

GREETING ADDRESS

by the first President of the Balkan Tribological Association
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Dear participants and organizers of BALKANTRIB'2005

In the beginning of the third millennium all people accept that the world is no more the same. If actually the world has changed and became a different one – global, dynamical, insecure, etc., shouldn't we ask the question how this fact has influenced tribology as an interdisciplinary science?

I would like to greet you in the name of the Bulgarian tribologists and in the name of Bulgaria, where, in 1993 the Balkan Tribological Association was born. I will try, as first President of BTA, to attract your attention on these changes using questions and answers.

1. Does a general (global) problem situation of humanity exist?

Yes, it does exist! It is expressed in the contradiction that the world as a whole, in its fundamental cross-sections globalizes mostly economically, ecologically and problematically, and as per consciousness, science and behavior, it continues to be differentiated and localized according to the formal-scientific paradigm of the industrial society. This means practically a world with global problems and a local consciousness with thousands of scientific disciplines, specialties, departments, faculties, etc. In other words, the world is unified as per problems, but multiple as per behavior.

2. How does the problem situation reveal itself?

The global situation is one in its essence, but many-sided as revelations. As a whole, it is identified by the global crisis, because it comes deep down the centuries, and is worldwide. As contents, it is expressed through the phenomena of terrorism, natural and social disasters, diseases, corruption, prostitution, limitation of the overall territorial functionality of the Earth, shortening of ecological production, of pure food, water and air, soil contamination, desert expansion, atmosphere warming, advance of the oceans to the land, acid rains, growth of unemployment and poverty, increasing of mafia and sectarian movements and activity, aggravation of demographic problems and emigration movement, aggravation of social and

military conflicts, growth of aggression and consumer eagerness of people, cultural saturation and science-technological slippage, backward education and intellectual poverty, ineffective monitoring and control, information indefiniteness and prognostication insufficiency, lack of material, energy and financial resources, along with continuously consumer desire of people and humanity as a whole.

3. What is the explanation for the problem situation?

It is explained with the fact that between contents and form of this situation is no communication in the form of a contact web, which should unify and reconcile them. The essence of the global crisis is for us, tribologists, much deeper than it is usually defined in literature as ecological, spiritual, cultural, economical, etc. The crisis is really that, and being all this, its roots are much deeper, so we have to define it as ontological. It means that there is a deficiency in the structure of all formations and situations, expressed by the principle of the excluded third. The crisis is a human crisis, crisis in our fundamental ideas, values and principles, crisis in our consciousness. This is a crisis in our alternative thinking and behavior, crisis in our model for the black-white essence of things. While thinking and working according to this model, the humanity has managed for a relative short period of several thousand years to fill its vital space with incompatible material and spiritual formations, with non-related and hostile elements, each of which strives to obtain a dominant position according to the formula: "If you don't want to be a slave, become a master!" (and in the variant of the Balkans "If you don't want to be an anvil, become a hammer!")

Moreover, the essence of the crisis is expressed by an extreme aspiration of the elements not only to dominate their likes, but also the wholeness they belong to. This leads to personality cults, to centralism, fascism and totalitarianism. We should identify this aspiration of the separate person, community, and party, to impose their view and

will on all the rest, as a disease, using the definition for “ontological deficiency of human consciousness”. This disease, which is traditional and widespread for modern civilization, is the deep essence of the global crisis. If we relate the above stated with the functional role of contacts as ontological elements, we could reduce this crisis to a disease called “CONTACT DEFICIENCY of human consciousness”.

4. Does humanity have a common ideal under conditions of global crisis?

The conditions of chaos and uncertainty, under which humans live, represent the negative phenomena of the problem situation, hence they provoke and form the new universal ideal for sustainable development of the society. This ideal slowly but surely pulls together the creative potential of humanity in the direction of integration of the consciousness.

The idea of sustainability begins from mechanics, and more precisely from the lack of contact friction by slippery and flood, which lead to slipping and destruction. Further the notion for non-sustainability is related to the lack of material resources, to social, ecological and control insecurity for the coming generations. According to the usually accepted definition the sustainable development is related to resource, ecological and control guarantee of security and prosperity of the future generations.

There is still no consensus about an universal ideal; some of its properties and elements are outlined slowly through the notions “globalization”, “new global order”, “fair society”, “humanization”, which are elements of the sustainable development.

Everyone agrees with the statement that the world after September 11 is no more the same, but what is it like and what is its ideal, remain open questions without unifying doctrine for the civil society. In the search for this doctrine participate the fragmentary culture of the industrial society, and the representatives of the post-industrial society, mostly of those of the civil society.

5. Is it possible that humanity realizes its ideal for sustainable development?

A leading role in the approaches for confirmation of the universal ideal and the methods for its accomplishment has the scientific approach of the interdisciplinarity. In fact, the contact models of tribology form the basis of interdisciplinarity as a new global consciousness. This statement is related to the fact that contacts, which are the main formations in this tribological doctrine, are also the basic elements in the globalization, in the new consciousness, morality and order, and also in the search of sustainable development of the society. In the complicated fragmentary wholeness of human society, contacts and contact webs secure its

sustainability. This is due to its dynamic metamorphoses in space and time, which assist generating compensating reactions to the active perturbations of the environment. This means that tribology is fundamental science and is the condensation kernel of the interdisciplinary consciousness – the basis of the future global world and the new global order.

6. Which is the place and role of tribology?

This is the main question in the modern interpretation of tribology. If humanity is in a global and continued crisis related to a bipolar consciousness, far behind the character and pulse of the real problems, is it possible then to overcome the crisis by cosmetic changes in the frames of the dualistic models? The answer of tribology as interdisciplinary science is that this is impossible because of the reasons:

1. dualistic models are not sustainable and
2. dualistic models are lacking in resources for the realization of the universal ideal.

Where is the way out?

It is in tribology, which offers principally new model including in an ontological level a third element to the alternative elements of the existing models, this element being the contact and contact webs. Their creative resource is inexhaustible, and the solutions are triunique and stable. Moreover, tribology offers a new neutral point of view (new coordination origin), new principles and new approach for solving the problems.

The origin of coordinates or the observation point is of significance for each scientific, social or political doctrine. Let's remember that Copernicus' system, which places the origin of coordinates in the Sun, instead in the Earth as in Ptolemy's system, initiated the modern science and culture of the industrial society. In other words, the world is not only the kind we observe it, it is important also the observation point, or, in tribological cross-section the world is objective, subjective and relative. Subjectivity is expressed by the observer, and relativity – through the choice of the observation point.

In everyday life the role of origin of coordinates by the assessment of the event is accepted fact. For example, the assessment of the starving and the sated in the proverb “He whose belly is full, believes not him who is fasting”, the assessments of professors and students about the same events, the assessment of producers and customers, of master and slave, of rulers and citizens, of healthy and sick, of aggressor and victim, of nationalists and cosmopolitans. As a conclusion it could be generalized that every doctrine is identified by its origin of coordinates.

What is characteristic for the observation point of classical sciences? The answer is brief. It is always outside the observed event, state or object. So, it is said that the classical science is objective and the phenomena described by it exist outside and independent from human consciousness.

Where is the observation point for people of art? This is mainly a point inside, e.g. the golden section of the object, a point from the center of the event, etc. In this relation we can mention the words of Balzac "Science – this are us, art – this is me". Similarly, the state chooses the reference point in law, business – in profit, and citizens – in ethics.

Then comes the basic question: Does it exist another multifunctional point, which can serve as origin of coordinates of interdisciplinarity? Such point should exist by presumption, because if not, a principally new picture of the world could not be built. This point is the point of the contact between things, where alternative neutralize themselves, i. e. the already known point called "the contact zero". This is such point, which is simultaneously outside for the alternatives, inside for the entity, and neutral for the contact, i.e. this is a point with triple function.

7. What does the tribological paradigm require?

There, where the problems are, should be placed the origin of coordinates, that means that there should be the means and methods for their solving. The principle "Split and control" is the basic principle in modern society. In our case it could be said: to one part of the society are given the problems, to the other part – the power, and to the third part – the richness. Why are we then surprised in front of the monstrosity of corruption? Only the civil society is capable as presumption to unify based on interdisciplinarity the means (richness), the power (law) with the problems (needs) in a sustainable and prosperous global wholeness.

The civil society through the civil culture and education, is called upon realizing the tribological paradigm unifying in a wholeness problems, wealth and power in the name of prosperity of the future generations.

Conclusions

The national tribological societies and the Balkan tribological association have their unambiguous achievements in the domain of the interdisciplinary paradigm of tribology, which must be kept and multiplied by a future International School of Tribology.

I hope that with the confirmation of the idea for an International School of Tribology Kragujevac will become a symbol of the tribological integration in Europe and worldwide.

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