



Constructive Dialogue - As a Mechanism of Manifesting the Social Fractal

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Received 24-10-2022	Abstract: In the modern social reality, the growth of uncertainty, nonlinear dynamics and complexity of the environment, in turn, to produce the mechanisms for decreasing it is of urgent importance. In this article, constructive dialogue is studied as a mechanism of social fractal (order) manifestation.	Keywords: Uncertainty, Complexity, Dialogue, Feedback, Synergetic Effect, Social Instability, Social Fractal
Accepted 27-10-2022		
Published 30-10-2022		
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INTRODUCTION

As modern events have shown, the fact that uncertainty and risk are increasing day by day, and their sometimes unexpected negative consequences indicate the extreme difficulty in knowing and managing complex systems. Especially, current nuclear war, terrorism, conflicts in international relations and their dangers show the complexity of these events and processes. The COVID-19 pandemic has hindered the socio-economic development of the country. Uncertainty, social turbulence, and social entropy in the overall system increased and did not decrease. The system reached the limits of instability, critical state. This is the fact that humanity has come to the stage of feeling a strong sense of responsibility and responsibility in its development, which requires a reconsideration of the fundamental problems of understanding and knowing existence. In such a situation, the problem of knowing the complexity, understanding the uncertainty, chaos, non-linearity, various complex relationships, which are considered its characteristics, is of urgent importance. This requires the development of mechanisms for the implementation of social order.

MATERIALS AND METHODS

Philosophical understanding of the nature of complexity, philosophical-methodological analysis of new paradigmatic approaches to its modeling, and thereby the theoretical-methodological analysis of sustainable development directions (positive attractor) of our society constitute a systematic methodology, a fractal approach in the context of the synergetics paradigm.

Analyzing the philosophical and methodological aspects of the perspective of social development of Uzbekistan, which is building a civil society and a legal state, is becoming an urgent task. The year 2017 was declared "the Year of Dialogue With People and Human Interests", by our President. This, in turn, is one of the mechanisms of interaction between the state and society.

There is always a relationship between the state and society. Connections can be made in direct and inverse form. Direct connection is the influence of a governing entity (for example, state authorities) on an object (for example, people). That is, it means control from above. In feedback, it means the reaction of the object to the control subjects in the form of certain effects. That is, feedback is an effect against the object of control, and thus inhibits control. For example, the attitude of the object to the activity of management subjects is implemented in the form of satisfaction or dissatisfaction with their activity. There should always be a reciprocal relationship between the state and society. This ensures the effective functioning of the state, in a word, the social control of the society over the state. The reason is that the feedback mechanism (principle) acts as a control in public administration. If the direct connection is absolute and there is no reverse communication, it will damage the legal relations between the state and the society. For example, it can take the form of despotism.

V. Arnold, an expert in the theory of catastrophes who studies complex systems, emphasized that "control without feedback in the control system always leads to disaster." According

to N. Wiener, the scientist who introduced the concept of feedback for the first time, he evaluated feedback as a "sense of the blind", while French biologist P. Latil considers it as "the secret of the most general order and organization". In a word, through the mechanism of feedback, the real implementation of the goals set for the country and society is supported.

So feedback is an integral part of the system. Feedback is the basis of system self-regulation, system development rate growth, system adaptation in changing conditions.

The feedback principle was applied by Norbert Wiener to the study of self-regulatory processes. In reverse, the cause affects the effect, and the effect affects the cause. We see a similar idea in the views of the French philosopher Leger-Marie Deschamps. According to him, "everything comes from one thing and one thing returns to another."

There are two types of feedback: negative feedback (balancing feedback) and positive feedback (augmenting feedback). In it, as a negative feedback, it suppresses possible random leakages, suppresses them and simply stabilizes the system. Positive feedback was considered to be a mechanism for increasing leakages and fluctuations.

Donella Meadows gives the following examples of negative feedback (balancing feedback): "balancing feedback improves the system's ability to self-regulate. For example, preventive medicine, exercise, and good nutrition support the body's resistance to disease; the law on freedom of information limits the authorities' ability to hide and block information; Taxes, fines and other payments for environmental pollution are secretly used for income and encourage society to incur additional costs and expenses" [2, 128]. So, negative feedback is a mechanism that serves to maintain stability in the system.

One of the most basic concepts in the synergetic paradigm is synergy or the law of synergy.

The concept of synergy comes from the Greek word meaning "syn" - "together", "ergeia" - "effect", "labor", and is characterized by the interaction of two or more factors in a cohesive, cohesive way, showing a certain effect. According to the law of synergy, the effect of the effect of the sum of their components is greater than the result

of the effect of the interaction of each of the components of the system. As for the application of the law of synergy in the economy, "the merging, integration of individual parts of a holistic system can be understood as the efficiency of activity at the expense of a systemic effect or emergency, ie the emergence of a new quality in the system. [3, 495].

In short, it means a direction of joint, concerted action of several complementary factors towards a single goal. This instability contributes to the self-organization of the system in conditions of uncertainty. Otherwise it can manifest itself in a state of dissynergy in the system. In the case of dissynergy, there is no integration in the system. This situation causes conflicts in the system. According to the law of dissynergy, the sum of the parts of a system is smaller than the whole. That is, like $1 + 2 = 1$, $1 + 1 < 0$. Simply put, the efficiency of the functioning of the whole system decreases as a result of the negative interaction of the elements entering the system without mutual agreement with each other. This is reminiscent of the "crane-scorpion-fish" scenario.

For example, the efficiency of joint ventures of firms, firms, or companies is greater than the sum of the efficiency of their separate operations, or the advantages are more efficient. That is, the benefit / profit in a merger of two firms or companies will be greater than the sum of the total profits when they are separate. R. Matthew distinguishes two models of the source of the manifestation of the synergetic effect in the economy, as above: subadditive and superadditive[4].

In this case, according to the first model, the function has a subadditive property, such as $F(x_1 + x_2 + \dots + x_n) \leq F(x_1) + F(x_2) + \dots + F(x_n)$. If the value of the function of the sum of the variables is less than or equal to the sum of the values of the functions of each variable. In the second model, the function has a superadditive property, in which the formula $F(x_1 + x_2 + \dots + x_n) \geq F(x_1) + F(x_2) + \dots + F(x_n)$ is appropriate. The subadditive nature is to reduce the total costs of merging companies (increase capital, employee duplication) while maintaining the existing sales volume. The nature of superaddictiveness is to increase profits by increasing sales. Hence the synergistic effect gives the sum of these two models. $S = F_1 + F_2$, F_1 -subadditivity, F_2 -superadditivity [5].

Indeed, in the first model we see the principle of partial superposition. That is, "the result of the combined action of two different

factors is a simple superposition of the effects of the separate effects," the closedness of the system in the external environment and its development lies only in the numerical changes, gradual, linear, non-alternative, ie. In the second model, it is seen that the principle of superposition is not appropriate in part (a situation that is not equal, but large). It exhibits a synergistic effect.

The subadditiveness of costs in an integrated economic system is characterized by a decrease in the total cost of production relative to the cost of production of individual enterprises until they merge into a single structure [6, 219-222].

Applying the concept of synergy to the field of economics, I. Ansoff considers that "the income from the self-use of resources is treated as a phenomenon that exceeds the income from the separate use of resources, and gives the effect of $2 + 2 = 5$ " [7].

For this reason, the synergistic effect in the sectors of the economy affects the efficiency of economic activity, which in turn is a powerful methodological tool for the effective functioning and development of the economy as a whole.

The synergistic effect can have a positive or negative effect on the system. From this it is possible to distinguish between a positive synergistic effect and a negative synergistic effect. $2 \times 2 = 5$ in the positive synergistic effect, $2 \times 2 = 3$ in the negative synergistic effect. This can be especially evident in innovative development.

RESULTS

What is Positive Feedback (or Augmentative Feedback)? Positive feedback is a source of growth and even disruption in the system, accelerating the pace of development. If the rate of growth in the system is not controlled, the positive feedback eventually leads to pathology - breakdown of the system. Hence, positive feedback is controlled by negative feedback [8].

For 2017, our President Sh.M. Mirziyoev named the country "the Year of Dialogue With People and Human Interests". This dialogue mechanism continues today.

When analyzed from a philosophical point of view, this year is a clear example of the fact that it is based on the principle of feedback. That is, the relationship between the state and the people means the relationship between them. The

organization of public receptions or portals of public services in the places of state institutions ensures the manifestation of two-way communication between the state and the people. This, in turn, is a mechanism that guarantees changes in public service for the better. But sometimes the following situations may occur:

In order for the system to organize itself, it needs freedom. But this may not always happen. The existence of conditions for self-organization is frightening for some, that is, it can threaten their existence. For this reason, in some cases, the government does not want its citizens to organize themselves. Even the possibility of self-organization is limited by law and order. As a result, inevitable order reigns forever, there is no creativity, etc.

So, the mechanism that reduces instability and chaos in our social life is the feedback principle based on mutual dialogue. This in turn creates a social fractal. Social fractal is a certain arrangement of the social system, mutual similarity of parts and the whole, a process of constant formation. Constructive dialogue represents a social fractal and serves as a mechanism against social chaos. What is a fractal?

First, fractals reveal the structure of chaos [9]. Second, fractals are basically a new language that expresses the appearance of the form of chaos [10]. thirdly, he analyzes the thinnest structure of fractal chaos and explains the origin of order in it [11]. Fourthly, fractal gives an opportunity to find order in chaos [12]. So fractals are part of chaos. Fractals exhibit a chaotic state in that they have irregular and random characters. An attribute of fractal deterministic chaos was calculated. A fractal is a self-similar structure in which each part repeats its progress (cyclical property), a recursive pattern that also manifests itself in the progress of the whole. So, fractal is a specific model of complexity research.

CONCLUSION

In short, the uncertainty, nonlinearity, unpredictability of the current modern reality, in a word, the complexity of events and processes, nonlinear dynamics, in turn, it is required to develop mechanisms that reduce it.

The concept of social chaos is considered by most people to be synonymous with chaos and uncertainty. However, this is not always true. How chaotic can Chaos get? Chaos also has a certain

order and obeys a certain law. But finding this law is complicated. The goal of studying chaos and fractals is to find patterns in this unknown and absolutely chaotic system.

In our opinion, constructive dialogue based on the principle of feedback serves as a mechanism for revealing the social fractal (order). Today, all mankind is required to conduct its activities based on the principles of constructive dialogue, global ethics, and humanism.

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