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OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 02 Volume: 82

Published: 29.02.2020 <http://T-Science.org>

QR – Issue



QR – Article



Samar Abdurashidovich Alikulov

Samarkand State Architectural and Civil Engineering Institute
Associate Professor

Ithom Imomalievich Rizaev

Samarkand State Architectural and Civil Engineering Institute
Lecturer
rizaldo@mail.ru

METHODOLOGICAL PROBLEMS OF RESEARCH OF SOCIAL SYSTEMS

Abstract: This article discusses the emergence of synergy and the paradigm of self-organizing systems in the XX century. Special attention is paid to the fact that instability, chaos, entropy, fluctuation and bifurcation differ from the balance of the social system and the methodological problems of systematically studying the social system.

Key words: system, structure, element, non-linearity, spontaneous system, dissipative system, open system, diffusion system, integration.

Language: English

Citation: Alikulov, S. A., & Rizaev, I. I. (2020). Methodological problems of research of social systems. *ISJ Theoretical & Applied Science*, 02 (82), 717-720.

Soi: <http://s-o-i.org/1.1/TAS-02-82-128> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.02.82.128>
Scopus ASCC: 3300.

Introduction

UDC: 66,3(2y) P-51

A view of society as a system does not have a distant past. Book T. Parsons "The system of modern societies" [6; 270] was published in 1971, for the first time with the problem of studying society as a system. However, Parsons argues that the system of modern societies was formed exclusively in Western Europe and denies that society as a system cannot be formed in other parts of the world [6; 11].

This statement was even more exaggerated in the work of M. Weber "The protestant ethic and the spirit of capitalism". According to Weber, rational science focused rational thinking, systemic knowledge was formed only in the West, and the Protestant rational ethics served as the basis for the emergence of capitalism in the West [4; 594-596].

In his book "The open society and its enemies", K. Popper develops this point of view, arguing that an open society as a system was formed only in Western Europe and that such a society cannot be formed anywhere in the world [8; 619].

The English Field Marshal A. Stets brought this idea to an absurdity and argued that the world should be united under the leadership of Great Britain and the USA. This view of society is called holism (Greek holos-whole, holistic) [2; 368]. Holism ultimately defends global claims of hegemony under the guise of a global system.

There are many systems in the world, and which of these systems is society?

Each system must be complete. Separation and fragmentation are the antipodes of the system. In society, politics, religion, economics, etc. cannot exist separately. Consequently, their integrity constitutes a social system. All parts, sectors, functions and functions of society are integrated. Integrity is not a conglomerate. As you know, a conglomerate is an unrelated set of different elements.

A phenomenon that brings parts together is a bond. It is communication (social relations in society) that is the dominant phenomenon of systemic organization. Economic, political, legal, ethical, religious, family, interpersonal, collective, ethnic, national, interstate, international relations prevent

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fragmentation of society and support it in a holistic system. It is no accident that social relations are perceived as the main element of society. Therefore, social relations are an inalienable integrating quality of society. So why do people get into social connections? Abu Nasr Farabi argued that a lonely person cannot satisfy his needs, so they will have to enter into a relationship that will form the core of society [1; 223]. From this, it is concluded that social relations are a self-organizing integrative structure of society.

Any system consists of a combination of different parts (components), that is, it is a heterogeneous integrity. If an object consists of the same elements, this is called homogeneous integrity and cannot be a system. The constituent heterogeneous parts of society: activity, reason, relationships, values, various areas: economic, political, social, moral, religious, spiritual; various historical units: tribe, ethnos, nation; various institutions: state, non-governmental organizations, political parties, associations, strata and groups. It is in heterogeneity that there is a tendency toward development, and there is no development in homogeneity. Only heterogeneous systems are capable of self-organization.

One of the attributes that characterize a system is that the object has a structure. "Structure," writes I. Nikolov, "is the order of some internally stable parts of the system" [7; 50]. Society also consists of certain parts, with relatively stable relations between them, which are often found in one form or another. We cannot change this relationship at any time of our own free will. Social structure is a complex phenomenon, and we will dwell on this in more detail.

Society is an **open system**. Open systems exchange resources and energy with other systems. Has a transforming ability [3; 173]. As a rule, open systems are more likely to develop. This is because they have the added benefit of the energy and bonds of other systems. For example, society contributes to its development through the use of natural resources and energy. Therefore, Popper's opinion that an open society is peculiar only to Western countries is illogical. Some governments may pursue policies such as "closed doors," isolationism, protectionism, and mercantilism to crush and rob their people. For example, in 1753, China proclaimed a "closed door" policy and prevented the introduction of Western capital. But in 1898 he was forced to switch to an open door policy. Japan has also pursued a policy of isolationism since the 17th century. As a result of the "enlightened revolution" (Meiji revolution) of 1868-1878, it became an open society. Today it is the second largest developed country in the world,

introducing new sciences and technologies. This means that open systems are more viable and have more opportunities for development.

Society is a **diffuse system**. Diffuse systems are large systems that do not have clear boundaries, and it is difficult to determine where the system begins and ends. This uncertainty makes it difficult to predict scientific trends. For example, a telephone system is a large system, but its communication technology is understandable and its boundaries are clear. Therefore, it is not a diffuse system. If at least one number changes, the connection will still occur. But in the social systems of the sector, parts, the relations between them are elastic, flexible and variable.

A social system is a **differentiating system**. In additive systems, the number of parts, functions, and relationships in evolution does not change or changes little. For example, over 3 million years, the human body has not produced new organs, two ears four or eight legs. However, new parts and functions appear and develop in society, and therefore, they develop spontaneously. In a primitive society there was no state or social strata, they appeared in a later period, there were no banks or exchanges in the slave system, they appeared in the Middle Ages, in the middle Ages there were no large machine-building and large enterprises, they appeared in modern times and so on. Differentiation not only means the emergence of new components, but also classifies the process of complication. Differentiation: a) adaptation to new conditions; b) the satisfaction of new needs; c) performs such functions as maintaining social integrity and, more importantly, ensuring the gradual development of the social system.

Regardless of how many parts and layers a society consists of, it can survive as a single **integrative system**. If the energy of the parts exceeds the total energy of the whole, the system will collapse (fluctuation). Therefore, system scientists say that the system is always bigger and stronger than the details. In addition, if the amount of external energy exceeds the integrative energy of the system, the system will collapse. The first violates internal homeostasis, and the second violates external homeostasis. An example for the first case is the collapse of the USSR. As you know, the USSR was a chimera¹. It was forcibly artificially uniting people of different religions and nationalities. At the end of their lives, these conglomerate units were subject to fluctuations due to the desire for independence of the republics. The second example, the state of Khorezm shahs worsened due to external influence, that is, from the Mongols. The effect of integration can be negative or positive. For example, the unification of the Mongols had negative consequences, the anti-Hitler coalition

¹ in Greek mythology, a fire-breathing monster with the head and neck of a lion, the body of a goat and the tail in the form of a snake.

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ensured the victory over fascism. Another example, repression in the USSR, the persecution that led to the deaths of 40 million people, while the formation of the United States brought prosperity. Why did this happen? Why did the USSR collapse (1922), and the USA (1776) live on? As mentioned earlier, the USSR was a chimera, it could not live long (anti systems are strong, but they cannot live long). The United States was formed by passionaries² volunteers from all over the world. Therefore, this system has existed for more than two and a half centuries, taking first place in the world for more than 100 years.

As a result of integration, a new quality appears that parts do not have. For example, oxygen and hydrogen are gases that combine to form water; neither oxygen nor hydrogen has the property of water. Also, when people unite in society, new qualities are created that specific people do not have. For example, a person does not have a state, but individuals can join the state. But now the state is a new subject, and its qualities differ (and sometimes contradict) from the characteristics of individuals

The integrative quality of society developed in the course of evolution and is currently being implemented on a global scale.

Society is a dissipative system [3; 53], which not only receives resources and energy from the environment, but also dissipates energy in the environment. For example, as a result of the greenhouse effect, global warming is occurring, causing climate and cyclical changes. Society is a system of dissipative structures that can destroy the old system and reorganize after chaos. In the first case, there is a tendency to dissipate energy, and in the second, a tendency to accumulate energy. Due to the strong dissipation of energy, entropy (chaos) increases, the ability of the system to withstand decreases. For example, a lot of energy was spent on preserving the Timurid Empire; for the sake of the unity of the empire, passionaries laid their heads on the foreign lands. The energy is gone, the empire was destroyed and occupied by the Shaybanids who saved the energy.

Society is a **substantial system**. In non-substantial systems, momentum is directed from parts to wholeness. In substantial systems, on the contrary, momentum transfers from integrity to particles. These systems are spontaneously organized and capable of self-development [5; 176].

A social system is a **unique system** that moves from disorder to order, from entropy to negentropy. In natural systems, the opposite trend is observed. When we pay attention to historical evolution, we observe evidence of this. In the primitive community, family relations took the form of polygamy, and in antiquity

a monogamous family was formed. In religion, there is a tendency from polytheism to monotheism. The legal side of anomie (lawlessness) continues to develop towards the rule of law.

Society is a **complex system**. In complex organized systems, the elements and its components are numerous. Between them there are many connections and at the same time this system itself is divided into several subsystems. There are economic, political, legal, and ethical systems in society, their components are also complex. The complexity of the social system lies in the fact that the phenomena in it occur in the form of processes, and the study of processes is more complicated than the research of stationary objects. Complex organized systems must maintain a certain order (negentropy) in order to maintain their qualitative identity. In these conditions, society will be able to develop. Society is always subject to greater complexity, and differentiation is at the heart of this process.

Society is a **non-linear system**. In the structure of non-linear systems there are different stationary states, that is, different constants, such systems can move in any direction. As a result of fluctuating or external influences, they can pass from stationary to variation states. Such systems can be stable in one situation, unstable in another and can go from one state to another. Therefore, it is difficult to accurately predict their trend lines. In non-linear systems, parts and spheres are qualitatively different opposites that cannot live peacefully in one system [3; 148]. Their internal contradictions lead to chaos, and chaos leads to the collapse of the old system and self-organization of the new system.

A self-organizing system tends to develop spontaneously. According to evolution, the emergence of society begins with the creation of tools, that is, a person first separates from the animal world, creating objects from stone, bones and wood.

The spontaneous new system continued to expand its environmental cell. Initially, australopithecus, pithecanthropus, sinanthropus united in groups and lived in caves, hunting and heating (3 million - 100 thousand years ago). The Middle Paleolithic Neanderthals (100 - 40 thousand years ago) appeared their first religious ideas and funerals. Gradually, they switched to tribal foundations, where the first elements of housing, clothing, morality (taboo) and art are observed. In the Neolithic period (6-4 thousand years ago), agriculture, animal husbandry and crafts arose. This trend has occurred in the course of historical development.

In conclusion, we can briefly say synergetic studies show that the chances of self-organization in

² in the passionary theory of ethno genesis, people with the innate ability to absorb more energy from the external environment than is required only for personal and species self-preservation, and give

out this energy in the form of focused work to modify their environment.

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complex, holistic, heterogeneous, organic, dissipative, open and non-linear systems are very high.

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