Philosophy of ecologized economics

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Abstract. The ecological crisis goes a long way back and has been brewing for centuries. The main factors of human alienation from nature: technical progress; suppression of pagan culture, that used to be tied to nature, world religions; spread of atheism; consolidation of the positivism paradigm in scientific methodology; triumph of the market economy model. As a result, humans were pulled out of their natural environment. They live and work by rhythms and rules contradicting natural laws. The result is the growing global crisis of industrial civilization.

1 Introduction

Industrial society has exacerbated environmental problems to their limit. Back in 1992, Professor of Georgetown University, USA, Dr. Murray Feshbach, published the book *Ecocide in the USSR: Health and Nature Under Siege*. There, he made an attempt to analyze data on the ecology and health of the population. The book's overall result was inauspicious: the population of Russia is threatened with environmentally induced degradation and extinction [1].

Evident is the "alienation of nature" as one of the types of alienation, described by K. Marx. The essence of the theory of alienation is that the external environment, as well as artificially created nature, are included in the production process, humanized, transformed by human labor. At the same time, the laws of nature are transformed from the prerequisites and conditions of production into hostile, destructive forces. What is important is methodology of the question, and above all the root causes of the problem. They can be found both in technical progress and in the areas external to the economy – politics, spirituality, etc. Having outlined the solution to the main issues, we can finally focus on a specific necessary mechanism.

2 Literature overview

There are quite a lot of research papers on the problems of interaction between ecology and economics. As a whole, articles indexed by the Web of Science in recent years can be divided as follows:

1. General approach – environmental pollution [2], green economy and relationship with politics [3], impact of globalization [4], at the level of methodology and global economics theories [5];

2. On more specific issues: interaction of the economy and the environment with a positive (also in terms of economics) effect [6-7], water systems [8], agriculture [9], COVID-

19 pandemic [10], architecture and design [11], territorial aspect [12], international cooperation [13].

The largest group of papers is concerned with interdisciplinary scientific relations [14], the problem of culture and morality for solving environmental issues [15].

The papers indexed in the e-library over the last 6-7 years can also be divided as follows:

1. field-specific – industrial agriculture [16], legal issues [17], civil engineering [18], subsoil use [19], waste reduction [20], pedagogy [21];

- 2. within the framework of the traditional market approach to the economy [22];
- 3. on state regulation of problems, in particular, on financial instruments [23];
- 4. on improving sustainability and efficiency of natural resource use in general [24];
- 5. quite a few are engaged with the issue of innovation and the latest technology;
- 6. some authors write from the standpoint of sustainable development [26];

7. less (although more often compared to previous decades) is spoken about the need for a systematic approach [27] and building a new type of ecologized economics in view of the crisis of the old, industrial, consumeristic type of mass production and consumption [28];

8. very few speak directly about the problem of culture and morality for solving the environmental issue [29].

Thus, we observe a shortage in comprehensive study of the problem covering not only technologies as factors of environmental risks, but also industrial (institutional, social) relations, linking the problem with the industrial production crisis and the transition to a different type of social reproduction. A deeper analysis will bring the researcher to a philosophical level of understanding, and the predicted tendencies and recommendations for managing society, which are of a systemic nature, must inevitably take into account social psychology, rooted in the depths of mentality and mass culture.

3 Materials and Methods. Analysis and Results

Mainly, the systems theory, method of scientific abstraction, formal logic, dialecticaltheoretical methods, method of empirical analysis, and other economics methods were applied. We used the concept of the equilibrium paradigm as the methodological basis.

The main results of researching.

1. As the initial principle of constructing the concept, following the example of classical economists (A. Smith, K. Marx, etc.), we took the anthropological principle, i.e. the initial ideology should proceed from general ideas about human nature. As we have argued earlier, a human is a social, spiritual, and biological being, since they have characteristics generated by society, nature, and spiritual forces [30. P.101]. Hence the main statement of the equilibrium paradigm: it is necessary to restore the lost equilibrium of man with nature, society, and God [30. P.85; 31. P. 373]. Equilibrium here is viewed as maintaining the quality of the system, i.e. its founding elements and connections between them. This paradigm's necessity and essence stems from the deepening global crisis, i.e. systemic crisis of industrial Christian civilization, covering the economy, ecology, social relations, and spirituality. The Positivism paradigm prevailing in modern science was created in the 1830s-40s by Auguste Comte and is reducing scientific knowledge only to accurate, observable, accumulated, and verifiable information. It has exhausted its capabilities, since it is an obstacle to obtaining new knowledge not exactly meeting the described criteria. Therefore, the separation of science from religion, culture, and morality led to a rapid growth of technical progress, while creating global risks throughout the whole world, including above all others the environmental ones.

Therefore, the topic of this paper is identifying the root causes of the loss of the former balance between man and nature, not only as an environment or a source of resources, but as an ecological niche or habitat. 2. The first, initial, reason for the alienation of nature is inextricably linked to the technical progress. Hunting and agricultural types of economy were built into the natural environment. A human was afraid (maybe excessively) to go beyond its limits, the conscience was syncretic, believing in mystics and magic. Eventually, the artificially created environment (especially industrial technology and related sciences), for no less than 100 years, freed humans from their direct dependence on the natural climatic environment and created a tangible foundation for leaving it. However, given that many processes tend to cycle, it is possible to assume that a dialectical return to nature may occur at a new spiral of progress.

Technological progress, especially accelerated by the industrial production, has generated a lot of negative side effects (negative externalities). Humans have been long living in the artificial environment, from the moment about 20 thousand years ago, during the final period of the Younger Dryas glaciation, when they left their caves and began building their first artificial houses, usually dugouts or semi-dugouts. And while to do so for thousands of years natural materials were used – primarily wood and stone, in the twentieth century they were replaced by a plethora of artificial building materials using a variety of chemicals. The result is well-known – the spread of cancer, allergies, and other diseases caused by radioactive and other harmful elements.

According to the research done by biologists, physicists, and medical doctors, a discrepancy between the internal and external electromagnetic environment of a person is possible. Experiments with water show the negative impact on its energy by various electromagnetic devices – plasma TVs, computers, cell phones, microwave ovens, etc. [32]. This can especially harm the health of children whose cranial bones have not yet developed sufficient thickness. This issue is gradually being resolved. In particular, the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing adopted new sanitary rules in the field of child education and upbringing, stating that minors are now prohibited from using smartphones for the purposes of education [33].

3. The mass junk food industry creates addiction to certain ersatz foods, the constant consumption of which can lead, at least, to poisoning, or, worse, to dangerous diseases such as oncology (coffee, sweets, hot dogs, etc.). Food, medicine, clothing, household items, building materials for the sake of cost reduction and convenient mass production contain more and more artificial, chemical-based components, which also potentially contradicts human nature. Thus, according to TV presenter Dr. A.L. Myasnikov, today 200 million people on Earth are diagnosed with prediabetes. This is the initial stage of type 2 diabetes, which develops in adults due to the consumption of unhealthy food. Since the late 70s, the food industry began to produce left-handed glucose as sweeter and therefore applicable for the confectionery industry. However, our body is used to the other, right-handed, glucose. As a result, blood sugar does not enter the cells. Cells are hungry for energy – and blood sugar decomposes into acetone and poisons the body. In order not to die from poisoning, you need to follow a strict diet and take certain pills. Otherwise, you'll develop real diabetes. This is an example of the market being an economy without conscience.

4. There is a separation from natural cycles, violation of daily and other life cycles that have a cosmic origin. The use of electricity has practically erased the shift between the times of day, which, in addition to purely technical progress, has greatly increased human capabilities by creating industries with a continuous cycle (metallurgy, chemistry, transport, medicine, all security services, partially trade, entertainment industry, etc.). However, separating a person from natural rhythms is manifested in the discrepancy between their individual life cycle and natural cycles, e.g. daily, seasonal, etc. All this, especially paired with unhealthy pastime, leads to the risk of various health problems. Due to the lack of sleep, a person can make grave mistakes, even the ones leading to severe casualties.

5. For a long time, humans were engaging into unhealthy habits that animals do not have – smoking, alcohol, drugs, overeating. Throughout the history of mankind, from time to time

the cult of physical pleasure intensifies, tearing humans away from reality, making them dependent on their vices and bound. Obesity leads to excessive strain on the heart, and the abuse of alcoholic beverages and tobacco leads to liver cirrhosis, lung disfunction, and other diseases.

These are only several of the most striking negative consequences of technological progress and spreading urbanization generated by the industrial production system and artificial (mainly urban) habitat.

6. The spread of modern world religions also contributed to the alienation of man from nature, since their followers did their best to destroy pagan cults. Pagan religions are, first of all, the worship of nature, where humans are inextricably linked with all of animate and inanimate life. Actually, all life in paganism is considered to have spirit and a person is supposed to treat it accordingly. This means numerous prohibitions (taboos), including many environmental ones. Christianity, and later Islam, proclaimed man to be created in the image and likeness of God, and therefore, the master over other earthly creatures. The next step from here is to proclaim man the ruler of nature. In fairness, it should be pointed out that Islam retains some environmental provisions. For example, during the Hajj (pilgrimage), you cannot pick the grass, and killing animals is only allowed in self-defense. Christianity, on the other hand, ignored the issue of environmental conservation, and various magical actions in relation to animals, for example, during a hunt, are denied as superstitious. At the same time, paganism returned the favor, since Christianity absorbed elements of local pre-Christian cults. For example, the Orthodox menologium significantly altered the Christian calendar. Hence, the holidays with agricultural subtext such as Apple Feast of the Saviour, Saviour of the Honey Feast Day, etc. This suggests that it is impossible to completely detach a person from nature, and a person keeps striving for it in various ways.

7. The assertion of atheism in the general mainstream of the development of positivist science finally torn man away from nature, which was proclaimed to be "not a temple, but a workshop". Positivism, as a science freed from the influence of morality, has put into the hands of man a weapon dangerous to the entire world.

8. The unrestrained development of the market, especially in the twentieth century, exacerbated the ecological situation, spiritual degradation of society to their limits, there is a sharp increase in risks to the physical health of people.

Thus, according to the main conclusions drawn by J. Forrester and D. Meadows, in the period 2030–2050 there will actually be a world catastrophe caused by the lack of natural resources and the rapidly growing population. Even if we assume that the world's population will consume resources at a rate of 4 times less than that of 1970, it will still reach its maximum number by 2030, and then, as a result of hunger, disease, mutual extermination, will die out by five-sixths of the reached 10.9 billion people. [34. P.24].

4 Conclusions

Thus, based on long-term studies of economic, political, social, and cultural processes of recent decades, we came to the following conclusions – recommendations for contemporary politicians:

1. The use of enlightenment, propaganda, and education, taking into account that public consciousness, especially ideologies and religious beliefs (including such secular forms of religion as atheism, and liberal popular culture), are conservative. This requires a general sobering up, i.e. liberation of the psyche and consciousness from various substances. State support for culture, especially traditional culture, is needed. The introduction of moral censorship is advisable.

2. The problem of depletion of natural resources is solved by a more complete, "deep", integrated extraction and recycling of available resources. There is considerable experience,

for example, in more complete oil production by the organization "Gazpromneft-Development". An obligatory element in modern circumstances is energy saving and loss reduction in heat, water, and other resources. Another direction is more efficient use of traditional types of energy and development of non-traditional types, complex recycling of household waste.

3. It is necessary to study the existing experience of the past, for example, the traditional economy, which for hundreds of thousands of years has provided people with food and other resources, without upsetting the ecological balance.

4. However, the development of new technologies is not enough. A new philosophy and a complex methodology of interaction with the environment is required, that was started by the Russian cosmism philosophers (Chizhevsky, Tsiolkovsky, Vernadsky, etc.), who created the concepts of sustainable development, biosphere, noosphere.

In conclusion, let us designate new possible *principles of human interaction with the natural environment within the Ecologized Economics model*:

- accepting human nature as social, spiritual, and biological, as opposed to being only viewed as a social being. Through accepting their inextricable ties with the environment, the perception of a human should change both as an object of management and as a goal of the existence of society. At the same time, this imposes new responsibilities in the world due to humans' unique position among other beings;

- developing directions of state policy and social regulation on these problems in accordance with the human nature. For example, it is necessary to recognize that socializing a person by means of ordinary "enlightenment" is not enough. People accept a lot "in good faith". This is specific to the everyday thinking, which often prevails in behavior. This is the basis of the concepts of "routine", "stereotypes" in institutional economics, management, marketing, the concept of "bounded rationality" by the Nobel laureate H. Simon, etc. Therefore, a deeper consideration of psychology is required, for example, *personality types* (according to C. Jung), generated not by society, but by genetics (meaning, partly by the natural environment);

- applying to the social sciences (economics and other human studies) the interdisciplinary connections, for example, with biology. Even A. Marshall recognized the influence on the neoclassical theory of biology he created (for example, Darwin's theory of evolution). However, the account of new data is necessary – on behalf of genetics, zoopsychology, cybernetics, and other systemic theories. Thus, at one time, the Theory of general equilibrium by L. von Bertalanffy and the Theory of tectology by A. Bogdanov were created mainly based on medical data.

All of this allows us to consider a person in a more systematic, complex way, socialize them accordingly and manage them more efficiently, benefitting both society and the person. This concept can be viewed as a new dialectical stage largely denying the concept of "industrial man" (as the embodiment of *Homo economicus*).

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