UNIVERSAL STATE OF EARTH

XXI CIVIL TEACHERS COMMISSION PROGRAM EARTH CITIZENS ONLY

"Realistic understanding of the World Scientific picture through a new ontological model: time - space - quality"

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Rethinking “philosophy” to-day, we should think first of all about ontological foundations of the modern universe description and rethink them on the ground of modern scientific knowledge, because until now there is no any precise scientific conception of the structure of the universe, of reasons and moving forces of its permanent evolution. All of it create basis to propose various unscientific ideas. Some of them, maybe the most unscientific are the ideas of creationism, which are not only just incorrect but push the minds of people in the wrong direction of primitive mythologems. And this has a danger to lead mankind conciseness to the wrong understanding of being in general and the realities of everyday life as it is.

It was the main reason why the Council of Europe adopted in September 2007 the Resolution No. 1580 - The dangers of creationism in education, in which there is a warning against certain tendencies to pass off a belief as science. It is necessary to separate belief from science and to prevent belief from opposing science. For some people, the Resolution says, the Creation, as a matter of religious belief, gives a meaning to life. Nevertheless, the Parliamentary Assembly is worried about the possible ill-effects of the spread of creationist ideas within education systems and about the consequences for democracies. If we are not careful, creationism could become a threat to human rights, which are a key concern of the Council of Europe.

Creationism, born of the denial of the evolution of species through natural selection, was for a long time an almost exclusively American phenomenon. Today creationist ideas are tending to find their way into Europe and their spread is affecting quite a few Council of Europe member states.

The prime target of present-day creationists, most of whom are of the Christian or Muslim faith, is education. Creationists are bent on ensuring that their ideas are included in the school science syllabuses. Creationism cannot, however, lay claim to being a scientific discipline. Creationists question the scientific character of certain areas of knowledge and argue that the theory of evolution is only one interpretation among others. They accuse scientists of not providing enough evidence to establish the theory of evolution as scientifically valid. On the contrary, creationists defend their own statements as scientific.

None of this stands up to objective analysis. We are witnessing a growth of modes of thought which challenge established knowledge about nature, evolution, our origins and our place in the universe. There is a real risk of serious confusion being introduced into minds between what has to do with convictions, beliefs, ideals of all sorts and what has to do with science. An “all things are equal” attitude may seem appealing and tolerant, but is in fact dangerous.

Creationism has many contradictory aspects. The “intelligent design” idea, which is the latest, more refined version of creationism, does not deny a certain degree of evolution. However, intelligent design, presented in a more subtle way, seeks to portray its approach as scientific, and therein lies the danger.

The Assembly has constantly insisted that science is of fundamental importance. Science has made possible considerable improvements in living and working conditions and is a rather significant factor in economic, technological and social development. The theory of evolution has nothing to do with divine revelation but is built on facts.

Creationism claims to be based on scientific rigour. In reality the methods employed by creationists are of three types: purely dogmatic assertions; distorted use of scientific quotations, sometimes illustrated with magnificent photographs; and backing from more or less well-known scientists, most of whom are not specialists in these matters. By these means creationists seek to appeal to non-specialists and spread doubt and confusion in their minds.

Evolution is not simply a matter of the evolution of humans and of populations. Denying it could have serious consequences for the development of our societies. Advances in medical research, aiming at combating infectious diseases such as Aids, are impossible if every principle of evolution is denied. One cannot be fully aware of the risks involved in the significant decline in biodiversity and climate change if the mechanisms of evolution are not understood.

Our modern world is based on a long history, of which the development of science and technology forms an important part. However, the scientific approach is still not well understood and this is liable to encourage the development of all manner of fundamentalism and extremism. The total rejection of science is definitely one of the most serious threats to human and civic rights.

The war on the theory of evolution and on its proponents most often originates in forms of religious extremism closely linked to extreme right-wing political movements. The creationist movements possess real political power. The fact of the matter, and this has been exposed on several occasions, is that some advocates of strict creationism are out to replace democracy by theocracy.

All leading representatives of the main monotheistic religions have adopted a much more moderate attitude. Pope Benedict XVI, for example, as his predecessor Pope John-Paul II, today praises the role of science in the evolution of humanity and recognises that the theory of evolution is “more than a hypothesis”.

The teaching of all phenomena concerning evolution as a fundamental scientific theory is therefore crucial to the future of our societies and our democracies. For that reason it must occupy a central position in the curriculums, and especially in the science syllabuses, as long as, like any other theory, it is able to stand up to thorough scientific scrutiny. Evolution is present everywhere, from medical overprescription of antibiotics that encourages the emergence of resistant bacteria to agricultural overuse of pesticides that causes insect mutations on which pesticides no longer have any effect.

The Council of Europe has highlighted the importance of teaching about culture and religion. In the name of freedom of expression and individual belief, creationist ideas, as any other theological position, could possibly be presented as an addition to cultural and religious education, but they cannot claim scientific respectability.

Investigation of the creationists' growing influence shows that the arguments between creationism and evolution go well beyond intellectual debate. If we are not careful, the values that are the very essence of the Council of Europe will be under direct threat from creationist fundamentalists. It is part of the role of the Council of Europe's parliamentarians to react before it is too late.

The Parliamentary Assembly therefore urges the member states, and especially their education authorities to:

• Defend and promote scientific knowledge;

• Strengthen the teaching of the foundations of science, its history, its epistemology and its methods alongside the teaching of objective scientific knowledge;

• Make science more comprehensible, more attractive and closer to the realities of the contemporary world;

• Firmly oppose the teaching of creationism as a scientific discipline on an equal footing with the theory of evolution and in general the presentation of creationist ideas in any discipline other than religion;

• Promote the teaching of evolution as a fundamental scientific theory in the school curriculums.

The Assembly welcomes the fact that 27 academies of science of Council of Europe member states signed, in June 2006, a declaration on the teaching of evolution and calls on academies of science that have not yet done so to sign the declaration.

Hence it is exactly Philosophy that bears responsibility to make such rethinking, explanations and more precise definitions that would make science more comprehensible, more attractive and closer to the realities of the contemporary world. This sounds correctly because in all previous times Philosophy was understood as a science about the most common laws of evolution of Nature, of the Humanity and Mind. Exactly this way it was understood 2500 years ago by Aristotle, who considered philosophy as “a science about cognition of certain foundations and principles... It would be more correct to designate

philosophy as a science about the truth; - he said, - as the goal of theorizing is truth, while the goal of practice is action".

A more closer to us in time the German philosopher Edmund Husserl had exactly the same opinion about philosophy, considering it as "a science about the true basis, about sources... And, - he wrote at the beginning of the last century, - if to think of it in the ideal completeness, then it will be the reason itself, which cannot have no one authority neither beside it, nor above it".

Many other great philosophers understood philosophy the same way, considering it as the highest attainment of the Humanity. So, the issue is not to put some thoughtful question, but to be in a position to answer such a question - and to answer it "scientifically, i.e. in a compulsory for every reasonable person way".

However in practice not all, who numbered himself among philosophizing people, understood and understand philosophy precisely that way. In connection with this fact the above mentioned Husserl had to put the clear dividing line in order to separate philosophy as a pure science - the result of common longtime efforts, which any thoughtfulness strives to convert into clear rational logic formations, on the one hand, from ideas of so cold world-contemplational philosophy, which is a fruit of various philosophizing individuals. And introducing such a classification, Husserl appealed to representatives of the world-contemplational philosophy to turn down their claims to consider it as a science and at the same time not "to create difficulties to the progress of the scientific philosophy".

That is why it is philosophy which gives us hopes to expect out of its research discoveries which make more clear the modern scientific universe description, aspects of conscience, problems of globalization, etc.

Going back to the foundations of the World, surrounding us, we have to remember, that Matter is the objective reality, the nature of which are different forms of motion, being itself its attribute. Hence, there is nothing in the universe except motion, all existing construction material is motion. Matter is woven with motion. Any particle of any substance is a regulated motion of micro motions; any event is a determinated motion of elements of the system of motions. It is possible to resolve mentally any phenomena, events or substance into different forms of motion as well as out of different forms of motion in conformity with certain Laws it is possible to synthesize any phenomena, event or substance of Matter. Therefore in order to know how it happens it is necessary to learn the Laws, that regulate different forms of Matter's motion.

Until now most of philosophers associate the motion of Matter on the whole only with its motion in space and in time, mixing at the same time philosophical and physical aspects of these two principle categories. Owing to this the attention of most researchers is drawn mainly to technical problems of calculating and measuring distances in space and intervals in time, disregarding fundamental philosophical problems of the space and of the time. Generally speaking, the present-day ontological model of understanding the World, the Universe is constructed purely on the basis of only these two fundamental categories.

And partially it is true. It is impossible to imagine no one event, phenomenon or material formation out of space and out of time. However, a more deep reflection of the essence of Being, if to realize it on the basis of only these two global categories, brings us to the disappointing conclusion, that we have nothing more except a mechanical motion, i.e. spatial displacement of a material point (or a system of points) relatively some point of counting off. Therefore there are so much unclear in the existing picture of the World construction, due to what a lot of various present-day explanations of ontological principles and foundations exist. Owing exactly to this fact we have now about 400 theistic versions of the creation of the world, because the only atheistic theory could not present until nowadays a convincing enough plan or model of the universe, logically explaining all phenomena and events of life, surrounding us, and also giving clear answers to many most important for the human being questions.

Realizing the limits of the current scientifically-philosophical explanations of the construction of the world, some thinkers long ago started to doubt that only the two basis categories - space and time - are quite enough for the description of the on-going evolution of Matter and for the causality of this development. Thus, an ancient Greek philosopher Protagor in the Vth century BC announced inconstancy, variability as the main attribute of matter. The great Aristotle in the IVth century BC attributed a quality change, or transmuting of characteristics to one of the form of motion beside such a form of motion, as the spatial displacement. Even Phoma Akvinsky in the XIII century accepted the earth inconstancy as the main object in theology, the motion in quality as an essential not removing part of the universe. It is also well known the attitude of supporters of the emergent evolution, who dispute their point of view for the concept of development as the process of appearance of new higher characteristics.

The first and the most precise definition of obligatory study of the organization of the construction of Matter adding the third component - the motion in quality - was given by F. Engels in his book Dialectics of Nature. "...There are also many qualitative changes to be taken into account," he wrote, "whose dependence on quantitative change is by no means proven. ... Any motion includes mechanical motion, change of place of the largest or smallest portions of matter; to obtain knowledge of this mechanical motion is the first task of science (philosophy), but only its first task. But this mechanical motion does not exhaust motion as a whole. Motion is not merely a change of place [that is motion in space-time - I.K.], in fields higher than mechanics it is also change of quality." (my emphasis - I.K.).

Among opinions on this subject of our contemporaries one should note the definition of the Russian academician A. Oparin, who characterized "the process of evolution of matter as the way of genesis of new, not existing before qualities".

But what should we understand under the motion in quality? According to an ordinary definition quality is a structurally undivided combination of indications, features, characteristics of some substance, field or a thing revealed in a system of relations with other substances, things or other similar material formations. Quality is the essential determination of substance, field or a thing, due to which they are given but not any other material formation and are different from other formations. Hence, each qualitative form of

matter has its own definite composition of peculiarities and signs, which it reveals while relating with other forms of Matter. But as it is well known an external revealing of qualitative characteristics of an object in a presumed system of relations is its function. That is why with a change of qualitative characteristics of any material formation its functional characteristics are changing as well.

Hence, a change in quality or a motion in quality one should consider as motion in functional heterogeneity of substances realized through systemic organization of material forms.

But how to explain that namely quality and not any other philosophical category should be put in one row of global categories together with space and time? It comes fist of all from the nature of the category quality, which also, as the two others, is immanent to motion and owing to this can have its own separate ordinate. Quality is as relative as space and time and can go both to the deep and to the width of Matter, i.e. from 1/to?. Also, as in case of space and time, we cannot find in quality the smallest unit of motion, i.e. 1/? as well as to define the maximum value - infinity, eternity and the final goal of Evolution. But in all the three categories we can point out both the actual point and any point of counting off on their ordinates of motion.

At the same time the motion in quality is as tightly linked with the motion in time as the motion in space. Without motion in time it is impossible to imagine qualitative changes, it is the independent variable of the said interrelation. Therefore the motion in quality one should comprehend only as the motion in quality-time. All of this can be logically put into the formula of quantity of motion . If we put the meaning of quality increase instead of featureless physical mass, it would give us finally its sense completeness, at the same time cutting down all other further substitutions. This formula also defines the sense ratio between all the three fundamental forms of motion of Matter, which provide universal evolution. It is impossible neither to stop, nor to accelerate both the evolution and time. It is going at the rate (at least on Earth) defined by the sense ratio , deduced from the physical formula E = m x S2/2t2.

In order to prove the life truth of the new ontological approach, which is being offered, it is enough to remember the fact, that in the reality of the Earth planet the earth globe, according to the objective circumstances, has the unchanged limited surface. So, there is no space increase of biosphere for considerably long period of time (+S = 0). Because of that fact the above sense ratio became as - i.e. with ongoing of time the constant increase of quality takes place, and the whole evolution of the earth material totality during any period of time is going only due to the addition of its qualitative characteristics. But the present-day ontological plan or models, to which people refer until now, do not even have the sense formula of the development of the environment, that means they have no explanation of the cause, of reasons of its self-development, of its evolution.

Thus, the human cognition, which is based on the scientific philosophy, at present time has reached such a limit, when our ideas regarding the way of the material objectivity, which until now are grounded on two global categories - space and time, stopped to be sufficient and require a more expanded approach, taking into account all the latest achievements in

this field of knowledge, but first of all its connection with the motion of matter along the ordinate of the third global category - quality.

So, in order to create the full and complete picture of the formation and evolution of the material World it is necessary to observe the motion of material forming in three equivalent philosophical categories: in space - time - quality.

As the quite new elements of the suggested theory it is necessary to consider the introduction into the philosophical categorical circulation never used until now notions: a functional cell and a functioning unit, which are being the elements of structural analyses put at the same time the basis for the systemic approach in the scientific philosophy in connection with improving its ontological model by adding the motion in quality into it.

A functional cell means a field of concentration in time-space of a certain number of functional needs of some level, which are being actualized with the help of strictly specific "functional algorithms" by an appropriate for the given cell functioning unit, that has corresponding functional capabilities (abilities). All things and formations in the surrounding world are in fact some functioning units or a group, or a system of functioning units, which fill in these or those functional cells of its strictly designated structure.

The analysis of forming and maintenance of functional capabilities of units of formations through organizational levels of the systemic cascade of construction and evolution of the material world allows to reveal peculiarities of its structural architectonics and its progress. There are all reasons to affirm, that the mysterious or even mystical "Creator" - it is only just the motion in quality, which with going of time consecutively designate on its ordinate functional cells of still higher and higher category, which the Nature has to fill in opportunely without fail with corresponding to them functioning units.

In order to have an ocular notion about that it is enough to lay out mentally, for example, the human organism to organs, organs to tissues, tissues to cells, cells to macromolecules and molecules, those in its turn to atoms, atoms to nucleuses and electrons, nucleuses to protons and neutrons, those to quarks and gluons, and so on into the depth of matter until the zero vibration of vacuum. However, until nowadays nobody can explain why all those operations take place continuously around us in the opposite direction, what is the driving and guiding force of this synthesizing process, or moreover, why the Nature does not stay as long as possible in the condition of being laid out to sub-elements of some level.

The joining of all stages of the evolutionary development of Matter - from the lowest forms of its existence till the most developed ones - into the three-dimensional continuum (space - time - quality) forms a kind of the new ontological model, reflecting the unified, lasting in time, integral picture of the World, allowing to trace the historic going of the development of Matter from early to late, from small to big, from simple to complex. This model gives the possibility in the only way to explain the causal condition of the process of evolution of lower forms into higher ones as well as the objective regularity of this process. After introduction into our practice of notions functional cells and functioning units as well as functional significance of all material formations on the ordinate of quality the science is provided with capability not only to answer to numerous questions when and where?, but

also to why? Together with the new ontological model the atheistic version acquires at last not only other sound, but also its indisputable evidence, that allows to raise its logic over arguments of theistic versions.

Thus, the ideas of the new conception of ontological model and conclusions received due to that according to “the conformity principle” can be referred exactly to “strictly scientific philosophy”, become actual supplementation of really scientific philosophical knowledge on the way of a more objective ontological comprehension of our Being, of the law of development of the human civilization and the Universe as a whole. This knowledge can be successfully used for the description of the realistic paradigm of Being, in explanations of the meaning of Life.

However, the broad use of this knowledge would be possible after when not only philosophical elite masters it for themselves, but when also a considerable part of society learns it. In the current conditions of not so high authority of philosophy among ordinary people this is not a less complicated task, but a very important one. Therefore only the scientific philosophy is in a position to increase according to Immanuel Kant “the thinking society”, only its spreading will help in protection and evolution of the human civilization.

For those, who wishes to know more about the above ideas, they may find them at

http://ikondrashin.narod.ru/eng/articles/kond/dialmat.htm

in my book DIALECTICS of MATTER - Systemic approach to fundamentals of philosophy.

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