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#### Outstanding Scientist of Our Time: to the 80th Anniversary of Academician A.D. Ursul

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The article gives a brief analysis of some important directions of scientific work of doctor of philosophical Sciences, Professor A. D. Ursula. Shown the encyclopedic nature of scientific activities of this outstanding scientist, who is the founder of some new trends in Russian and world science. The main attention in this work paid to the results of A. D. Ursula in the area of noospherology, the philosophy of information, social Informatics, and information of cultural studies — a new direction in cultural studies, in which cultural phenomena are studied from the perspective of information approach. Shows the relationship of these areas with the current problems of national and global security.

Keywords: global studies, information globalistics, information culturology, noospherology, social Informatics, philosophy of information.

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# Academician Arkady Dmitrievich Ursul Scientist of worldwide reputation

July 28, 2016 marks the 80<sup>th</sup> anniversary of the member of our Editorial Board, honoured scientist of the Russian Federation, Doctor of Philosophy, Professor – Arkady Dmitrievich Ursul.

Arkady Dmitrievich has published more than 1,200 scientific papers, including more than 200 monographs, in Russia and other parts of the world. These works are well known, as evidenced by the high level of their citation. For example, in the RISC (Russian Science Citation Index) the number of references to his publications has already approached 7 thousand and continues to grow rapidly. This is despite the fact that the RISC has only about 320 of his publications.

A.D. Ursul belongs to the rare type of polymaths, whose research interests are extremely broad. A very brief review of his scientific achievements would require several dozen pages. Therefore, in this article I will briefly consider only a few of the main research areas, which seems fundamentally important in terms of their relevance to address the global civilizational problems in the short term.

### Contribution to the philosophical space exploration

A.D. Ursul began his scientific career with studying the problems of space exploration in the practical and philosophical terms. He laid the foundations of social and philosophical concept of human space activities; developed a methodology for space activities; foresaw its evolution from the perspective of sustainable development and global evolutionism; for the first time ever gave a detailed comprehensive philosophical and sociological analysis of the problem of extraterrestrial civilizations. He also revealed the role of the science "cosmization" and

development of many processes (not only space research) of on the basis astronautics. He predicted a more complex process – *space revolution in science* that preceded the global revolution.

During the methodological search, he put forward and justified the direction of global research, which later received the name Cosmo-Gobalistics. He created the concept of anthropogeo-cosmism (socio-geo-cosmism), substantiated the idea of the space development priority for solutions of terrestrial and global problems of humanity; proposed a single supersystem "Mankind-Earth-Universe", which became the methodological basis for Cosmo-Globalistics. The introduced concept proceeds from the fact that the priority aim of space studies in the foreseeable future is the orientation on the solution of global problems and the transition to sustainable world development.

A.D. Ursul put forth the idea that one of the most important tasks of finding extraterrestrial life is promoting sciences and addressing earthly (especially global) problems of mankind, that require to treat our civilization as a systemic, holistic, progressively developing object.

The scientist suggested the *hypothesis of information space development* by mankind, stating that the informational aspect serves as a priority in interaction between society and nature, which is the most important in the process of development. This interaction reflects the profound essence of the formation and evolution of the social stage of development and determines the human development of the natural environment.

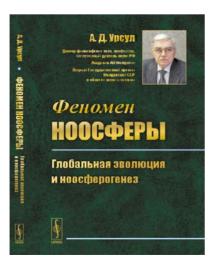
#### Development of globalistics, problems of sustainable civilization development and noospherogenesis

The most popular in the world scientific community today are those A.D. Ursul's works, which deal with the development of *globalistics*,

research problems of *sustainable* civilization *development* and the formation of the *noosphere* as a higher stage of development. One of his first monographs in this area was published in Russian in 1993<sup>2</sup>. The author of these lines had a chance to read it in manuscript.

This study showed that to overcome the systemic crisis of civilization and further sustainable development of human society is possible only in the noosphere, i.e. in the sphere of the mind, where the interests of global security are placed above the geopolitical ambitions, business interests and private property. However, to achieve this it is necessary, first of all, to reform the education system, making it advanced, as well as to use effectively new possibilities created by global informatization of society. Today, 23 years after the publication of this monograph, we see that the global challenge of sustainable development is really coming to the fore and has become the subject of discussion in the UN<sup>3</sup>.

Thus, AD Ursul's conclusions and practical recommendations are still relevant and strategically validated today, and the *concept* of the noosphere civilization development<sup>4</sup> may and must become a scientific and methodological basis for solving urgent problems of sustainable development, which are now discussed in the international community.



A.D. Ursul showed that in the long term the international community security and Russian national security can be achieved not so much by means of protection, but by the effective implementation of sustainable development strategy, ensuring the civilization survival and the biosphere preservation. He was the first who proposed and developed the concept of security through sustainable development. Moreover, he paid special attention to the problem of global and national security through sustainable development in connection with the solving global problems and decreasing the negative effects of globalization.

He also took an evolutionary approach to the global research and spread the *concept of evolution globalistics*, which focuses on the study of the development and co-evolution of global systems and processes. The main subject of the global research in this concept is global processes and systems (including natural global processes) and their evolution on the planet.

He was the first to show that the solution of the whole complex of global problems lies in the world's transition to sustainable development, and the emergence of the noosphere as a global (and in the future – planetary-cosmic) process will initially take place through sustainable development.

Noospherogenesis as a global process is considered from socio-technological point of view as the creation of the information society with sustainable development (info-noosphere) at first and then as the ecological society formation (econoosphere), in the long term — cosmonoosphere. He also formulated the basic principles of the new phase of the global process of the mind sphere formation (as a form of advanced noosphere intelligence), implemented through sustainable development. This marked the beginning of a new—"non-classical stage" in the noosphere theory.

Thus, he created the *noospherogenesis concept* as the non-classical stage in research aimed at studying the sphere of reason.

#### Social Informatics as the scientific basis of global information society

A.D. Ursul is the founder of **Social Informatics** – a new research direction aimed at studying information aspects of social development, which began in Russia in 1990 with his first monograph on this complex issue and which since that has been actively developing<sup>5</sup>.

This direction gained international recognition rather quickly. It is sufficient to state that the recommendation for the Study of Social Informatics problems in advanced education system was included in the proceedings of the II UNESCO International Congress "Education and Informatics", which was held in Moscow in July 1996 and attended by over 1200 delegates from abroad.

Currently, the Russians have a scientific school in the field of social science, its results of are well known both in Russia and in other countries,<sup>6</sup> especially in China, where in 2006 Institute of Social Information was created as a part of one major university.

The strategic significance of this research area is that it creates a scientific basis for the formation of *global information society*, the development of which takes place now. Such society drastically changes not only the human environment, but also people's traditional notions of quality of life, time and space, material and cultural values.

A.D. Ursul's scientific merit consists in the fact that he first gave this area a fundamental philosophical foundation.

### A.D. Ursul - founder of scientific school of information philosophy

The term "information philosophy" appeared in the world of science relatively recently, in Russian scientific journal "Problems of Philosophy" Chinese Professor Liu Gang published his corresponding article in 2007. He pointed out that in China this direction is actively developing, fueled by particular mentality of Chinese scientists, emerging on the basis of the Confucius works.

At the same time, the philosophical concepts of the overwhelming majority of Western scientists (with the exception of G.W. Leibniz, whom the author considers to be the follower of Confucius) are radically more materialistically oriented, since they are based mainly on the ideas of R. Descartes and I. Newton. Therefore, the author of this article pessimistically evaluated the prospects of information philosophy development in these countries

In fact, the situation is completely different in Russia, as in China research in the field of information philosophy began only in 1980, while in Russia – in 1967, i.e. 13 years earlier. The most fundamental works in this field are those of A.D. Ursul. The first of his five books in this area was published in Russia in 1968<sup>8</sup>. At the same time, almost immediately in Germany







it was published in German. Then, in the period of 1970-1975 A.D. Ursul published three monographs on the subject<sup>9</sup>, and finally, in the last few years, a monograph in collaboration with I.M. Gurevich<sup>10</sup>.

### Some A.D. Ursul's monographs in the field of information philosophy

Thus, the priority in the field of information philosophy as a scientific field undoubtedly belongs to Russia, and A.D. Ursul is its founder and recognized international leader.

My report on this at the IV International Conference on the Fundamentals of Information Science (Beijing, 2010)<sup>11</sup>, upset Chinese scientists very much. However, their response was very quick and efficient: in just six months first in the world one of the major universities in China created the International Research Center for Information Philosophy with the Academic Board including academician A.D. Ursul, a number of scientists from Austria, Great Britain, Germany, the USA and France, as well as the author of this article.

In 2013, the Center held first in China international conference on the information philosophy. Unfortunately, due to problems with the financing of science, none of the Russian scientists took part in this conference, and the only Russian report<sup>12</sup> was read by French Professor of John Brenner.

### Russian scientific school in the field of information philosophy

The aforementioned A.D. Ursul's monographs devoted to philosophical problems of information became the basis for the development of this scientific field, not only in the world science, but also in Russia. Today in Russia in this area more than 10 scientists work in this area, and their results are used both in science and in education, especially in the preparation of

candidates and doctors of science. These results are regularly discussed by the Joint Scientific and Methodological Seminar of the Institute of Informatics Problems of the Russian Academy of Sciences (RAS) and the Institute of Scientific Information for Social Sciences RAS.

In addition, in 2009 at the initiative of academician V.A. Lektorskii, the chief editor of the journal "Problems of Philosophy", this magazine organized a round table on the topic "Informational approach in interdisciplinary perspective". The meeting was attended by academician A.D. Ursul, who described in detail his findings and prospects of development of this fundamental method of scientific knowledge. His speech became the basis for further discussion of the round table participants, led by V.A. Lektorskii.

It is needless to say that the materials of the meeting, published in the journal "Problems of Philosophy" today have a very high level of citation in the RISC database, which shows a significant interest in this issue expressed by Russian and foreign scientists.

The reasons for this are clear, they are associated with a major increase in the role of information in modern society, it is no wonder that many scholars regard the 21st century as the beginning of the information age of human development.<sup>14</sup>

The peculiarity of the Russian scientific school in the field of information philosophy is that its scientists are respectful of the views of their opponents who do not share their concepts in this area. The reason is that one of the most difficult philosophical problems of modern science is the problem of understanding the information phenomenon. Scientific discussions on this issue have been going on for more than 60 years, but they have not resulted in a consensus on a philosophical interpretation of this phenomenon yet. Although in recent years the number of

supporters of the attribute concept of information (consistently developed by A.D. Ursul for almost 50 years) has extensively increased.

In our opinion his merit is that he linked the concept of information with the fundamental philosophical category "difference" and gave enough arguments to prove this relationship in his works. This enabled him to bring the concept of "information" at the level of general scientific philosophical categories of the same high rank as "matter" and "energy". His works also had a momentous impact on the development of science methodology, and, first of all, of the information approach as a fundamental method of scientific knowledge.

Indeed, while studying certain objects, processes or phenomena in nature and society, we primarily analyze their similarity or contrast regarding the objects, processes or phenomena already known to us. At the same time we aim to quantify or assess qualitatively the extent of these differences, and to identify certain patterns of their functioning on this basis.

Thus, strictly speaking, what we are doing is nothing but *information research*. After all, the process of cognition of the world and man per se is *an information process* in its essence.

Therefore for the further development of science it is necessary, first of all, to improve its information methodology, i.e. means and methods of measuring and evaluating the differences in the properties of the phenomena being studied<sup>15</sup>. Certainly the information approach must occupy a central place here.

### Information concept of culture phenomenon

One of the fundamentally important concepts to study the humanitarian sphere of society is A.D. Ursul's *information concept of understanding the culture phenomenon*. He has been developing this concept lately, and in

the most complete form it is presented in two monographs, one of which was published in 2011 in Germany<sup>16</sup>, and the other – in 2015 in Russia<sup>17</sup>.

The gist of this concept lies in that culture is seen in it as an informational phenomenon that manifests itself in the form of an evolving global information system that characterizes the deep essence of human civilization. According to A.D. Ursul, this system reveals, first of all, information and semiotic processes generated by human consciousness, without which the cultural and information process would not have appeared.

#### Monographs on Information Cultural Studies

This statement echoes one of Confucius sayings about that the purpose of man is to be a creator of culture – the only reality not created by nature.

Information concept of culture directs the researchers' attention to studying the communication aspects of this multifaceted phenomenon of reality. Simultaneously, in the context of the global evolution challenges, culture should be regarded as an extra-genetic information process, characterizing the social stage of the global civilization development. On the basis of this philosophical concept, A.D. Ursul offered *information criterion of development* in nature and society, verified the possibility of its application to the cultural evolutionary processes.

It seems vitally important for the development of scientific methodology and the information worldview of the modern researcher.

#### AD Ursul's scientific-organizational activities

The results of the scientific and organizational activities of academician A.D. Ursul are very important both for Russia and for world science.





Suffice it to say that he is one of the founders of the Academy of Astronautics, created in Russia in 1993. He was its first president from 1991 to 1997. In 1999, this public Academy of Sciences became All-Russian scientific organization. He was also a founding member of the Russian Ecological Academy, and he has been a member of its presidium since 1991.

Arkady Dmitrievich is also the founder and first president of the Academy of Noosphere (of Sustainable Development), created in Russia in 1992 and gaining the status of international scientific organization in 1997. This Academy functioned reasonably well until October 2014, when International Academy of Global Studies (IAGS) was created on its basis. Now the Academy opens its thematic and regional offices.

So, it is quite natural that A.D. Ursul was elected one of the leaders of this new social Academy of Sciences; currently he creates thematic Branch of Global Processes and Sustainable Development.

#### Scientific, educational and editorial activities

Currently, A.D. Ursul is the Director of the Center for Global Studies at the Moscow State University named after M.V. Lomonosov, and Professor of the Faculty of Global Processes at this university, where he gives the original courses in global studies and global research, sustainable development, global evolutionism and other matters.

Arkady Dmitrievich has been the member of the Editorial Board of the journal since its foundation in 2014 and is actively involved in its activities. Our readers are well aware of his scientific articles, which are regularly published in the magazine, as well as of book reviews of his new books.

We are pleased to note Arkady Dmitrievich celebrates his anniversary at the height of his creative powers. Editorial board and editorial staff of the journal "Strategic Priorities" warmly congratulate him on this significant date and wish the scientist good health and further success.

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## Выдающийся ученый современности: к 80-летию академика А.Д. Урсула

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В статье проведен краткий анализ некоторых важных направлений научного творчества доктора философских наук, профессора А.Д. Урсула. Показан энциклопедический характер научной деятельности этого крупного ученого, который является основоположником ряда новых направлений в российской и мировой науке. Основное внимание уделено результатам А.Д. Урсула в области ноосферологии, философии информации, социальной информатики, а также информационной культурологии — новому направлению в области культурологии, в котором феномен культуры изучается с позиций информационного подхода. Показана связь этих направлений с актуальными проблемами национальной и глобальной безопасности.

Ключевые слова: глобальные исследования, информационная глобалистика, информационная культурология, ноосферология, социальная информатика, философия информации.

Научная специальность: 09.00.00 – философские науки.