the possibilities of recovering the lost moral and cultural compass.

## *Contributing Participants*

- Paul BEAULIEU : Professor, School of Management Sciences, Department Strategy and Social Responsibility, University of Quebec in Montreal, Montreal (Quebec), CANADA.
- Tatiana BYSTROVA : Doctor of philosophical sciences, Professor at the Ural Federal University, Chief Researcher of the Institute UralNIIproject RAASN, Yekaterinburg, RUSSIA.
- Sergei N. GRINCHENKO : Doctor of technical sciences, Professor, Institute of Informatics Problems of the Russian Academy of Sciences, Moscow, RUSSIA.
- Hongkyu HA : Yonsei University, Seoul, KOREA.
- Chuangen HUANG : Ph.D. candidate, College of Philosophy and Sociology, Beijing Normal University; Beijing 100875, CHINA.
- Du JIANG : College of Philosophy & Sociology, Beijing Normal University, Beijing 100875, CHINA.
- Konstantin S. KHROUTSKI : PhD, Institute of Medical Education, Novgorod State University named after Yaroslav-the-Wise, Veliky Novgorod, RUSSIA.
- Ho Young LEE : Chung-Ang University, Seoul, KOREA.
- Henry H. LINDNER : M.D., G.P., Scranton, PA.
- Xiaoting LIU : Ph.D., Professor, College of Philosophy and Sociology, Beijing Normal University / Center for Science and Humanity Studies, Beijing 100875, CHINA.
- Anna MAKOLKIN : Ph.D., Professor, The Frank Iacobucci Centre for Italian Canadian Studies, University of Toronto, CANADA.
- Stephen M. MODELL : Dr., M.D., M.S., Dissemination Director of the Center for Public Health and Community Genomics; University of Michigan; Ann Arbor, MI.
- Nargis NURULLA-KHODZHAEVA : Doctor of philosophical sciences, Researcher at the Institute of Oriental Studies, Russian Academy of sciences, Moscow; Coordinator of Dissertation Councils, Technological University of Tajikistan (Dushanbe), TAJIKISTAN;
- Vitaly G. SHOLOKHOV : Doctor of philosophical sciences (PhD in technical sciences), Metropolitan State University of Denver, CO.
- Koji TACHIBANA : Ph.D., Faculty of Letters, Kumamoto University, Kumamoto, JAPAN.
- Milan TASIC : Professor, Department of Social Sciences, Teacher's Training Faculty, University of Niš, SERBIA.
- Ming WONG : M.D., G.P., Allston, Boston, MA.
- Kwon Jong YOO : President of the Biocosmological Association, Ph.D., Professor, Department of Philosophy, Chung-Ang University, Seoul, KOREA.
- Xiuhua ZHANG : School of Marxism, China University of Political Science and Law, Beijing 100888, CHINA.





*7th International seminar on Biocosmology  
concurrently with the 44<sup>th</sup>-ISCSC-conference  
“**Biocosmological approach to civilizational studies**”-  
co-organized by  
The International Society for the Comparative Studies of Civilizations,  
Monmouth University and Biocosmological Association*