

ANALYSIS OF CULTURE IN A CHANGING WORLD IN THE VIEW OF THE EVOLUTION IDEAS

АНАЛИЗ КУЛЬТУРЫ В ИЗМЕНЯЮЩЕМСЯ МИРЕ В СВЕТЕ ИДЕИ ЭВОЛЮЦИИ

FİKİR EVRİMLERİ BAĞLAMINDA DEĞİŞEN DÜNYADA KÜLTÜR TAHLİLİ

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ABSTRACT

The dynamics of evolutionary processes and their respective theories culture and its corresponding elements are determined basing on the system of evolution elements. The analysis of culture in the changing world must include studying the corresponding evolution elements of culture in a proposed scheme. The feedback mechanisms and "renewal" of culture are elements of the scheme. Besides, an explanation (referring to the biological analogues in connection with the discovery of variable and constant parts in the genome of species populations) to conservative tendencies in the evolution of culture in the epoch of globalization has been suggested.

Keywords: Culture, Evolution, Population, Ethnic Culture, Globalization.

АННОТАЦИЯ

На основе системы эволюционных процессов и соответствующих им теорий элементов эволюции рассмотрена динамика культуры и определены соответствующие ей элементы. При анализе культуры в изменяющемся мире наиболее важно изучить те элементы эволюции культуры в предложенной схеме, которые связаны с механизмами обратной связи и «возобновлением» культуры. Также дано объяснение (со ссылкой на биологические аналогии в связи с открытием изменчивой и константной частей генома популяций видов) консервативных тенденций в эволюции культуры в эпоху глобализации.

Ключевые Слова: Культура, Эволюция, Популяция, Этническая Культура, Глобализация.

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ÖZET

Kültürün evrimsel süreçlerini ve ona uygun farklı alanlarının teorilerini tahlil ettiğimizde kendisinin düşüncelerin ana unsurların toplamı olduğunu görürüz. Bütün bunlar kültürel evrimin esas çekirdeğini, oluşum şartlarını, faktörlerini, hareket güçlerini, geçmişle ilgili mekanizmalarını, işleyiş ve bilgiyi taşıma sistemini oluşturmaktadır. Bütün bunlara dayalı kültürün seyri tetkik edilmiş ve ona uygun unsurlar belirlenmiştir. Değişen dünyada kültür tahlili yaptığımızda teklif edilen şemaya uygun olarak geriye temas mekanizmaları olan ve "yenileme" (kültürün yeni şartlara göre karşılık vermesi) denilen evrimsel unsurların incelenmesi gerekir. Ayrıca farklı toplumların genomların sabit ve değişen kısımları üzerinde yapılan biyolojik araştırmaların sonuçlarına dayalı küreselleşen dünyada kültür gelişimin muhafazakar eğilimleri açıklanmıştır.

Anahtar Kelimeler: Kültür, Tekamül, Toplum, Etnik Kültür, Küreseleşme.

1. The evolution idea that went through all history of a human society is a part of scientific picture of the world and world outlook. Its influence came to its peak after the publication of Charles Darwin's "Origin of species" in 1859. The theory expanded further than the area of biology. Starting from the end of 19th century, biological analogues became widely used in different areas, including technical and humanitarian ones. For example, it is G. Simmel's "the philosophy of life" (Ionin, 2001: 46), "the philosophy of technology" (Gorohov, 1998: 13). In the 20th century the tendency continued trying to introduce different phenomena as biological in their nature, which was not always correct.

The researches of the last decades in the areas of biological evolution, as well as technological and cultural processes, allows making some assumptions about philosophical generalization of evolutionary processes in general.

2. Starting from the analysis of evolutionary processes and corresponding theories, let's formulate a list of basic elements, helping to see the existence of evolution in different systems. In every evolution theory, model or concept, the following logical elements connected with each other must be present:

- A fundamental evolution cell
- The starting conditions of evolution
- Evolution factors
- Evolution movement forces
- Feedback mechanisms
- An control system of evolution
- An evolution information carrier

A fundamental evolution cell is an object of evolutionary changes, found on different levels of nature's organization. The object is one of the main ways to determine nature's level of organization. The regularities of evolutionary changes as a (complex of evolutionary processes) are especially visual for it.

The starting conditions of evolution do not manifest themselves in every event, as well as the final conditions of evolution indirectly connected with them. In some cases they are

especially effective, destroying a large part of Earth biosphere, as it happened at the end of the Permian (approximately 250 million years ago) or the Cretaceous periods (65 million years ago).

Evolution factors are some new processes, physical fields, systems, technical solutions, collecting of resources. All of a sudden, some planet spheres, or a part of the population or a cultural society fall under the influence of radiation, the joint effect of heavy metals, the charismatic activity of a prophet or a scientist. As a result, a new tendency is created, or some new attributes of the system appear and let it to adapt to new circumstances, and so on.

Evolution movement forces make the evolutionary process possible on all levels of nature. Classic evolution movement forces were investigated by the Darwinism and Modern evolutionary synthesis (the second, classical stage of the Darwinism). These are mutations, population waves, some kinds of evolutionary isolation.

Feedback mechanisms are different on all levels of nature's organization, but their basic algorithms are similar. Feedback mechanisms accelerate the evolution process, make it especially versatile.

The control system of evolution exists on almost all levels of nature, but it is especially visible in the areas of mechanics and technology, and in cultural sphere. Here we should pay special attention to subjective and objective areas of culture, as they are considered in details later. A human being started an active interference into an evolution process. The main question here is to find the limits of such interference in nature mechanisms. If it is not destroying the main natural rhythms, it can be quite acceptable.

An evolution information carrier plays an incredibly important role in an evolutionary process. It is present on any level of an evolutionary development. The best examples of such a carrier are genetic and cultural codes. They are especially stable, providing the reproducing of ontogenesis and cultural artifacts during a long period of time.

3. Taking into an account the culture dynamics described by V. M. Rosin, let's study culture development as based on the given integrity of basic evolution elements and make sure that it is possible to talk about the evolution of culture. "There is an analogy between culture functioning and the life of the population. Some social organisms (tribes, nations, kingdoms, later states) are functioning in borders of their culture, they are somehow similar to biological populations. They struggle for their territory and resources (by means of wars, threats, invasions, etc), destroy each other or cooperate and achieve expansion. It is possible to name several large social populations in every culture (for example, Egyptian and Sumerian cultures in ancient world)" (Rosin, 2001: 227).

A population is a fundamental cell of a biological evolution. By analogy, it is possible to consider a social organism (an ethnos, a nation, a state) as a cell of a culture evolution. Genetic mutations, abrupt changes of environmental conditions leading to the extinction of the old and emerging of new ecological niches, are starting conditions of the biological evolution.

"Starting notions and realities, as well as social practices, can become a basis and a precondition for forming the culture as a social organism. Within the framework of the distributed whole that is characteristic for an appearing culture, basic culture scenarios and social institutes, life support and culture development systems come to life. Basic culture scenarios are created by a human, answering the challenges of the time" (Rosin, 2011: 237).

Thus, forming basic culture scenarios is a starting condition for cultural evolution. It is especially necessary, when the existing rate of culture's development is getting behind other areas of society's progress, such as technology, economy, science.

Evolution factors are the events, defining the direction, speed and stability of the evolution. They make a connection between a control system and an evolving object. If the factors in biological evolution are heredity, variability, isolation, horizontal passage of evolutionary information, basic culture scenarios are the factors of culture evolution. "Those are invariant representations, providing the reproduction of culture during all its existence cycle". Next, "in the ancient world basic culture scenarios were set with the help of myths, later this role was undertaken by the concepts of philosophy, science, religion. As long as culture's core is constant, basic culture scenarios are functioning, providing the realization of the basic culture processes (Ibid.).

Evolution movement forces are the impacts that make possible any system changes and even the existence of the system itself. They are also the sources of energy, matter and information. As far as the biological evolution is concerned, natural selection is such a force (though it is rejected by the ecosystem theory (Nazarov, 2005:438)), as well as nature disasters and poor environment resources. The force moving culture evolution (except outside cataclysms) is the tension between existing basic culture scenario and the antisenario that is coming to life. Such a situation appears when "a functioning culture becomes more complicated, and a contradiction arises between a basic culture scenario and a real culture formation. The appearance of "antisenarios" in culture starts the process of its death, together with the crystallization of new culture focuses" (Rosin, 2011: 254).

Feedback mechanisms provide an interconnection between results and starting conditions of the evolution. Thanks to its feedback mechanism, the evolution becomes a more purposeful and non-random process. The direction of the feedback is opposite to the evolution. Feedback mechanisms in biological systems realize as environmental changes that are due to the activity of the living organisms and themselves become an evolutionary factor.

As V. Rosin points, it is necessary to distinguish between "culture reproduction" and "culture regeneration". "Within the framework of culture reproduction, any differences of circumstances are ignored, and the task is put to replay exactly all culture realities. On the contrary, culture regeneration is a reaction to new circumstances, new opportunities. Surely, culture realities are restored, but from the very beginning, in another way, in other conditions" (Rosin, 2011: 237). Thus, culture regeneration in changed circumstances is a feedback mechanism in culture evolution.

Evolution controlling mechanisms take different forms depending on the system's organization level. Evolution controlling system includes the elements of higher organizational levels than the evolving object itself. The influence of a human on biological evolution, its course and perspectives increases from past to future. Biological evolution can become a controlled process. With the help of effective control system, evolution becomes faster and able to use energetic, informational and material resources more effectively.

As it was mentioned above, the contradictions between a basic culture scenario and a real cultural life can destroy the culture completely. The role of a human, a personality and all society in preservation and controlling cultures increases in the course of the evolution.

An evolution information carrier for biological systems is hidden in a living cell core. Hereditary information is encoded in nucleic acids. Some researchers were carried out to find an elementary information medium in culture evolution studies. We can mention some attempts to introduce basic culture units. For example, the term "meme" – a discrete unit of culture evolution accumulating and transporting cultural information. Corresponding to the idea, memes propagate in human population, passing from one brain to another with help of the process called imitation. So, memes are a power forming culture evolution. "Melodies, ideas, popular words, phrases, means of cooking soup or building an arch, etc. can be examples of memes" (Cheek, 2000: 117).

Thus, it means that culture can really evolve. Besides, culture is able not only to be reproduced during its lifetime, but to regenerate. Culture regenerates when its system changes and acquires new possibilities. In modern time, all existing cultures are, to different degree, vulnerable to their changing environment. Cultural realities reproduce rather differently as a result of the feedback mechanisms. However, culture cores stay intact, as it is in present. Although globalization tendencies can be found in many areas of human activity, cultures are still not easy to integrate.

4. Many scientific results, helping to explain conservative tendencies in evolution, were acquired not long ago. The results of biological research by U. P. Altuhov and U. G. Rychkov attract the largest amount of interest. "According to their research data, in all investigated populations, the monomorphous invariant proteins can be found together with the polymorphous protein markers of corresponding genes. Approximately, 1/3 of the researched locuses belong to polymorphous part of the genome. The remaining 2/3 of the genome do not show any variability, do not allow to learn anything about genetical divergence of the population. That's why, they are not considered by traditional methods of population-genetic research. The monomorphic part of the genome includes specific signs of the species with a high rate of constantsy" (Nazarov, 2005: 388). Later, the author noted that biological systems of any complication are organized due to common principles, according to the systematic approach. Any biological system is divided into components that differ in the level of their resistance to external agents. In other words, modern science shows that the genomes of biological systems consist of variative and conservative (static) parts.

Using this conclusion, let's suggest that culture (or its information unit) can also be divided into static and variative parts. The static part is more fundamental and large-scaled. It becomes possible to understand one of the global world contradictions. Almost all the areas of human activity are integrated, but, on the contrary, cultures diversify as much as possible.

It's been proved by nowadays that full isolation of culture from other societies or states leads to its degradation and death. On the other hand, the interaction of cultures must not be left to spontaneous, uncontrolled forces. The docking stations between cultures can harmonize their developing interactions and provide wider educational functions. The representatives of the culture in modern circumstances must possess enough knowledge about the people from other cultures, especially neighboring ones. Cultural codes and main concepts of each culture must be translatable and understandable for other ethnos members. They must be translated to corresponded languages accessible to other forms and types of the world views. A large amount of experience has been already accumulated here, it must be generalized, systematized and researched as deeply as possible. Modern culture can't be

isolated, otherwise being doomed to stagnation and chronically far away from modern world realities.

That's why, culture must be an open system to possess a possibility to evolve. An open system is the system which can exchange energy and information with environment. The modern scientific picture of the world is based on the concept of dynamic chaos (dynamic order). Dynamic chaos (order) emerges only in open systems with abundance of information and energy. It contributes to forming of dynamic balanced structures as a result of self-organization processes. The algorithm of holistic structures emergence is similar on different levels of nature, society and humanitarian sphere (Arshinov, 1999: 163).

Some cases of culture transformations in modern circumstances can be shown by the Republic of Sakha (Yakutia), Russian Federation. Cultural and educational processes constantly deepen and widen there. Firm cultural traditions, sung in the famous native epos "Olonkho", had been formed in Yakutia. These are such traditions as harmony, aspiration for kindness, zealous struggle with evil. The culture of Yakutia is able to play an important role in the formation of a planetary culture network (Kozhevnikov, 2010: 304).

"To think globally, to act locally" - the motto of the Club of Rome is becoming an idea to express the essence of glocalization. First, it appeared in the 60s of the past century, but became actual for comprehensive and consistent research not long ago. The term "glocalization" was proposed by the British sociologist R. Robertson. He claimed that global and local tendencies "finally are complementary and interpenetrating each other, but can come to collision in specific situations" (Robertson, 1999: 31). "Glocalization, by the determination of A. Morit, matches the scenery of "a decentralized and just world", combining the processes of local culture modernization with the achievements of global multicultural civilization" (Malinovsky, 2002: 19).

Thus, we can conclude that all the cultures in the modern world are affected by two main tendencies. They all must complete the process of self-identification, so as specifying their borders and becoming transparent and most determined for the members of other cultures. The further development of the humankind must base on the integrity of connected cultures. Thanks to that, it will gain more stability, as the biosphere is basing on ecosystems, as well as on bio- and geocenoses. From another point of view, traditional culture cores must be kept intact as distinctive fundamental elements. Synthetical unity of a humankind culture must combine the global heritage and gifts of unique traditional cultures.

A static (or conservative) part of culture is ethnical culture, the most ancient layer of national culture. It is materialized in literature, art, science, philosophy, social-politic and technological development of the society.

"Ethnic culture carries in itself the traditions of our ancestors, embracing, mainly, the sphere of labor and mode of life: its traits are revealed in speciality of food, dress, folklore, handicrafts, medicine and so on" (Kulturologiya, 2005: 298). Conservatism and lineage are the characteristics of ancient culture and its values. They are a culture core, less vulnerable to culture integration process. "Ethnic values are an integrity of culture traditions, which are chosen by the ethnos itself as the most specific ones, marking its historical and cultural singularity. The basis to form a system of ethnic values is historical and social experience of ethnos' collective life" (Ibid.: 367).

Thus, the analysis of cultural dynamics based on the suggested integrity of the main evolution elements let us make a conclusion that the most important role is played by such elements as controlling culture evolution and feedback mechanisms in coevolution of different cultures in the changing world.

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