

PHENOMENAL, THE LAW OF SURVIVAL: INCLUSION IN ENERGY AND TECHNOLOGY

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Called phenomenal events that reliably experimentally or mathematically established, but not explained by natural science generally recognized scientific laws. They testify to the incompleteness of the universally recognized laws, existence of undiscovered laws of nature. Currently, such phenomena are: the golden proportion, fractal structures, solitons, phase transitions, ontogeny or biogenetic law, and the law (rule) electromagnetic inertia Lenz, phenomenal physical and chemical principles: Le Chatelier, Farm, least action. The last two are known to be used as the source of the theory of fields of physics, respectively, classical mechanics and optics.

In 19th century with the work S.Karno devoted to the correct definition of the efficiency of a heat engine, began the development of classical thermodynamics. Its main law - the second law and its function entropy caused a manifestation of a number of problems in science. The second principle was "a foreign body in a coherent system of classical physics." It is contrary to the main sections of physics. The main function of the second law of thermodynamics, entropy is everywhere and growing continuously, destroying the natural structure dissipated their energy. There was a problem concerns the "heat death of the Earth and the universe." In the discussion on this issue a number of scientists: VI Vernadsky, H. Helmholtz, Timiryazev, KA Ziolkowski et al. Have expressed the position that, along with the second, there is no public law, the essence of which is opposite to the essence of the second law.

The purpose of research - identifying the impact of the structure of self-organization of matter in the establishment of the desired properties of created

objects (technologies, technical devices and materials).

Materials and methods of research. To achieve this goal the generally accepted provisions of basic science is not enough. This is evidenced by the current problems of fundamental science, the problems caused by classical thermodynamics.

On the basis of this hypothesis in 1977 I Sventitskys was justified such a law, called later the law of survival. Its essence in the following: every element of nature in its development (individual, evolutionary) spontaneously strives to make full use of the available free energy of the system of trophic level to which it belongs. This law directs the progressive evolution of the self-organizing nature. In 1981 this law was presented by the author at the 1st World Congress on management of the world reserves of energy, as the law to solve problems: energy, food and environmental. The report was published in the book, published by Oxford University and the New York Academy (Ed. Pergamon Press).

The results of research. Everything that surrounds us in space and on Earth, there was in the process of progressive evolution. It originated life and thinking person. The Earth does not have a regular exchange with its surrounding material, forming part of organisms. It is thermodynamically closed system over substance. Evolution on it is only possible in the presence of her cycle biophilic substances. Experimentally, such a cycle is set: only fraction of a percent of the total amount on the surface of the Earth, biophilic important elements - nitrogen and carbon - in a closed cycle turning into a living part of the biosphere. This indicates a high energy and a real thrift progressive evolution. After the release of the self-organized (live) state of the system are in equilibrium. Thanks to the second law of thermodynamics and entropy function throughout their structure and continuously broken down into states of matter suitable for reuse in the self-organizing (living) systems. Note, this only applies to objects that emerged from the self-organized state. The second law of thermodynamics applies only to equilibrium, not self-organizing systems. Its

main role and function of entropy - recovery systems that have emerged from the self-organized state, the release of these substances for the newly formed self-assembled systems.

Phenomenal phenomenon usually do not agree with the second, their essence opposed to its essence, but is consistent with the essence of the law of survival. Phenomenal phenomenon is energy, resursoekonomnymi phenomena. This is their positive feature for improving the technology and the creation of highly efficient energy systems. Traditionally, the second law of thermodynamics is considered a major energy law, so anything that does not agree with him, as a rule, formally rejected. Distribution of application of the second law of thermodynamics for self-organizing natural phenomena, often encountered in science, brought a lot of grief in the inventors unjustly accused them of "invention of perpetual motion." Apparent inconsistency second principle used by the inventors phenomenal, self-organized structures and processes in the inventions often gives them an idea of the second law unfounded. This conclusion comes not only ordinary inventors and inventors, scientists. In the new sections of quantum physics and relativity second principle is not explicitly included, so they have a problem of negative energy (Fig. 1).

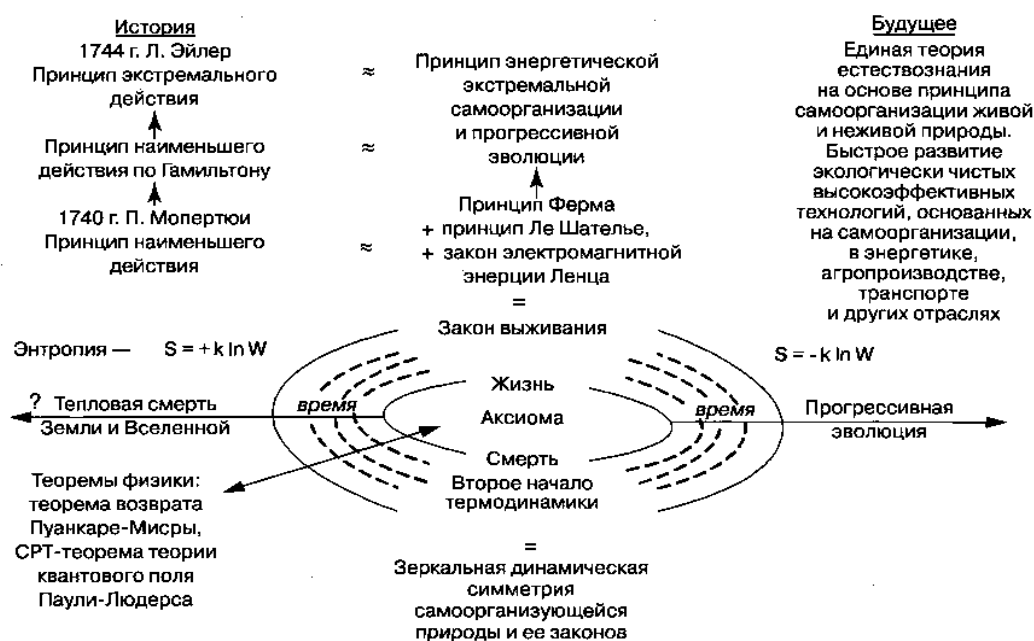


Fig. 1. The logic circuit communication core essence of the law of survival of the second law, energy extremeness self with the axiom of life

and death, a phenomenal physical and chemical principles and the fundamental theorems of physics

These innovative scientific achievements are the source of natural science foundation of the unity of knowledge. They allowed solve the main problem of biophysics: logically, conceptually unify theories of physics and biology. Based on them, managed to solve the problems of science, due to classical thermodynamics, and identify the general direction of the spontaneous progressive evolution to save the basic essence of nature: energy, matter and information. Progressive evolution unthinking nature is perfectly real properties, which obviously must comply with the humanity in its historical development.

This confirms the necessity of the anthropic principle, which is a consequence of the progressive evolution and its level of precision. Spontaneous tendency of progressive evolution to save energy, matter and information complied with the precision at which the physical constants must be calculated with an accuracy of less than 9 - 12 decimal places. Anthropic principle to sociology and anthropology as a whole is just as important and exact law as the law of gravity in physics and engineering. This principle is the scientific basis for the transition of the biosphere to the noosphere, the sustainable development of mankind and unthinking nature. These results were presented at the XXIII World Congress of Philosophy, "Philosophy as knowledge and way of life."

The scientific innovations allow a conceptual logical theorising formalized empirical disciplines, combine them with basic science. On their basis the naturalistic methodology of participatory exergy analysis bioconversion of natural energy plants and technological transformations of energy in agricultural technology, which optimizes energy supply of rural consumers and rational use of the basic means of agricultural production: land, the genetic potential of plants (species, varieties, hybrids), as well as high-quality zonal technologies and means of implementation. The methodology of exergetic analysis of transformations of energy by plants during photosynthesis

was presented at the Third International Conference on simulation of biophysical processes of energy conversion plants in 1983 (Berlin, University. Humboldt) and published in the scientific journal Humboldt University.

Traditional agro-ecological value are not mutually agreed upon and have no quantification. Based on the consideration of innovation they are quantitatively defined and mutually agreed expressed in the same units eksergeticheskikh. The value of exergy of solar radiation for crop coming onto the surface of the land, while accepted as original. This value is the beginning of calculation, the starting point for determining how the productivity of plants in the specified environmental conditions and fertility of land in respect of certain species (varieties, hybrids) plants. Using these values established eco-compatible computer system, energy, resource optimization of crop production. This system allows you to assess the level of efficiency of agricultural technologies, taking into account the environmental conditions of land. Developed the theory of exergy harvest combines agro-ecology and the development of agricultural technologies with the basics of fundamental science. On this basis, it is necessary to upgrade the value of land agricultural use and enter the rent of land in the Russian Federation. This will allow to translate domestic agricultural production to a new scientific level and in a short time to restore the food security of the Russian Federation.

The initial model of theorizing agro-ecological knowledge and agricultural technologies also discussed at the 111 international conference on modeling transformations of energy plants and published in the international journal "photosynthetic" Until now, the agro-ecological knowledge and agricultural technologies developed on an empirical basis, and the economic, business and cadastral valuation of land does not correspond to the intensity of their use. Only on the basis of optimal energy modernization of agricultural producers and the introduction of ground rent in the Russian Federation on the basis of innovation can be considered in the short term to restore Russia's food security and to ensure the competitiveness of domestic agricultural products in

the international market. Russia, with two percent of the world's population, has 10% of global arable land and 8% of the world production of mineral fertilizers. It should have food security and to be a global exporter of food.

Despite more than a century that has elapsed since the original inventions and experiments on the Tesla wireless power transmission, a scientist in the field of dynamics makroelektromagnitnoy failed to explain them on the basis of Maxwell's theory, which cast doubt on the usefulness, or create a theory that they are adequately understanding. This indicates that the nature of Tesla's inventions has a fundamental novelty. On the basis of the above scientific innovation revealed that the law (rule) electromagnetic inertia Lenz's law is identical mechanical inertia and Le Chatelier's principle. In the derivation of the equations of dynamics makroelektromagnitnoy Maxwell used the Hamilton showing the mechanical nature of the principle of least action. Lenz's Law shows the electromagnetic nature of this principle, so based on it more easily and reliably can derive analytical dependences makroelektromagnitnoy dynamics, allowing to explain the invention Tesla.

The theme starts with the word "structure of matter", one of the most common themes in modern academic programs in many countries. Reviewed scientific innovation lead to the conclusion that the spontaneous tendency of progressive evolution of self-organizing nature to thrift: energy, real, information and obviously space should be reflected in the structural organization of the evolving objects. This finding clearly demonstrates the evolutionary tree diagram of organisms in the biosphere (Fig. 2).



Fig. 2. Evolution Tree organisms in the biosphere

This tree is the evolution of organisms in the biosphere is derived based on the sequential analysis of cytochrome C Dickerson organisms. Each node of the tree takes place only two branches. The entire structure can be represented as a binary three-link fractal. Is it an accident nature chose a structure of self-organization of matter at the stage of biological evolution? And why is it the same as the microparticles of structure, as can be seen from Fig. 3.

The organization of the microparticles is a proton ten-component self-similar structure type binary fractal three-tier and has the form (Fig. 3). It is known that the fractal structure and graphics of their analytical dependences have beauty, but to work II Sventitsky was not known to them sparingly: energy, real information. These properties to a certain extent you can answer the questions. These properties are represented in true ideal properties of the progressive evolution of the self-organizing nature of unthinking, which works to II Sventitsky were not seen. In contrast, the second law and its function entropy raises concerns "heat death of the Earth and the universe." Along with the fractal code of self-organization of matter in a progressive level phylogeny of microparticles was also found manifestation of the golden ratio in the distribution of energy in the interaction of microparticles. We also know that energy-saving mechanism is the golden ratio - the mechanism of the law of

survival - emerged on the physical stage of evolution, passed in biological objects and further social. In this process, the sequential transition essentially mapped phenomenon saving information. It is well known that the proton source seems the real foundation of the whole universe. Figures 2 and 3 illustrate the uniformity of the evolutionary unity of self-organization of matter fractal nature of the proton-to-man.

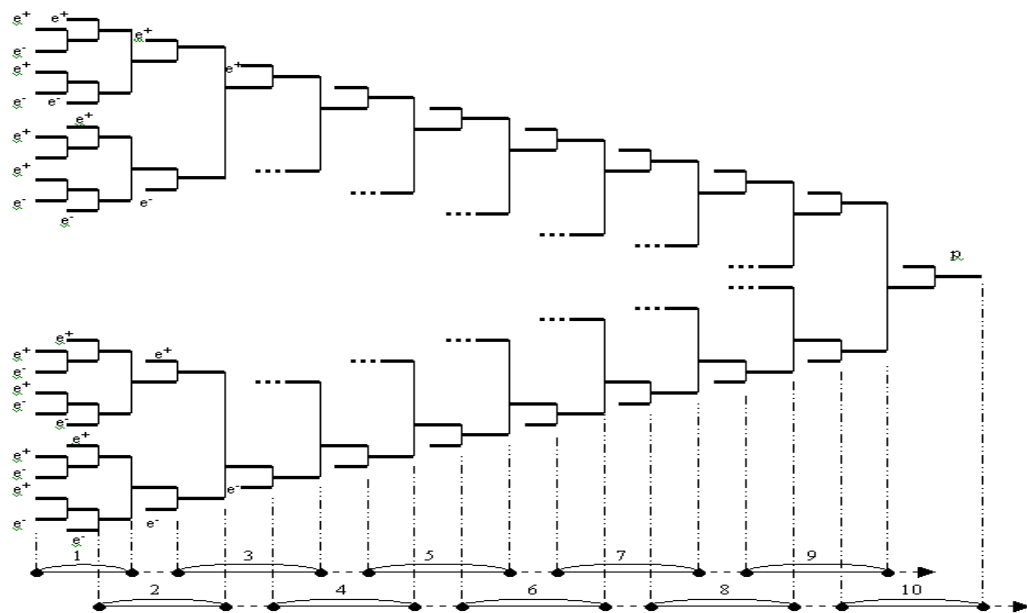


Fig. 3. Scheme of structure of fractal self-proton

Consequently, the evolution of all organisms in the biosphere can be described as a sequential process of selection, carried out by a three-tier binary fractal. Fractal structures are characterized by frugality entities, including real sparingly.

This mechanism of structure of matter nature clearly provides detection inseparable properties of progressive evolution. One proof of this are vysokoenergoeffektivnye proton-neutron interaction. They allow you to receive unlimited free energy (exergy). This natural energy-saving mechanism (the mechanism of the law of survival) at the micro level is the most promising in the global energy industry. Trying to consistent treatment of energy, material, information, documentation and intellectual evolutionary selection from the position of the second law of thermodynamics in the work carried out by

Professor. MEI BI Kudrin.

Manifestation of structural self-organization of matter at the earliest stage of progressive evolution of a binary nature of fractals and the manifestation of this pattern at the stage of biological evolution confirm the general tendency spontaneous progressive nature of phylogeny savings entities. This determinism is connected to the main power (energy) interactions: weak, strong and gravitational, electromagnetic. For most of the proton is characterized by strong and gravitational interactions. Transfer of a proton into a neutron and the possibility of its interaction with the electron obviously enhances its power of weak and electromagnetic interactions. This may explain the high energy efficiency of the proton-neutron interactions with the release of free energy.

The object of biological evolution stage progressive direction it is characterized, above all, the improvement of information. For a man as the final stage of its biological stages, its main feature is the intelligent information property - thinking, self-knowledge. On this basis, we can conclude that the self-consistent determinism substance fractal binary code applies primarily to information, manage the process of evolving natural objects. Not by chance was so complicated disclosure and understanding of the nature of intelligence both human and artificial. Evolutionary selection for binary fractal code apparently universal for all energy entities, real, information and intellectual.

Figures 2 and 3 show the phenomenal global process of progressive evolution unthinking self-organizing nature - the unity of the common selection mechanism - the binary fractal - with a huge variety of selected self-organizing, survivors and surviving objects physicochemical and wildlife. This phenomenon is detected on the basis of scientific innovation: the law of survival and self-energy extremeness. On the same basis, obviously, it is possible to explain the natural sciences.

Conclusions

Reviewed scientific innovations allow a conceptual logical theorising formalized empirical disciplines, combine them with basic science. On their

basis the naturalistic methodology joint exergy analysis bioconversion of natural energy plants and technological transformations of energy in agricultural technology, which optimizes energy supply of rural consumers and rational use of the basic means of agricultural production: land, the genetic potential of plants (species, varieties, hybrids), as well as high-quality zonal technologies and means of implementation.