Economic sociodynamics: criticism

Arsen A. Movsesyan

Independent researcher

27 January 2015

Online at https://mpra.ub.uni-muenchen.de/82043/
MPRA Paper No. 82043, posted 21 October 2017 10:43 UTC
Economic sociodynamics: criticism

The article provides a solution to the problem of classification of the social sciences, and briefly tells about the newly discovered fundamental laws of Sociodynamics, which are the driving force of the historical progress. The author, based on these laws, holds constructive criticism of the concept of Economic Sociodynamics (CES) proposed by R. Greenberg and A. Rubinstein. The corresponding analysis bears interdisciplinary nature at the junction of sciences such as Physics, Psychology and Sociodynamics. The article reasonably shows the fallacy of the foundation of CES. The author in doing so was basing on the objective laws of nature and not on the subjective judgments.

Key words: society, the laws of Sociodynamics, freedom of action, the median economy, the spectrum of society, social governance

JEL: A 12, Z 13

Introduction

"Plato is my friend, but the truth is more expensive"

Constructive criticism of the concept of Economic Sociodynamics (CES) proposed by R. Greenberg and A. Rubinstein will be held in this article. The idea of finding a third economic way is correct and necessary, but CES is erroneous, and even dangerous. So, engineer-physicist against two professors, the first of which being an economist, and the second an economist-philosopher with basic mathematical education. The more interesting it is, at least for the author. Can the army lieutenant criticize the General staff officer? According to the army regulations - not, but the ideas of the lieutenant may be wiser than the plans of the General. But, Thank God, in science there is no such subordination, so let’s try to make clear the concept of CES on the basis of the laws of nature.

In order to name the criticism of one or another concept a constructive one, it is necessary to soundly point out its mistakes, however it is not enough. A sufficient condition is the indication of the correct solution to the problem underlying criticized concept, that is, the following principle comes into action: if you say that this is wrong, then tell me how it should be. Therefore the article is composed of two main parts - the necessary and sufficient parts of criticism.

1. The Necessary Part of Criticism

A well-known Russian proverb goes like this: "We meet one by his appearance, and by his mind we see him off". If applied to the purposes of the article it comes about the concepts "form" and "gist" relatively to CES, bearing in mind its title and content. At first let's talk about the name, and then move on to the content.

Thus, does the word combination "Economic Sociodynamics" have the right to exist? At first I shall point out the explanation of the authors of CES on this issue, and then will present my vision. They say so: "Together with R. Greenberg in due time we considered it appropriate to use concept "Sociodynamics" which was introduced in the scientific revolution in the 20s by one of the founders of the theory of social stratification, Pitirim Sorokin. With the help of this concept we identified our intention to overcome the atomistic model of society and immerse Economy into Sociodynamic (according to Sorokin) social environment where individuals act and interact as a part of certain social groups. With this same we draw parallels between "Thermodynamics", which characterizes the state of energy equilibrium in physical systems. I proceed from the assumption that in social systems as well there exists an analogue of physical energy. These are interests - preferences of individuals, their various aggregates, interests of separate social groups and society as a whole".\(^1\) That is, there is no rationale, only - "considered appropriate". The idea of finding an analogy between the behavior of society and Thermodynamics is correct, but the choice of the concept "interest" as a counterpart to the concept "energy" is a mistake. We shall speak on it later.

\(^1\) Rubinstein A.Ja. «Normativniy vektor v jekonomicheskom analize: metodologija, teorija, politika». //Doklad. XIV aprilskaia konferencija po problemam razvitija jekonomiki i obshhestva. M.: IJe RAN, 2013. (Translation from Russian made by author of article)
To reasonably respond to the aforesaid question, it is necessary to answer two interrelated questions in advance: 1. What is Economics?; 2. What is Sociodynamics? Sociodynamics is a fundamental science about social stability, and Economics is an important component of the subject of the reference of the practical component of this fundamental science. Justification of this assertion requires the solution of the problem of classification of sciences.

Classification of sciences is a millennial problem of Philosophy, the solution of which was the matter of many trials for a number of famous philosophers, for example, Sen-Simon, Comte, Bacon, Hegel, Engels, Kedrov and others. Although the works of these philosophers were important to science in general, all attempts to thoroughly solve this problem proved unsuccessful, because this problem is unsolvable in the framework of Philosophy. Nowadays, this problem is solved through a new theory of cognition, which is built starting from some general physical representations and heuristic glance at the basics of general Psychology. In more details you can read about it in source [3], but now briefly.

There exist only two ways of man's acknowledge of the surrounding world - empirical and theoretical. In the arsenal of empirical way there are two tools of cognition - observation (1) and measurement (2), and the tools of theoretical way are logical design (3) and mental simulation (4). Simple combinatorial considerations suggest that the number of possible combinations of the four elements is equal to fifteen, which predetermine fifteen possible forms of scientific cognition: description (1), computation (2), logic (3), philosophy (4), practice (1+3), designing (1+4), analysis (2+3), experiment (2+4), empirical generalization (1+2), theory of (3+4), engineering (1+2+3), technique (1+2+4), general approach (1+3+4), application (2+3+4), foundation (1+2+3+4). The new theory of cognition substantiates the following assertion: any research is complete, if substantial characteristics of the object of cognition identified during this research some way correspond to the following criteria of completeness of the research: 1. Impact; 2. Motion; 3. Rest; 4. Space; 5. Time. Applied to social scientific disciplines the criteria of completeness of study and the characteristics of the object of cognition form the following pairs: 1. "impact - social self-governing"; 2. "movement - social mutual agreement"; 3. "peace - social stability"; 4. "space - social organization"; 5. "time - social evolution". Specified characteristics correspond to the following scientific disciplines. We shall call: 1. The science about social self-governing - Sociology; 2. The science about social mutual agreement - Sociosinergetiks; 3. The science which is associated with the study of problems of social stability - Sociodynamics; 4. The science that studies the social organization - Socioformatiks; 5. The science that studies the issues of social evolution - History. If we accept the fifteen forms of scientific cognition as a vertical conditional axis of coordinates, placing them from top to bottom, and the five characteristics of the object of cognition as horizontal axis of coordinates placing them from left to right, we shall get a tabular representation of possible "operator" social sciences, 75 in total. All of them are presented in Table 1.

In my opinion, the justification submitted confirms that Sociodynamics is a basic science. And this, in its turn, means that there must exist the foundation of this science in the form of a set of laws of nature. A little later about it, and now about let's speak on Economics.

Is Economics a science? Nowadays, there are only two sets of economic dogmas, the essence of which is the market and the planned theories, designed to "serve" for two antagonistic state devices of society - capitalism and class socialism. It is hard to imagine that under capitalism one set of physical laws of nature is possible, and under class socialism – the other. Consequently, even if we assume, that Economics is a science, then neither the market, nor the planned theories are scientific. In doing so both theories can be represented with the help of the "serious" of mathematical apparatus. However, the already solved problem of classification of Sciences allows to assert that it Mathematics itself is not a science, but a form of scientific cognition in the form of calculations, that is, an instrument of science. Yes, an important instrument, but still – an instrument. Thus, the presence of a mathematical apparatus does not confirm the being scientific of one or another economic conception. In case a gardener-amateur replaces the shovel with a minitractor in the process of ploughing his beds, his basic knowledge in biology will not replenish, and the yields of cucumbers will not increase. Once Galileo said: "The book of nature is written in the language of Mathematics". And many scientists believe in this. But this is a mistake, because we can algorithmatize only the mind, but not the reason: it is the law of nature. Will indeed the gardener say - "my fruit garden bloomed wonderfully thanks to my spade"? It can be assumed that economic science is connected with practical forms of Sociology, Socioinergetiks and Sociodynamics. But the foundations of these sciences are still not developed in a proper way. Today it is

---

Economics is closely linked with the following five levels: 1. Physical; 2. Psychical; 3. Informational; 4. Social; 5. Economic. Moreover, Economics is closely linked with the **foundation of living arrangement of society**, briefly FLS, which represents a totality of the following five key concepts: 1. Freedom of action; 2. Equality; 3. Unity; 4. Fairness; 5. Stability. This link will be shown below, but now it makes sense to denote definitions of the five concepts of FLS.

**Definition 1: Freedom of action** is the conjugation of free will and freedom of choice, or differently, their unity applied to the proposed action.

---

<table>
<thead>
<tr>
<th>No</th>
<th>Form of cognition</th>
<th>Sociohistory</th>
<th>Sociology</th>
<th>Sociology</th>
<th>Sociology</th>
<th>Sociology</th>
<th>Sociology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Description</td>
<td>Systematization of Sociology</td>
<td>Systematization of Sociology</td>
<td>Systematization of Sociology</td>
<td>Systematization of Sociology</td>
<td>Systematization of Sociology</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Computation</td>
<td>Mathematical Sociology</td>
<td>Mathematical Sociology</td>
<td>Mathematical Sociology</td>
<td>Mathematical Sociology</td>
<td>Mathematical Sociology</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Logic</td>
<td>Logic of Sociology</td>
<td>Logic of Sociology</td>
<td>Logic of Sociology</td>
<td>Logic of Sociology</td>
<td>Logic of Sociology</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Philosophy</td>
<td>Philosophy of Sociology</td>
<td>Philosophy of Sociology</td>
<td>Philosophy of Sociology</td>
<td>Philosophy of Sociology</td>
<td>Philosophy of Sociology</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Practice</td>
<td>Practical Sociology</td>
<td>Practical Sociology</td>
<td>Practical Sociology</td>
<td>Practical Sociology</td>
<td>Practical Sociology</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Analysis</td>
<td>Analytical Sociology</td>
<td>Analytical Sociology</td>
<td>Analytical Sociology</td>
<td>Analytical Sociology</td>
<td>Analytical Sociology</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Experiment</td>
<td>Experimental Sociology</td>
<td>Experimental Sociology</td>
<td>Experimental Sociology</td>
<td>Experimental Sociology</td>
<td>Experimental Sociology</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Empirical generaliz.</td>
<td>Generalizations of Sociology</td>
<td>Generalizations of Sociology</td>
<td>Generalizations of Sociology</td>
<td>Generalizations of Sociology</td>
<td>Generalizations of Sociology</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Theory</td>
<td>Theoretical Sociology</td>
<td>Theoretical Sociology</td>
<td>Theoretical Sociology</td>
<td>Theoretical Sociology</td>
<td>Theoretical Sociology</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Engineering</td>
<td>Engineering Sociology</td>
<td>Engineering Sociology</td>
<td>Engineering Sociology</td>
<td>Engineering Sociology</td>
<td>Engineering Sociology</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Technique</td>
<td>Technical Sociology</td>
<td>Technical Sociology</td>
<td>Technical Sociology</td>
<td>Technical Sociology</td>
<td>Technical Sociology</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>General approach</td>
<td>General Sociology</td>
<td>General Sociology</td>
<td>General Sociology</td>
<td>General Sociology</td>
<td>General Sociology</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Foundation</td>
<td>Sociology</td>
<td>Sociology</td>
<td>Sociology</td>
<td>Sociology</td>
<td>Sociology</td>
<td></td>
</tr>
</tbody>
</table>
Definition 2: Equality is the state of society, when endowed with freedom of action individuals with different capabilities and abilities equalize themselves on the basis of mutual respect and Love.

Definition 3: Love is the ability to give unselfishly.

Definition 4: Unity is rallying people on the basis of common values and factors.

Definition 5: Fairness is the equality between the measure of act and the measure of requital.

Definition 6: Stability is a reasonable assurance in the coming day.

Thus, starting from the connection of the concept "Economics" with the levels of freedom on the one hand, and with the concepts of FLS, on the other hand, we can discern the required definition of concept of "Economics".

Definition 7: Economics is the complex of mutual relations between the members of the society in the process of production, distribution, exchange and consumption of various goods and services.

In this definition five key words can be identified: consumption, distribution, interaction, exchange and production. A complex one-to-one correspondence exists between five levels of freedom, five concepts of FLS and five concepts of economics, which defines the concept of "socio-economic formation", briefly SEF. For a visual representation of the specified compliance, let's bring together all fifteen categories in Table 2.

<table>
<thead>
<tr>
<th>Categories of socio-economic formation</th>
<th>Levels of freedom</th>
<th>Concepts of FLS</th>
<th>Concepts of economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical (material)</td>
<td>Freedom of action</td>
<td>Equality</td>
<td>Consumption</td>
</tr>
<tr>
<td>Psychical (soulful)</td>
<td>Unity</td>
<td></td>
<td>Distribution</td>
</tr>
<tr>
<td>Information (spiritual)</td>
<td>Fairness</td>
<td></td>
<td>Interaction</td>
</tr>
<tr>
<td>Social (civil)</td>
<td>Stability</td>
<td></td>
<td>Exchange</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td></td>
<td>Production</td>
</tr>
</tbody>
</table>

Each column of Table 2 defines a complex one-to-one correspondence mentioned above. Indeed: 1. the increase in economic freedoms allows to increase production capacity, and this contributes to the stabilization of society; 2. the increase in social freedoms implies the need for equitable distribution of produced goods; 3. the increase in informational freedom promotes activation in the interaction between the members of society, thus ensuring the unity of the society; 4. the increase in psychical freedom allows to establish equality between members of society through voluntarily unequal exchange: "he who gathered much had nothing left over, and he who gathered little had no lack"; 5. the increase in physical freedom contributes to the realization of freedom of action, then as freedom of action is the conjugation of free will and freedom of choice, in an individual a possibility to determine in the affair of consumption of goods and services appears, and whether he will grow self-limited, or consume uncontrollably, will be determined by the level of his spiritual perfection.

The concept of SEF was introduced by Karl Marx as a central concept of historical materialism, but, as we see, it has nothing to do with materialism, because its foundation is spiritual in essence.

Definition 8: SEF is conjugation, or differently, the unity of the five levels of freedom, five concepts of FLS and five key concepts of Economy, with priority of categories of freedom.

Thus, it reasonably can be said that Economics, as a complicated concept, is a part of an even more complicated concept - SEF, that is as such it is not a science, but it is the subject of study for sciences such as Sociology, Sociosinergetiks and Sociodynamics in their practical manifestation. So, knowing the answer to the questions – What is Economics? and What is Sociodynamics? - we can answer the question relatively to the word combination - "Economic Sociodynamics". Of course, the authors of CES, who wrote the book "Economic Sociodynamics" in 2000, could not have known that in 2012 the problem of classification of sciences will be solved, that is they intuitively guessed correctly the vector of development of economic science at minimum in a part of its title. Therefore, I suggest the following tentative definition. Economic Sociodynamics is an interdisciplinary science, representing the unity of such scientific disciplines as Sociology, Sociosinergetiks and Sociodynamics, which studies Economics as part of SEF. In this case, it seems to me, "the suit will fit" and Economic Sociodynamics could potentially become the scientific basis of a third economic way - the median Economy. In this case we can talk not only about the practical form of cognition, but the whole complex of fifteen forms of scientific cognition specific to any fundamental science can be applied to this science. It should be noted that it is more correct to say - Sociodynamics of Economy, exactly the same way as we say, for example, Physics of plasma, that is first comes the title of science, and then the subject of its reference, but if someone says...
plasmic physics, then probably it is permissible. Another thing is when it comes to the synthesis of the two sciences, in this case the sequence of words does matter, for example, physical chemistry and chemical physics are two different interdisciplinary sciences. But since, I repeat myself, Economics is not a science, it is possible to use the title suggested by the authors of CES. So, I think, we have made clear with the form of CES, further we shall speak about the content of the CES.

To understand the essence of any theory, we first need to analyze its foundation. If it turns out to be correct, it will be possible further to go deep into the essence of the theory, and if it turns out that the foundation of the theory is composed of incorrect statements contrary to the laws of nature, the further proceedings lose any meaning, and such a theory can be called erroneous. That’s exactly what we shall do. Let’s consider the foundation of CES.

In doing so we shall be guided by the wording of the authors of CES relatively to its foundation. "The core of this concept defines the phenomenon of "irreducible needs" and a new paradigm - shift from methodological individualism to a softer principle of complementarity of individual and social usefulness, allowing existence of group preferences along with the preferences of individuals. Complementarity of usefulness is manifested also in the complementarity of the subjects of market exchange: the state is added to the aggregate of individuals, whose mission is to implement the regulatory interests of society. This extension of neoclassical model allows to see the state in a different light, located not somewhere outside the market or above the market, but organically embedded into it3.

Thus, the authors of CES propose to revise the postulate of individualism. Without going into the philosophical and other details under individualism we will understand the following: the individual interests are above the interests of society, and in doing so the interest of society as a whole is equal to the sum of the interests of the individuals who compose it (I=\(i_1+i_2+\ldots+i_n\)). And the presence of "irreducible needs" of society means that there is a common interest (normative), which cannot be reduced to a separate individual, that is I=(\(i_1+i_2+\ldots+i_n\)+\(\Delta i\)). And thus, as supposedly, this \(\Delta i\) "remains outside the brackets", then the State must commit itself on implementation these needs of society.

Do indeed "irreducible needs" of society exist? Note especially, that I do not question the existence of \(\Delta i\), but only put the question of the reducibility of this public interest. At all, I have negative attitude to the principle of individualism as such, and I believe this principle is unworthy for any man, but in doing so do not judge those who adhere to this principle, because I understand that these views are connected with their unfamiliarity and incomprehension. That is, thereby I want to say that I am not trying to defend the principle of individualism, yes it will fall apart, but I am putting task to answer the question of reducibility of public interest, based exclusively on the laws of nature.

For better understanding of the gist of \(\Delta i\) I will bring the following physical example. Any metal in the solid state has a crystalline structure. When heated the metal energy of atoms increases, and the intensity of their vibrations in the crystal lattice sites also increases. When the metal is heated to the melting point, for some time the growth of temperature is terminated, as the absorbed thermal energy is expired on the destruction of the interatomic bonds. This very total energy of interatomic bonds, which ensures the unity of metal atoms as the crystal structure, is accordingly the analog of magnitude of \(\Delta i\). To answer the question of the reducibility of the common interests of society, it is necessary to identify the source of these interests. That is, one needs to try to discover the "crystal structure" of society, to identify its possible phase states and characteristics, as well as the mechanism of phase transitions. For this, let’s very briefly consider a new look at the fundamentals of General Psychology.

Just the way the physical level of the substance consists of four main phase states (solid, liquid, gas, plasma), and there is some mechanism to convert the substance from one phase state to another, likewise all structures of the human (physical, psychical, informational and unifying levels) consist of four main phase states with the relevant mechanisms of phase transitions. Each of the four levels of a person consists of three sublevels, totally - twelve. We cannot consider all of them, because the article format does not allow, so will consider only those sublevels, which are important for the purposes of this article. These two are the sublevels of the psychical level - the mind and the will of mind, and two sublevels of informational level - the reason and the will of reason. But first of all, in order to facilitate the perception of characteristics of these sublevels by the reader, in the way of comparison will shall point out the characteristics of one of the three sublevels of the physical level of a man - matter.

---

3 Grinberg R.S., Rubinshtein A.Ja. Pyat’ tezisov na temu «Ekonomicheskaja Sociodynamika». M.: IJe RAN, 2013. (Translation from Russian made by the author of the article)
Matter is the substance of which the ambient world and the man himself consist. Basic phase states are solid bodies, liquid, gases, plasma (transitional form is the amorphous bodies). The structural unit of phase states is atom, molecule. The basis of structural unit is elementary particles. Characteristic of mobility of the structural unit is the temperature. The mechanism of phase transitions is the change in temperature by means of heating or cooling. The source of temperature change is warmth. The essence of warmth is electromagnetic waves, that is the photon flux. Depending on the photon energy we can distinguish following classes of electromagnetic waves that form spectrum: 1. radio waves; 2. the infrared radiation; 3. the visible light (red, orange, yellow, green, blue, indigo, violet, which in the aggregate form white light); 4. the ultraviolet radiation; 5. the x-ray radiation; 6. the gamma radiation.

A mind is a mechanism allowing a person to knowingly operate with various objects of reality, giving them titles with the use of words, which are representing themselves as the unit notion or the general notion. Basic phase states are notion, judgment, inference, theory (the transitional form is definition). The structural unit of phase states is knowledge recorded in the neural memory, and the basis of structural unit is consciousness. Characteristic of mobility of the structural unit is the degree of awareness. The mechanism of phase transitions is the change in the degree of awareness by means of thinking or unthinking. The source of change of the degree of awareness is reasoning. The essence of reasoning is the search of justified ties. The spectrum of justified ties will be mentioned a little later.

The will of mind is a decision-making mechanism at the level of consciousness with the purpose to meet the sensual needs of a man. The main phase states are the need, inclination, desire, passion (transitional form is the intention). The structural unit of phase states is aspiration of mind. The basis of structural unit is consciousness. Characteristic of mobility of the structural unit is awareness of the need. The mechanism of phase transitions is the change of the awareness of the need by means of concentration or dispersal attention of mind. The source of change of the awareness of the need is motivation. The essence of motivation is the decision-making in the process of constructing logically interrelated arguments. Depending on the liberty of decision-making we have the following spectrum of decision-making: 1. Negative voluntary; 2. Negative voluntary, but after overcoming doubts; 3. The decision-making does not depend on the free will of the individual (negatively forced, negatively forcible, a negative decision after the voluntary transfer of one’s will, positive forcible, positive forced, a positive decision after a voluntary transfer of one’s will, the lack of a decision after the voluntary transfer of one’s will); 4. Uncertainty; 5. Positive voluntary, but after overcoming doubts; 6. Positive voluntary.

A reason is a mechanism that enables a person to mentally handle with various objects of reality, displaying them in physical reality by means of images with the use of signs. The main phase states are sign, symbol, meaning, idea (transitional form is allegory). The structural unit of phase states is information, and the basis of structural unit is the thought. Characteristic of mobility of the structural unit is the degree of comprehension. The mechanism of phase transitions is the change of the degree of comprehension by means of reflection or thoughtlessness. The source of change of the degree of comprehension is shrewdness. The essence of shrewdness is mindsight, that is the discretion of ties. The word "mindsight" is formed by combination of two words - mind and sight, and as a result we obtain an important word, which literally means - the eyes of the mind. Then educated from this word adjective and verb will sound as follows: mindsightive and mindsightize respectively. Justification of the mind and mindsight of reason form a united spectrum of understanding which provides interrelation of psycho- logical and informational levels, which in its turn causes a holistic perception of reality. Depending on the depth of penetration of ties we have the following spectrum of understanding: 1. Visual; 2. Explanatory; 3. Logical (distinction, comparison, analogy, excretion, generalization, analysis, synthesis); 4. Figurative; 5. Contemplative; 6. Insightful.

The will of the reason is the mechanism of orientation in aspirations and hopes of a man when implementing his spiritual installations. The main phase states are installation, opinion, belief, faith (transitional form is worldview). The structural unit of phase states is the argument in respect of the issues: "Do I act correctly?" and "What is my purpose?". The basis of structural unit is the thought. Characteristic of mobility of the structural unit is assessment of correctness, briefly - assessment. The mechanism of phase transitions is the change of the assessment by means of concentration or dispersal attention of reason. The source of change of assessment is goal setting. The essence of goal-setting is dual: 1. aspiration of spiritual gaze of a man; 2. hope. Depending on the directivity of gaze of a man, bearing in mind his spiritual aspirations, we have the following spectrum of aspirations: 1. Pecunary; 2. Soulful; 3. Social (individual, family, genus, nation, country, earth, the universe); 4. Cognitive; 5.
Spiritual and moral; 6. Absolute. Depending on the landmark, at which spiritual gaze of man in the evaluation of the correctness of his thoughts, aspirations and actions is aimed, we have the following spectrum of hope: 1. On a case; 2. On the personal experience; 3. On an individual consciousness (scheme, plan, theoretical calculation, project, model, awareness, comprehension); 4. On the help; 5. On prediction. 6. On God. Prediction can bear different character - from encouraging loved ones to Biblical prophecy. As for God, each person perceives Him in their own way: for someone God is nature, higher intelligence, etc., but there are those for whom God is the One whom Christ called His Father.

As seen, the will is a complicated two-level concept, and it is always necessary to distinguish between the will of mind and the will of reason. Such a notion of the concept "will" allows to define another complicated by its form concept: faith is the fourth ("plasmic") state of the will of reason.

Further I will add some analogies. When heating the substance an interaction of atoms with quants of the electromagnetic field occurs, whereby the atoms, grasping thermal photons, are excited, that is the intensity of their movement increases, which leads to an increase in temperature, and thus the transition of substance from one phase state to another occurs. Approximately the same happens with the will of mind and the will of reason. The need of a human is a totality of aspirations of his mind. At the concentration of attention of the mind upon one or another need a justified search for the decisions to meet the given need begins, whereby the pursuit of mind under the influence motivated arguments escalates, that is awareness of the need of this need increases, that to encourages the human to commit certain actions, and thus the transition of the need of human via the inclination and the desire to the passion occurs. The spiritual installation of a man is the aggregate of arguments of his reason. At concentration of attention of reason on one or another spiritual installation the search of mindsightive orientation by the implementation of this installation begins, at which the arguments of reason under the influence of purposeful spiritual aspirations (gazes) strengthen, that is the assessment of the correctness of this installation is increased, that gives a person more confidence in the commission of certain actions, and thus the transition of installation of a man through of his opinion and belief to faith occurs.

Thus, just as the source of energy for the atoms is thermal photons, so the source of energy for the aspirations of mind and arguments of reason are arguments of mind and aspirations of reason respectively. If then take into account that the arguments of reason as structural units of phase states of the will of reason are associated with the arguments of mind as quants of conscious decision-making process through a spectrum of understanding, we obtain the following remarkable ligament: aspirations of reason \( \rightarrow \) arguments of reason \( \leftrightarrow \) spectrum of understanding \( \leftrightarrow \) arguments of mind \( \rightarrow \) aspirations of mind. The resulting ligament shows that when committing free action (physical, psychical, informational) aspirations of reason are in priority relative to the aspirations of mind. The act committed by the subject of the action, endowed with freedom of action, can be considered free if the will which is expressed by means of motivation and/or goal-setting bear voluntary nature. The priority of aspirations of mind is possible only in the case when an action is accomplished involuntarily, that is forced or forcible, or without understanding, that is without awareness and/or comprehension.

Thus, the analogue of the concept "energy", applied to a person as a member of society, is a aggregate of aspirations of reason and arguments of mind with priority of the first of them, and in doing so the arguments of mind act as "oscillation energy of the atoms", and the aspirations of reason act as "binding energy of the atoms". Now relatively of the concept "interest". The interest is the aggregate of aspirations of mind, that is, the phase state of the will of mind, and not the basic, but transitional, the same way as an amorphous body is a transitional state between solid and liquid. If the intention is a transitional form between the need and the inclination, then the interest is a transitional form between the inclination and the desire. So, if we speak in spirit of the physical analogy, then the authors of CES neither more nor less mixed up the concept of "amorphous body" and "thermal photon", that is why I said above, that they were wrong in this issue. But here a lot more is important than this. From all mentioned above, it follows that the source of the common interests of society \( \Delta i \) is the aggregate of aspirations of the reason of individuals that make up this society, that is, the general interests of society not simply are reducible, but are generated directly by the members of the society. We have the formula:

\[
I=(i_1+i_2+i_3+...+i_n)=(i_1+i_2+i_3+...+i_n)+\Delta i
\]

where \( i_n \) is the personal interest of the given individual, \( i \) is a part of the public interest posed by the given individual.

Thus, in this fundamental question CES is entering into serious contradiction with reality, that is foundation of CES contains in itself the wittingly erroneous statement, on the basis of which it impos-
sible to construct a correct theory. But in order for the criticism to be constructively full, let's try to comprehend another erroneous statement which follows out of the specified, namely, about the role of the state in the "implementation of normative interests". We continue the reasoning.

The analogue of the concept "energy" in relation to society as a whole will be called by the term "internal aspirations". Based on the fact that the temperature of the physical body is a measure of the intensity of the motion of the atoms, and the amplification of internal aspirations increases the activity of individual, as analogue of the concept of "temperature" in respect to society as a whole we accept the concept "activity". The activity of society as a whole is associated with the word "cohesion", which namely determines the four phase states of society: 1. Individual reason; 2. The cohesion of group; 3. The cohesion of class; 4. The cohesion of society. In doing so, rallying occurs at the level of reason. The mechanism of phase transitions is the change of the activity by means of ideologisation or deideologization of society, which is connected with the presence or absence of ideology. The essence of ideology is the common values and unifying factors, that is the flux of estimates and the flux of events respectively. Common values and unifying factors are some spectra, which are determined by the twelve sublevels of physical, psychical, informational and unifying levels of the human. The spectrum of common values: 1. Tangible; 2. Household; 3. Vitals (means of communication, production, historical memory, education, oeuvre, social, spiritual); 4. Traditional; 5. Emotional and sensual; 6. Humanitarian. The spectrum of unifying factors: 1. The material gain; 2. Protection against threats; 3. Life achievements (scientific and technical, industrial, historical, outstanding personalities, creative, social, spiritually meaningful); 4. The aspiration for social justice and equality; 5. The aspiration for a brighter future (natural property of the soul); 6. The aspiration for freedom (internally mortgaged evolutionary factor inherent to each individual).

From the above it can be understood that "crystal structure" of society is the unity of the people on the level of reason, which is provided by aspirations of reason through a set of two spectra - shared values and unifying factors, briefly the spectrum of society, the existence of which is the natural property of society. The spectrum of society and the ideology which follows out of this spectrum are the same objective concepts of nature as electromagnetic wave and warmth. And we should not abandon the natural ideology: after all we do not reject the heat of the sun, from which sometimes we get heat stroke. Another thing is that sometimes they try to impose some subjective human ideology on society. So, what to do? - Such is the nature of a man who always wants to get ahead the nature: one must beware a man. So, when the spiritual aspirations of society are aimed at the first items of the spectrum of society, then the remarkable ligament is circled, because the man himself relegates his reason to the level of the mind: such are the individualists, that’s why I said above, that they are in unawareness and incomprehension.

To go to the laws of Sociodynamics, it is necessary to determine with the concept of entropy. Entropy is a certain measure of chaos. The desire for chaos and the desire for freedom without limits are similar; therefore entropy is the degree of freedom of the individual or society as a whole. This or that fundamental principles of nature can be applied to its different objects, naturally with some appropriate adjustments, and the essence of symmetry of laws of nature is manifested in this.

The fundamental laws of Sociodynamics are similar to laws of Thermodynamics: 1. Society is committed to stability; 2. Internal aspirations of society persist; 3. The degree of freedom of society is constantly increasing; 4. Reducing activity of society leads to lower the degree of freedom. The first law of Sociodynamics says that every man, as well as society as a whole, is committed to a tranquil and secured life. The second law of Sociodynamics is none other than the law of conservation of energy as applied to society, which also can be called the law of conservation of aspirations. The third law of Sociodynamics defines the arrow of evolution of society, just as the second law of Thermodynamics defines the arrow of time. The fourth law of Sociodynamics argues that ideologically cohesive society has a high degree of freedom. Probably in a scope of the Article such volume of information is enough, for a little more detail the reader can look in the source [3], but here I will point out an item, which is not included in the book.

The condition for the completeness of the foundation of any cognitive system (CS) sounds as follows: the foundation of CS is complete, if it consists of five groups of assertions, each of which bijectively expresses its relation to one of the following concepts: 1. Impact; 2. Motion; 3. Rest; 4. Space; 5. Time. This means that specified foundation of Sociodynamics is not complete, since it consists of four assertions. Let us try to find the deficient fifth law. For this we will find out, which criterion of completeness remains unrealized? The first law discusses the equilibrium state of society, that is, it is linked to the
The second law is connected with the internal aspirations, that is, with the "energy" of society, as energy is the source of any process, then we have a connection with the criterion "impact". The third law defines an arrow of evolution of society, therefore, is linked to the criterion "time". The fourth law discusses the activity of society, that is, it is linked to the criterion "movement". Thus, the criterion "space" remains unrealized, therefore, the fifth law of Sociodynamics in some way is linked with this criterion. For discretion of the desired law, let's again turn to general psychology.

Each of the three levels of a man - physical, psychical, informational - consists of three sublevels. In order for the nine sublevels to consistently interface unifying structures are needed. There are three of them in all. Let's consider one of them, the overall structure.

The overall structure is a unifying structure that provides the connection between the physical, psychical and informational levels of a man, thereby allowing to elicit and develop initially nested personal qualities and abilities. The basic phase states are an individual, individuality, personality, righteous man (transitional form is doer). The structural unit of phase states is self-consciousness. The basis of structural unit is the concept of "I". The characteristic of mobility of the structural unit is inner freedom of a man. The mechanism of phase transitions is the change of inner freedom through the development or degradation of a man. The source of changes of the inner freedom is the capabilities that initially are nested in the form of makings. The essence of capabilities is the personal qualities that can be detected by means of labor. Depending on the i-states (i-biological, i-physical, i-skilful, i-social, i-moral, i-spiritual) and the difficulties of manifestation we have the following classes of personal qualities and abilities that form the spectrum: 1. Biological; 2. Physical; 3. Abilities (practical, intellectual, organizational, analytical, creative, humanitarian, strategic); 4. Social; 5. Moral; 6. Spiritual.

The man is an individual, initially possessing exclusively characteristic only to him biophysical, psychological and spiritual properties. The becoming of a man through the development of the capabilities given to him in the form of makings, which are disclosed through labour in the form of care of relatives in childhood, parenting and training in the youthful period, self-learning and self-improvement in adulthood, promotes to the increase of self-awareness of the individual under the influence of acquired personal qualities and abilities, that increase his inner freedom, and as a result the individual becomes at first an individuality, then a personality, and finally, a righteous man, who is a manifestation of the "plasmic" state of the overall structure of the man.

From the above said it is possible to make the following important withdrawal: "The constructive labour allows to reveal the inner potential of a person that contributes to increasing his inner freedom". If add to this important thought an important assertion about the fact that the desire for freedom is the internally mortgaged evolutional factor, it will be possible to discern the formulation of the fifth Sociodynamic law, which goes like this: the desire for freedom through creation reveals the inner potential of society, thereby increasing its freedom.

The fourth law of Sociodynamics has not only the lowering character, but heightening as well, that is, an increase in the activity of society under certain conditions leads to an increase in the degree of its freedom, thereby ensuring freedom of action for the members of society. But since the activity of society is related to its ideologization by means of the spectrum of society, one can observe that the third and fourth laws of Sociodynamics jointly are leading the society in general to unity. On the other hand, the first law of Sociodynamics pushes society toward equilibrium, but society can not be united and stable in conditions of absence of equality between individuals and fair interrelations between them in it. Thus, the first, third and fourth laws of Sociodynamics jointly lead the society to equality and justice. The second and fifth laws of Sociodynamics that are directly related to the spectrum of society, jointly contribute to ensuring fairness and stability of the society by disclosing its internal capacity. All the five laws of Sociodynamics jointly contribute to the formation of FLS. As can be seen, the laws of Sociodynamics consist of spiritual concepts, that is, the laws of nature bear objectively spiritual character. This means that our understanding of spirituality as a subjective concept is wrong, because spirituality is objective. From this we can conclude about the fallibility of setting that supposedly the setting of society has the economic basis. Yes, Economics is important, but it is less important than the spiritual beginning. The basis of life is spiritual! In doing so, we shouldn’t confuse objectively spiritual laws of Sociodynamics and the absolute laws, although, of course, they are interrelated.

Thus, the five fundamental laws of Sociodynamics are formulated, basing on which we can develop the socially oriented sciences, and make reliable predictions relatively the different states of society, its stability and evolution. In doing so it should be noted that the first four laws of Sociodynamics were
mindsighted out of the laws of Thermodynamics, and the fifth law was mindsighted thanks to basics of General Psychology. Note that the word "mindsight" in this case was used not once which is the essence of the source of the mobility of the structural units of phase states of reason, that is, the important laws of nature are derived not on the basis of differential equations and other applications of mind, but on the basis of reason. It is high time modern science finally replaced the ligament "idealization - abstraction" with a ligament "modeling - simplification", thereby giving due importance to the reasonable researches, because abstract concepts hinder proper formation of scientific thought. Do not forget, that Demokritos built the atomistic theory on the basis of reason, and this theory is one of the pillars of modern science. Not only the authors of CES, but other scientists as well are trying to solve complex problems of society on the basis of lemmas, theorems and other abstractions, forgetting that a man is a spiritual being, and his reason is impossible to algorithmate. I do not say that mathematics is not needed in Humanities, but I say that, firstly, Mathematics should stop abstract attempts to climb on the podium of science, because Mathematics is a tool of science, and no more, and secondly, one should not be carried away by abstractions, but only by modeling as an additional means of analysis.

Now, based on the laws of Sociodynamics let's talk about the role of the state relatively to "implementation of the regulatory interests" of society. The question of the state is always a question of power, and the question of power is always a question of freedom. In the community of spiritually perfect people ethics or Testament are observed, the cause of origin of which is a consequence of the need for providing freedom, that is in this case we are talking about self-constraint for the benefit of others. But since a society is spiritually imperfect, a need of external coercion arises. Therefore I will present the definition of the concept "power" in its theoretical and practical understanding, that is - what it should be, and what actually is, and then will present the definition of State.

**Definition 9 (the power - the theory):** The power is a mechanism of external coercion with a view to ensure the freedoms of the individual with regard to individuals who in their actions reject the norms of ethics and laws of Testament.

**Definition 10 (the power - practice):** The power is the presence of aggregate of enforcement mechanisms: on a spiritual level - authority; on the psychical level - threat; at the physical level - violence; on the social level - right (law); at the economic level - tax.

**Definition 11:** The State is a limited territory, on which the interrelationships between the inhabitants are regulated by the power.

The very bringing together practice and theory concerning the question of power makes the main task of the evolution of society. From the third law of Sociodynamics that defines an arrow of evolution of society it follows, that the change of the State regime occurs by means of successive transfer of power in accordance with chainlet - "individual → group → class → society", which defines the following chainlet of the State regime: "slaveholding → feudal → capitalism or class socialism → socialism". It must be particularly emphasized that here the concept of "socialism" is not connected with Economics and the means of production, but it just means the power of society. So, the third law of Sociodynamics tells us that, first, the class socialism, which was built in the Soviet Union, was a natural phenomenon, and secondly, the law of nature demands that today society began to move in the direction of socialism, because the time of capitalism has expired. I want to emphasize that I am not a socialist, a communist, an idealist, etc. etc., and my personal opinion is irrelevant - such are the requirements of the objective laws of nature.

Let’s briefly stroll along specified chainlet. When the power belongs to an individual, that is, to the king or pharaoh, then the freedom of one is ensured by power and the interests of "subjects" are dependent on his "mercy". When the power belongs to a group, that is, to the feudals, landlords, elites, etc., then the freedom of groups is ensured by the power, and interests of others are defined by this group, based on their interests. When the power belongs to the class of capitalists, then the power is ensured by the freedom of the class of minority and the interests of majority are obeyed to the interests of this class. When the power belongs to the class of workers and peasants, then the power ensures the interests of the majority perhaps by means of dictatorship, and the interests of minority are suppressed, but anyway it corresponds to requirement of the third law of Sociodynamics, because the degree of freedom of society is increases. In case the power belongs to society as a whole, which had never happened on Earth, the freedom of all society will be ensured by power, and thus a merge of the practice and theory on the question of power will occur, and the need of State (not at all as such, but namely in observance of the interests of society) will disappear, because these interests will be administered by public structures which
are created by civil society. This means that the principle of "complementarity subjects of market exchange", proposed by the authors of CES, which requires "to add the state to the aggregate of individuals, whose mission is to implement the regulatory interests of society" [2], is erroneous and dangerous for the following reasons. Firstly, the market economy as an integral part of capitalism has outlived its time, according to the laws of Sociodynamics, and any action against the laws of nature is dangerous. Secondly, the idea of "the State which is located not somewhere outside the market or over the market, but is organically embedded into it" [2], is contradictory and unrealistic. After all, the main task of the market exchange is to derive profit, that is, the State must earn on us in the best interest of ourselves. Well, we will close our eyes on this contradiction, but after all the State is not an abstraction, but a certain system with real people, who endowed the right of decision-making. For all these people could earn in benefit of others they must be spiritually perfect. Dear reader, have you ever known such perfect politicians? I'm not saying that they do not exist, but I am asking if many of them? Thirdly, the transfer of the right to maintain the common interests of society into the hands of the group of persons, who are outside the social structures, in conditions of capitalism corresponds to roll back to a model of feudalism, according to the scheme described above. That is, in fact, CES is a concept of revival of neo-feudalism. And if the world capitalism takes this concept and endows its authors by various premiums, then this is not surprising, because a step backward, not forward is profitable to them. So, CES is wrong, because it does not allow to see the future of society, and leads to its regress. It is precisely because CES is evolutionarily regressive and I did call it dangerous. We, humans, should not depart from the laws of nature, because it is dangerous, and we need to know and understand that we are under the action of insuperable force of objectively spiritual sense.

2. The sufficient part of the criticism

Above we grounded the fallacy of the foundation of CES, in the bases of which the question about general interest of society lies, which the authors of CES differently call "ward goods", and in the West they call it "meritorious needs of society". These two concepts are not necessarily identical; however, for the purposes of this article it is not important. It is also shown that the essence of the common interests of society is the spectrum of society. Next we shall talk about the possible ways of realization of the common interests of society.

Under the influence of the third law of Sociodynamics the freedom of society increases, which leads to the evolution of the SEF, resulting in the change of the State regime, and the actual number of citizens, possessing freedom, increases. Exactly the essence of historical progress is manifested in this. I will adduce the definition of the concept "State regime".

Definition 12: The State regime is a system of norms of state structure, of coordination and control spheres of social activity, which are determined by those who are endowed with power.

From this definition it follows that for evolutionary change of the State regime it is necessary to address three questions: 1. The state structure; 2. The form of social governance; 3. Methods of economic management. With regard to the question of power is mentioned above. Usually the state structure organizes proceeding on the principle of separation of power into three branches: executive, legislative and judicial. But this ancient principle of outdated. The state structure should be like the structure of a man, who consists as minimum of three levels: physical, psychical (intellectual) and informational (spiritual). The essence of the main difference of the principle of similarity to a man consists in the fact that in the basis of this principle lies not the concept of "power", but the concept of "society", and it is natural and regularly. Using the principle of similarity to a man, it is possible to identify all possible forms of social governance (SG), what exactly we are going to do.

In the formation of the setting of society three centers of governance can participate: 1. physical, that is, the state structures (SS); 2. intellectual, that is, the totality of thinking, reflecting and creative intelligence, combined into different public structures (PS); 3. spiritual, that is, Church, Council of Muftis, or council of elders (SC). These three centers may represent the interests of the whole society or a certain group of people, numerically smaller than themselves, that is, in the second case the centers of governance due to various reasons may prove to be dependent, and then we get another possible center of governance, named oligarchy (O), which may be collective or submitted by one person. For discretion of possible forms of SG we will present these centers of governance by means of a triangular pyramid as it is shown in Fig. 1. The resulting model will be called pyramid of SG.
As can be seen, seven arrows are directed toward the center of the base of triangular pyramid shown in the figure, each of which indicates some form of social governance. In addition, the arrows toward SG from SS, PS, SC and their pair combinations can be directed not directly, but from above, through O. Let me remind that the number of different combinations of the four elements is equal to fifteen. Another case is when not a single arrow is directed toward SG. Totally we have sixteen possible options to organize social governance. Let’s enumerate them: 1. SC → hierocracy; 2. PS → aristocracy; 3. SS → the state dictatorship; 4. SC + SS (1) → theocracy; 5. SC + PS (2) → ideocracy; 6. SS + PS (3) → democracy; 7. SC + PS + SS → socioauthority; 8. SC + O → hierocratic oligarchy; 9. PS + O → aristocratic oligarchy; 10. SS + O → the state oligarchy; 11. SC + SS + O → theocratic oligarchy; 12. SC + PS + O → ideocratic oligarchy; 13. SS + PS + O → democratic oligarchy; 14. SC + PS + SS + O → imaginary socioauthority; 15. → oligarchy (if the oligarchy is represented by one person, then we have some preimage of power of "antichrist"); 16. there is no arrow directed toward SG → the anarchy. The need to introduce a new word "socioauthority", which literally means - the power of society, is connected with the fact that the word "democracy" does not involve the participation of a spiritual center in the process of social governance (this fact also follows from Fig. 1), although spiritual persons are fullright members of society. All of these forms of SG, except socioauthority, tend to degenerate into a fascist form of government. And a socioauthority has potential for development. Under certain conditions it can be transformed into the only faithful form of SG, called conciliar socioauthority, wherein it becomes possible to ensure the freedom of action for all members of society, as well as equality, unity, fairness and stability, that is, fully to confirm the FLS. The characteristic features of conciliar socioauthority are the following: 1. The election shall be held only at the local level - in the Local Duma and the Public Chamber, which are formed by the local state and public structures, as well as delegates are sent for the formation of Local Council and the appropriate higher structures; 2. Representatives of the spiritual center as part of the Councils of different levels possess only an advisory capacity; 3. Councils are not authority structures, they are above authority structures: they do not directly interfere with the activity of SS and PS; 4. Councils form strategic vector of movement of society; 5. Councils on their levels have the authority to overrule any decision organs of the SS or PS, if they do not comply with or contradict to the strategic objectives of the society; 6. For people the main becomes not the right to choose, but the right to recall any deputy, regardless of the occupied position.

Now about the methods of economic management. It would be better if not the engineer-physicist elucidated such questions, but a footloose economist professional, that is independent from the dogmas of extreme forms of the market or planned Economics. For example, one of the authors of CES says so: "As an opponent of ultraliberal doctrines, as well as any form of socialism, I remain committed to the market economy[4]. Such an economist is not footloose. Every person is free to hold opinions, but only not a scientist, who is obliged to revise his beliefs under the influence of newly opened laws of nature. I hope that it will be so. I will touch upon only some fundamental issues, for the foundation of science is one.

As long as Sociodynamics of Economics as a scientific discipline is not adequately developed, and the economic lifestyle needs to be changed already today, the following considerations can be used. The planned economy is rigidly administrable, and therefore leads to a restriction of freedom of the citizens, and the free market leads a man to material bondage, and then a man becomes more unfree than under the planned economy, that is, if the planned economy is bad, then the free market is terribly bad. Therefore we need a middle path. Just like a middle path of Buddha precautions us from extremes of asceticism and life for the sake of pleasures, so the median economy should take all the best both from the planned economy and from the free market.

The fifth law of Sociodynamics says that only a joint creation can reveal the inner potential of society, contributing to the increase the stability of society. From this follows that, firstly, any primary natural object can not be the subject of purchase and sale, secondly, the enterprises of primary redivision must be

---

in the management of the society, thirdly, the cost of goods of primary redivision must be governed by the society and in the interests of all society. As for enterprises of the secondary as well as higher redivisions, they can be under management both of the society and of private owners, the difference should be only in the manner and amount of taxation. Thus the society will be able to get away from the pressure and oppression of the anti-human law of supply and demand, which is not cancelled, but: firstly, ceases to be the main and becomes secondary, and the primary and principal becomes the law of necessary sufficiency, of its real provision and availability, briefly - the law of sufficiency; secondly, the law of supply and demand should be subjected to a certain transformation in order to humanise him. This means that the demand is generated not artificially, through advertising and other "hooks", but naturally taking into account the urgent needs of the people.

How to determine the level of sufficiency? How to ensure the production of necessary products and goods? How to distribute them? - the economists of Russia have a great historical experience concerning the issue, and the best of this experience should be and must be used.

The enterprises and spheres of activities that undoubtedly should be in the management of the society, can be determined based on the criteria of completeness. Let us denote them in Table 3.

Table 3. The paramount spheres of activities which are obliged to be under the direct management of society

<table>
<thead>
<tr>
<th>The criteria of completeness</th>
<th>Paramount spheres of activities</th>
<th>Detailed activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impact</td>
<td>Enterprises of life support</td>
<td>Water -, heat -, gas -, electricity supply; enterprises producing goods and products to ensure necessary sufficiency</td>
</tr>
<tr>
<td>2. Motion</td>
<td>Transport Networks</td>
<td>Roads; railways; sea routes; airways; cosmic ways</td>
</tr>
<tr>
<td>3. Rest</td>
<td>Security</td>
<td>Medicine, sport, education, science, the media</td>
</tr>
<tr>
<td>4. Space</td>
<td>Extractive Industry</td>
<td>Energy carriers (coal, oil, gas, uranium, etc.); ore+concentrate+metals; minerals; seafood; forest and other natural resources</td>
</tr>
<tr>
<td>5. Time</td>
<td>Institutions of culture</td>
<td>Museums; theaters; musical institutions; film production; libraries</td>
</tr>
</tbody>
</table>

3. The final conclusion

So, in my opinion the constructive criticism of CES has been held, and in doing so the fallacy of the fundamental assertions of CES and its potential danger are soundly shown. Hence the author relied not on his subjective worldview, but on the objective laws of nature.

References

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. © Arsen A. Movsesyan 27.01.2015