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*Economic Theory*

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# THE WORLD NEEDS A UNIFORM THEORY OF DEVELOPMENT

## Abstract

Today, the mankind finds itself in a very dangerous situation – it has reached the point when its further existence is impossible without a fundamental scientific theory of development and improvement of social systems (production and economic systems, systems of states, and the world as a whole). This caused the author to write this article, the main purpose of which is to show how to arrange social systems at the present time and in the future. Unfortunately, the modern science has no uniform, integrated and complex science that could study social systems fully and comprehensively. It is high time for all technical, social and natural sciences to concentrate their efforts and find their place, their «niche» in studying and arranging the social systems.

## Key words:

cybernetics, development and improvement, economics, economic laws, economic system, environics, functional laws, fundamental theory of social systems development, law of development and improvement, law of organization, manager, natural and ecological laws, nature management, objective laws, production system, society, socio-economic development, sociology, sociological laws, tectology, tectological laws, the state, the world.



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Only the science reveals a wonderful world of the past, the present and the future

Now we need the theory that could become the guide to action

Ideas ripen quicker if practical necessity needs them very urgently

## Introduction

There is a striking resemblance between the beginning of the XXI st century and the beginning of the XX th century in terms of the world's social and economic development. Unfortunately, the mankind has not yet achieved much progress in this direction, and such problems as social inequality, poverty, degradation of entire nations, political opposition, violation of democratic principles, violation of human rights and freedoms are still present even in those countries considered to be highly developed. However, sufficient progress is achieved mainly in technical and biological sciences, and in technology. As for humanities and economic sciences, they have not advanced greatly during one century. There is a large gap between the technical sciences and the humanities. This gap, a distortion, has a pernicious effect on development of the society and the world on the whole. The humanities should go ahead of technology and point to basic directions for the social development. That is why the humanitarian scientists and economists face today the following task – to liquidate this gap and to «catch up» with the technical sciences. That is, it is necessary that the arrangement and the humanitarian, political and socio-economic development of a separate society (a state) and the world on the whole meet the modern technical progress. For this, it is necessary to find, first of all, the theory, which should not only be the theory, but the individual fundamental science capable of showing how to arrange the society, the state and the world not only theoretically, but practically as well.

## 1. The Need for the Science of Environics

At present, the mankind faces a great danger. This is asserted by many scientists of the world. These assertions are not pure assumptions; they are the expression of anxiety for the fortune of the future generation on the Earth.

The danger to further vital activity of the people is connected with hardened political opposition, economic crises, military conflicts, environmental destructions, social and other cataclysms.

The people of the world should be wise in deciding on further development on the Earth. Not only the leaders of all states, parties and the world's scientists bear the responsibility towards the future generation, but every citizen of the Earth should contribute to future development of civilization as much as he can.

At present, the world's scientists face a very acute problem and a primary task – to develop a scientific theory of further development and improvement of the civilization without, or at least with minimal, cataclysms.

It should be noted that the world civilization has been developing and continues to develop by trial-and-error. This method causes great political, economic, ecological, social and other damage both to the state and to the world as a whole.

The time should come for rational development and improvement of all social processes realized in harmony with the nature.

What does the rational human development mean? It is the development when the processes occurring in every state and in the world bear minimal moral and material losses. It concerns economic, political, social, ecological, and other activities. Today, the mankind is also developing, but with great losses to itself and to the nature. Sometimes, total costs exceed the utility of the finished product. If to take into consideration the billions of dollars spent on armament, exessive needs of the weel-to-do in every state, erroneous and arrogant managerial decisions, etc., then the development may be characterized as a negative one. If it continues, then, in the opinion of scientists, the world may degradate and suffer disastrous effects during the nearest decades. Nowadays, the scientists and the leaders of many states face the problem of finding a rational and optimal way for development of the mankind and for keeping the Earth and the nature in their original condition. What regards the development, there are many scientific proposals, projects and variants in many countries. But they all are unsystematic and hasty, and do not contain deep knowledge of the objective laws of social development.

The fundamental science about the development and improvement of the society should be developed by collective creative work of the institutes, scientists, leaders of states, parties and even common but thinking people. And if environics takes off and «makes» the intellectual potential think over the problem of establishing a uniform universal science of development and improvement of human existence, the author's goal will be achieved.

## 2. General Statements

The science of environics has originated on the basis of the century – old practical historic experience of development and improvement of the mankind. Despite natural and social cataclysms, wars, economic crises, mass diseases,

etc., the world has been developing and improving for millions of years. Thus, environics is a fruit of practical experience. The objective material world and mankind are gradually developing and improving. It would be useless to say about a universal science of development and improvement (environics), if the reality itself had not given it a life-giving force and if the practical necessity of its birth had not been felt.

It is obvious that the process of development and improvement of creatures began after they had appeared on the Earth. This process was based on practice and experience. By method of trial-and-error, the creatures got everything that was necessary for their existence and vital activity. In time, there appeared a human creature, whose brain permitted him to get the stage upper than the practice.

By practice and by learning the depth of material world, the man developed a series of sciences which ensure his development, as well as extend and improve the practice. At present time, when the world is rather complicated, he set the tasks to develop and improve the mankind on a global scale. Old methods, points of views, and ways of thinking prove their weakness. A new stage in development of the mankind comes in, and the methods of trial-and-error are no longer acceptable. Needed is a deep fundamental science capable of minimizing the negative phenomena which hinder development and improvement of the objective material world.

It should be noted that nowadays there are all necessary preconditions for foundation of the uniform science about development and improvement of the society and the world. The way to this science is too long and too difficult. This should be a general science, the most humane science that will provide a harmonious development of the man, the society, the world, and the nature.

## 3. Environics in Social Systems and Basic Components of Its Development

Environics should provide a scientific systematization of the world experience of development and improvement of production and economic systems, of society and mankind as a whole. Every creature, especially the man, has a certain experience of his development and improvement. This experience is gained from the very beginning, the birth of an individual. The individuals accumulate their experience through cognition and perception of the environment by all available organs given to them by the nature. The man, as the wisest creature, has equipped himself with the science. As a rule, the acquired experience is systemized consciously, sometimes unconsciously, and it is used for development and improvement in different cases. That is, every living being, and the man of course, has his own little «environics».

Environics of production systems considers the main ways of their development and improvement at the level of enterprises, firms, farm enterprises, building and transport organizations, etc. These systems, being the basic economic cells of any society, are developing and improving on the basis of experience and practical application of scientific methods. As a rule, the states are strong and prosperous if the production and non-production enterprises are profitable and do much for the society.

Environics of economic systems investigates and creates the main ways for development and improvement of the industrial branches, construction, transport, commerce, non-productive sphere, etc. Experience sharing among the states, and the scientific determination of priority industries proceeding from natural and socio-economic conditions are of great importance for every state.

Environics of the society, in defining the main ways for development and improvement of the state, provides a high-degree political, production, economic and socio-economic development of industries, taking into account the interests of every person in the society and conservation of nature.

The use of the methods of environics at the world level will provide rapprochement of political, social and economic development of the states. Integration processes started in Western Europe, North America and other regions are the first steps to integration of the states on the Earth. However, full integration for the mankind's good is possible only after deep learning of the objective laws that underlie the development of social systems, taking into consideration political, national, ideological, religious, cultural, production-economic, socio-economic, and other interests of every state. It is environics that should solve all these problems.

It should be noted that environics is nearly the same at every level of social systems, i.e. the development and improvement of a man, an enterprise or an industry have many things in common in every state. When planning the future development and improvement of social processes, one should take into consideration the national traits, natural conditions, geographical situation of this or that state. However, the universal and general approaches should be almost the same because the objective laws which underlie the development and improvement of social systems are uniform for every state. Thus, environics has the principles common for people, production and economic systems, society and the world as a whole.

Information, language and speech contain elements important for the development and improvement of social systems. They determine the main ways for development and improvement of social systems. Information helps us to learn previous and present historical experience; the word is used to set common aims, to define every man's place and functions, and to mark the perspective development and improvement of social systems. Human cognition and thinking are also organized by means of information, language and speech; it is they that help to accumulate, to concentrate and to share the experience, to accumulate the knowledge, to develop and to improve the sciences. They are the

primary elements of environics that help the man to form the principles both for his development and improvement and for those artificial systems created by him, in particular social systems.

## 4. The Ideas of Environics in the Studies of the World's Outstanding Scientists

It should be noted that many scientists, both of the past and present, have suggested different sciences of development and improvement of social systems. The scientists understood long ago that this science was very necessary. Philosophy was the first science to «fit» this need. Thus, J. Locke, D. Hume and I. Canth tried to turn philosophy into a universal science of cognition, «gnosiology»; they tried to put the human experience torn by selfish, nationalistic, territorial, socio-economic and other interests into a single, scientifically–composed system.

Hegel also worked on a universal methodology to explain the objective material world; he tried to find a universal method of development and improvement of social systems. Hegel's scientific research deserves a proper place; he was among the first who systemized practical experience with the help of dialectics, and he tried to explain social processes from the scientific point of view. It had a great influence on further progress in formation of the universal science of development and improvement of social systems. However, environics cannot be united with philosophy. Having been born in ancient times, philosophy had the character of ideological reasoning, far from practical life. K. Marx wrote that «philosophers only explained the world in different ways, but the point was to change it» [3]. By the way, the modern philosophy and many special sciences are still explaining the world. Environics, leaning on the potential of all sciences created by the mankind, is intended not to contemplate and explain the world, but to change it by developing and improving it. Conclusions of environics should be constantly tested in practice. Objective laws of environics are necessary, first of all, for their skilful practical application after their studying. Thus, environics, as it develops, should have a universal scientific and practical character.

Environics is a general universal science of development and improvement of the objective material world. It is only arising. But it is environics that should show the main ways for development and improvement of the objective material world, having generalized all scientific and practical experience of the mankind. This science is to develop now with great swiftness. Its full flourishing will reflect intensive and efficient development of enterprises, industries, states, integration, mutual relation, harmony between them and the nature.

It should be noted that A. A. Bogdanov in his «Tectology» [2] also tried to solve the problems concerning the development and improvement of social sys-

tems through general organizational processes. He succeeded in his efforts. He suggested the science that showed how to develop and improve social systems through organizational problems. Unfortunately, this science was unclaimed for many years, and it was not for public benefit. Deep cognition and further development of «Environics» and «Tectology» could give the opportunity of eliminating or minimizing the negative processes which occur in production and economic systems, in the state and in the world as a whole at present time.

The problems concerning formation and effect of the science that «works» for social systems in the same way as economics, sociology, technology, mechanics, physics, mathematics, etc. should be set from the point of view of environics, i.e. from the point of view of development and improvement of enterprises, industries, states. The experience in formation of all sciences shows that their popularity and authority are possible only after recognition of their research and development, and their results are necessary both for the science and the practice. That is why every science and practice should consider any actions and processes from the point of view of environics. It fulfils the uniting role in regard to special sciences that «work» for environics using their methods, i.e. for general processes of development and improvement.

Now, the scientists suggest a number of sciences that would deal with the problems of development and improvement of social sciences. But there are no fundamental achievements yet. In the best case, there is a name and a definition of the science. One may agree with the modern social scientists that philosophy and other social sciences have their own goals and tasks, but the development of production and economic systems, the society and the world as a whole need an individual science. We suggest environics to be this science.

## 5. Basic Principles of Environics

A profound theoretical work should be submitted to experimental test and practical approval, and then it will be possible to determine and to study the effect of objective laws of environics. In creating a close unity of theory and practice, environics sets its main task – to systemize the theoretical and practical experience in development and improvement of social systems. Thus, environics should discover the methods available in technical systems, nature and human activities, to generalize, systemize and define those of them which are acceptable, and only after that, mark basic directions for development and improvement of social systems. Environics deals with the experience of functioning of enterprises, industries, society and the world as a whole; in other words, it covers the material of all other sciences and of all life practice, i. e. it uses the intellectual potential of the mankind for its development and improvement.

The merit of environics is not only that it coordinates all the sciences participating in development and improvement of social sciences, but it also stimu-

lates the positive factors observed at enterprises, in industries, in the society and in the world as a whole.

Environics as a science is intended first of all for solving practical tasks using comprehensive research and development. The way of defining the problems in environics is to set the goal of development and improvement of systems. The way of their solution is to provide rational organization of all processes occurring in the systems. The principle of general approach gives an opportunity to control and to develop evenly all the processes occurring in the systems.

Besides, the principle of general approach gives environics the opportunity to «make» all sciences work on the problem of development and improvement of the systems. Embracing the fields of all other sciences, environics forms the base, the necessary support for itself. Environics would be impossible without close «cooperation» with other sciences and practical life. Thus, tectology learns how to organize technological, economic, sociological, natural, ecological, and functional processes in production and economic systems. Such sciences as technology, economics, sociology, management of nature, etc. should be aimed at development and improvement of social sciences. It should be noted that a number of exact sciences, such as mathematics, physics, chemistry, biology is also used by the man. That is, to develop and to improve social systems, environics uses all scientific and practical potential accumulated by the mankind.

The main idea of environics consists in harmonious development of all processes occurring in the material systems, including the social ones. It is an all-embracing science that reveals the objective laws which underlie the development of material systems. To embrace all the processes occurring in the system, to consider all its elements, environics uses the potential of quite different sciences, including both natural and social ones. It is suggested that all thinking people on the Earth should establish a new synthesizing science covering all fields of human knowledge.

If the atmosphere of development and improvement prevails in every social system and in the world as a whole, environics will win recognition. Even the thoughts about destructions, wars, confrontations, etc. should be removed. A person is to be acquainted with the basic principles of environics from the very beginning, the school programme should teach and demonstrate the main ways of human development and improvement.

If in every individual system there is a general vision of the things determining its present viability and its future, it will be able to avoid many negative phenomena. This approach is especially important in the period of technical progress. That is why the increased interest in environics is exorbitant and the processes occurring in production and economic systems and in societies become more complicated. The world's social and economic system also becomes more and more complicated. The knowledge of universal, general and special laws which underlie the development of social sciences becomes especially urgent. If the mankind knows these laws, the political and socio-economic trans-

formation processes in many countries will not be so unhealthy, unreasoned and stupid.

The main principle of environics is the principle of rational approach. It means that every action and process realized by the people should be thought-out, substantiated scientifically, with consideration for practice, and are to be used in such doses and portions which will provide development and improvement of social systems.

The history of human development shows that those states flourished where the political and administrative leaders and the society itself used the principle of rational approach. And on the contrary, the states failed if used right-extreme or level-extreme approaches. Today, in the age of political, military, nationalist, socio-economic, and other kinds of opposition, the principle of rational approach should be of great worth. If the people do not take up rational organization of production and economic systems in every state and in the world as a whole, the social, economic, political crises, wars, all kinds of national opposition, cataclysms will take place on the Earth. It is the human mind that will save the world.

## 6. Interaction in the Objective Material World and Formation of the New Science

The material world surrounding us consists of systems. Every system exists in a certain environment. One of the most important discoveries of the XXth century is a systemic character of the material world, indissoluble connection of the systems and the environment, regular exchange of substance, energy and information.

Systems and their environment could not exist if they handn't the ability to interact. Interaction is an impact of environment on the system and vice versa. The age-long process of interaction is the basis for formation of the new natural and artificial material systems, for creation of natural and artificial environments for their existence.

In result of interaction, complex chemical combinations appear in inanimate nature, changing landscapes and climates. In the animate nature, the interaction of systems and the environment gives rise both to processes of birth, development and improvement and of dying and disappearance, which we observe in the vegetable and animal world of our planet.

Interaction is a necessary condition for existence of the man. With the appearance of first reasonable creatures, the necessity aroused to set contacts between them: between individuals, between an individual and a group (collective), and between groups. As the man improved his implements of production, technique and technology, mutual relations became complicated, and some groups,

collectives or countries developed more rapidly and flourished, the others declined and ruined.

Close connection of the man with powerful technique, technology, economics and ideology, mastering of great military potential brought the civilization into the situation when the interaction in this form may lead the world to degradation and to perishing of the man, the nature and all living beings. That is why the most important task now is to preserve the mankind and the life on the Earth. It is possible to solve this task only provided that all interaction processes are directed to a rational channel, to development and improvement of material systems and the whole objective world.

Having learned the principles and laws of human interaction, it will be possible to protect the man, the nature and all living beings on the Earth from many negative phenomena and to provide the development and improvement of the systems and the environment.

The world-known scientists have always attached great importance to dialectical interaction. F. Engels wrote: «When we subject the nature, the human history or our own spiritual activity to mental consideration, first of all, we see the picture of endless combinations of links and interactions, where nothing remains immovable and invariable, but everything moves, changes, appears and disappears» [4]. And further, «Interaction is the first thing that comes forward when we consider the moving matter on the whole from the point of view of present natural study. We observe a number of movement forms: mechanical movement, heat, light, electricity, magnetism, chemical combination and decomposition, transformation of aggregate conditions, organic life, which all, except organic life, transform into one another, mutually stipulate one another, representing here the reason and there the action, the total movement being the same under all changes of the form. (Spinosa's words – «substance is causa sui» (latin – cause of itself) – express interaction very well)» [5].

Unfortunately, the interaction – an important specific form of substance movement that determines all the ways of the modern world development – didn't become the object of deep and comprehensive dialectical research of modern social scientists. In the best case, the scientists pay attention to significance and importance of interaction processes. «...Interaction as a more general process is a phenomenon absolutely necessary in any type of substance movement form. It's rather difficult to think of anything in our world that doesn't interact. It is an element of all processes» [6].

This form of substance movement is studied mainly by natural sciences, such as physics, chemistry, biology and less by social sciences.

In this work, we make an attempt to substantiate environics as the science that would research the interaction between the material systems and the environment surrounding them.

It's not a new idea to establish the science that could avert many crisis situations arising in result of relations between the nature and the man, between

the material systems and the environment surrounding them. As it was mentioned, the scientists suggest the names and even definitions of new sciences. Among them are natural sociology, noology, noogenetics, global ecology, social ecology, human ecology, econology, economics, modern ecology, Ecology with capital letter, big ecology and so on. However, these proposals do not go further than giving the definitions of future science, though they reflect the barest necessity of insight into interrelations between the nature and the society.

It's hardly believable that the scientists pursue only ambitious aims when they suggest development of the new fields of knowledge in order to solve pressing problems. Their search is motivated by great concern about the fortunes of future generations and all living beings on the Earth. This task is not easy to solve. It goes about foundation of the science that could unite the whole potential of the modern scientific knowledge and interest the reseachers in finding the solution to urgent problems. Will it be possible? Many people will answer negatively. But now, when mankind has to choose between «to be or not to be», it is necessary to do all possible and impossible to eliminate the dangers that threaten the civilization.

It is a paradox, but the world has come to crisis in result of its development. It can be explained by objective and subjective reasons, and they testify to the scientists' direct or indirect participation in creation of this situation.

When analyzing the history of technical progress, one cannot but notice that the foundation of new sciences and theories was always determined by practical necessity. With development of the society, the elements of new science as if appear and become visible in the «entrails» of practice. It has no the name yet, but its laws let know of them in human activities. The scientific and practical workers face the necessity to display, to understand them and to show how they are manifested. It is well known that the ideas ripen quicker if the practice needs them very much.

In 1948, Norbert Wiener announced the definition of cybernetics as a management science, but this did not mean that no one was engaged in management before him. In this case, the necessity was realized to generalize the practice and all researches conducted by different sciences in the sphere of management and to create a new branch that would concentrate a store of knowledge in this field and determine their ideological direction, reveal the laws of cybernetics and the mechanism for their practical application.

Cybernetics, in its turn, has paved the way for making research and development in the field of the systems approach and the general theory of systems. Nowadays, there is not a single branch of science that doesn't deal with systems, their development, improvement or management. Every system interacts with the environment. To control this interaction, it is necessary to know how the system behaves itself under constant change of external and internal environment and to know the factors which have influence on the system and the environment.

In our opinion, environics should study the mechanism of interaction between the elements within the systems and the systems themselves with the environments surrounding them.

This work pays special attention to artificial systems and environments which have a great influence on the present vegetable world (e.g., production systems). Artificial systems and environments have their own laws of interaction, which come in conflict with the laws of the nature and the society.

Social systems refer to the most complicated artificial systems created by the man. Formation of these systems began at the very outset of the mankind. Primitive labour of one man with the help of the simplest implements – sticks, stones – created simple systems. More complicated labour required combined efforts of people in order to do this or that job. Simple implements became more perfect and included more complicated mechanisms and machines.

The production united more and more workers. Plants and factories became larger. With the appearance of trusts, syndicates, etc., the country entered the production and economic activity, and then more and more countries joined this activity through production cooperation and through the system of the world trade. At the present time, one can judge the complexity of social systems by their structure: the enterprise (production and nonproduction firm, farm enterprise, etc.) is a production system, branch is a complex economic system, the whole state is a super-complex social system. In other words, the economy of any country presents a super-complex production and economic system[1].

Division of natural and artificial material systems into systems without regulators or systems with regulators show that the latter constitute the base for vital activity, development and improvement of systems. With complication of the system, its regulators also become more complicated.

It should be noted that the mechanism of interaction in the material world has not yet been explained. Dialectics gave us the idea of substance and energy interactions, and cybernetics added the information ones. But there is no answer to the question how they are realized. For example, the system impacts on the environment through substance and energy, and vice versa. It's important to determine the character of this interaction and the way this process is being realized. Is it the same as pouring of liquid from one vessel into another? But even in this case, the transmission of substance and energy from the system into the environment and vice versa may be slow, quick or in a volley. It is obvious that this process is more complicated because qualitative changes of the system and the environment depend on it. However, at first, a certain amount of substance, energy and information should be prepared and concentrated, and only after that they may have influence on the system and the environment, i.e. there should be a sufficient amount of substance, energy and information to cause a great (qualitative) modification of the system and the environment.

[1] We call all systems created above the enterprise level the economic ones.

It is really so in practice. In order to make some actions, to realize the necessary processes, one should do spade-work that provides accumulation of necessary substance, energy and information. Only then, when the amount is sufficient, the effect on the system and environment is ready to begin.

In the scientific literature, this amount of substance, energy and information is called the effecting factor.

At present, the reasons for different modifications in the science, practice, in our everyday life are explained, as a rule, by influence of biological, geographical, geological, technical, economic, social and other factors. But nobody can explain what the effecting factor means.

## 7. Laws of Environics

We observe an unceasing variety of interactions both in the nature and in the society. In some cases, at first sight, they seem to be unsystematic or even chaotic. But a thorough analysis of these phenomena helps us to see stable essential and necessary links and actions in these processes, i.e. to reveal their law-governed nature. The general law of environics displays the mechanism of interaction of the material systems and the environment surrounding them; the general laws refer to material systems of one type, e. g., production, biological, geological systems, and so on.

This study presents general laws of environics which concern the social systems: general laws, laws of interacting processes and functional laws. Now, let's consider the practical use of these laws. Table 1 presents different levels of social systems which should be developed and improved. Of course, the main figure of every system is a manager (leader, executive). The development, improvement, degradation, crisis or bankruptcy of social systems depend but on the manager. The table also shows what processes the manager controls, how much time he spends for it, what the laws of social systems are and what sciences study these processes and help to exercise managerial activities.

Basic dominating objective laws of development of social systems are the law of organization and the law of development and improvement. In the objective material world, everything begins with organization, and to reach a high level of development of any system, it is necessary to organize it.

The researches have shown that the manager spends more than half of his working time for solving the problems connected with organizational processes and processes of development and improvement.

*Table 1.*

**Processes, Objective Laws and Sciences that Study Social Systems**

| World system (all states of the world) | | | |
|---|---|---|---|
| Society (state) | | | |
| Economic system (branch) | | | |
| Production system (enterprise) | | | |
| Manager (leader, executive) | | | |
| Processes taking place in social systems | Time spent by the manager (leader, executive) for controlling these processes, (%) | Objective laws existing in social systems | Sciences that provide a profound study of the processes and objective laws taking place in social systems |
| Organizational | 40 | Law of organization | Technology |
| Development and improvement | 10 | Law of development and improvement | Environics |
| Technological | 5 | Technological laws | Technology |
| Economic | 15 | Economic laws | Economics |
| Sociological | 10 | Sociological laws | Sociology |
| Natural and ecological | 5 | Natural and ecological laws | Management of Nature |
| Functional | 15 | Functional laws | Cybernetics (forecasting, modeling, norm-setting, planning, registration, control, regulation) |

Environics is a general theoretical science about universal and general laws of development and improvement displayed through processes of interaction of elements (parts) within the systems and between the systems and their environment, i. e. it is a science of development and improvement of the objective material world, all types of systems, including the social ones.

The universal law is the law of interaction. General laws existing in social systems include the laws of organization, development and improvement, technological, economic, sociological, natural – ecological and functional laws.

It is very necessary to put the objective laws of environics into practice after their revealing. These objective laws should be taken into consideration for developing the social systems. It will permit to avoid stagnation, crises, different conflict situations, cataclysms, etc. in development of enterprises, industries, states, and the world as a whole. Besides, environics will ensure scientific sys-

tematization of the world practical experience in development and improvement of social systems in order to suggest the best variants of development to the countries searching for ways to arrange their systems.

The laws of environics have their effect at different complex and super-complex levels of production systems and of the society as a whole. Their observance provides harmonious all-round and goal-oriented development of any social system and the corresponding environment, in particular natural one, reduces negative factors and stimulates the effect of positive factors of the production system on the environment, and vice versa.

Revealing the essence of interaction mechanism gives the opportunity to define the role and importance of the body of laws and every separate law in the development of social systems and the environment surrounding them, as well as the degree of influence of certain processes, namely organizational, developmental, technological, economic, sociological, natural-ecological and functional, on the development of production (enterprise) and economic (higher levels) systems.

Employment of mathematical methods, computers, and facilities for collection, storage and transfer of data permits to learn the laws of environics in all their variety and display.

Learning the laws of interaction gives the opportunity to estimate the blunders and benefits of different systems of economic management and to define the methods and forms of management that can provide better development as compared with other forms.

The laws of environics which underlie the development of production and economic systems are characteristic of all social and economic formations. Moreover, the laws have the features specific for this or that formation. The unity of modern world-wide system of states represents the largest and the most complex production-economic system with its laws of interaction both inside of separate states and between them. The task of the science is to find common points of contact in these complex, sometimes too complex and even antagonist interactions, and on this base to keep the peace on the Earth, to preserve the mankind, the nature, the animal and vegetable world, the atmosphere and to make everything in order to leave the viable and flourishing planet to our future generations.

Environics is intended for liquidating the gap between the humanities and natural sciences, to provide the improvement of production and economic systems on the basis of objective laws of existence and development of the material world. Disregard of any of them excludes the possibility of harmonious development of the social systems and creates preconditions for negative influence.

Though, it is not sufficient just to discover the laws of environics and to understand how they work. It is necessary to disclose their inner interdependence and, thus, their mutual effect. Thus, technological progress is impossible without a new-quality approach to solving the problems concerning organization,

development and improvement of social systems. Economic and social rearrangement of the society in its turn influences the methods of organization, development and improvement, requires accelerated introduction of new technology, and determines a new structure of forecasting, norm-setting, planning, accounting, analysis, control, and regulation of the social systems.

Interaction and interdependence of laws of environics is also traced at the level of states and the world as a whole. They cause many serious problems and their solution is of great importance for every country and for the world as a whole.

One of these problems is organization of the state's economy so that the state could withstand negative internal and external shocks and that the economy and the policy of the state had the "stock of strength" in terms of technical, military and economic potential.

The dynamics of economic development depends on many factors. Thus, the formation and improvement of production systems and the country's economy require not only the rational organization of all economic processes, but also the systematic introduction of the new technology into production, usage of the advanced social and economic methods of economic management, rational treatment of natural resources as well.

In its turn, the development of technology provides economic and military strength of the state. In other words, advanced technology becomes the key factor of economic, social and ecological development.

The solution of some problems, very important for every country, is connected with the economic situation. The problems are production of products and distribution of finished products between the members of the society, reproduction of means of production, economic and trade contacts with other countries, strengthening of the state's economic might, etc. Hence, special attention is paid to the social aspect of interconnection – the relations between the people in the society, attitude towards property, production, other countries, nations, and so on.

Because of many reasons, the natural and ecological problems attract special interest nowadays. The objective of investigating natural and ecological problems is studying of the trends in the mankind's development, relations between the man, the society and the nature.

Finally, the functional problems of management of production and economic systems are of no less importance in the state. The success in solving the mentioned problems depends much on the rationality of such management functions as forecasting, norm-setting, modeling, planning, accounting, controlling, and regulating.

The effect of any law is tested in practice. In this study, we have made an attempt to show how the laws of environics of social systems function and interact in practice.

The modern technical progress and further scientific, technical, economic, sociological development make for development and improvement of social systems. At present, it is impossible to distinguish only one science that might be the leading one in studying these systems. As it was mentioned earlier, many sciences contribute to it directly or indirectly. The task of environics is to investigate the social system as a complex, indivisible, organic mechanism using the accumulated scientific potential.

## Conclusions

Thus, to elaborate the theory, to lay down the foundation for the science of development and improvement of social systems that could generalize the whole scientific potential and the world experience, the science that is of vital necessity at the present stage of development, is a matter of great importance. Having made bold to propose such a science, the author hopes that the scientific public will support these ideas. As a pioneer, the author is to be subjected to critical remarks, and this is quite natural, because the opponents will find some disputable aspects.

We have a strong belief that sooner or later the science of development and improvement of the mankind will appear. But the sooner is the better. The necessity of establishing this science has been ripening in brains of many scientists for a long time. Besides, the time is not waiting, and delay in establishment of the science of development and improvement of the mankind is fraught with serious cataclysms for everything and everybody who lives on the Earth.

We would like to acknowledge that this work addresses the future of the mankind. It includes little critics and disputes, but concrete proposals on foundation of the science of the future that is much talked about, but only in regard to problem definition. We have tried to consider the problem so that to show the trends in evolution of the scientific progress.

In conclusion, it is necessary to note that the suggested science of environics does not pretend to be the truth in the highest instance of the social sciences development. The author thinks that the purpose will be achieved if the suggested theoretical statements make people think, if they give rise to discussions which make a breakthrough on the theoretical front and provide the unity of theory and practice, as well as a complex and integrated solution of the current problems of the mankind.

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