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**REFLECTION IN THE CONSCIOUSNESS OF THE  
COMPONENTS OF THE ENVIRONMENT**

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***Abstract***

The article describes a study on the approbation of a questionnaire developed by the authors.

To develop a questionnaire that diagnoses the preferences of one or another environment in a conflict situation, first of all, four media were identified: natural, technogenic, social and informational. After this, situations were developed in which these environments conflict with each other. Each situation has been described as a task involving different solutions. Moreover, the conflict of each pair of media was represented twice, in two different tasks, where first one medium is the object of activity, and the second is a condition, and vice versa.

As a result of the study, it can be concluded that the artificial conflict situation proposed by the subjects made it possible to actualize their ecological consciousness, in which, first of all, the opposition of the natural and man-made environment is presented, whereas the demographic pressure on the natural environment is realized to a much lesser extent. At the same time, it is the interaction of the social and natural environment that deserves attention in connection with the development of megacities and the study of this interaction is becoming more urgent.

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**Keywords:** Ecological consciousness, natural environment, technogenic environment, social environment.



## 1. Introduction

The severity of the ecological crisis that has been growing throughout the last century has led to a rethinking of the world outlook of the socially active population (scientists, politicians, media and public organizations) and the tendency to shift the technocentric consciousness to the ecocentric (Pavlik & Nosulenko, 1992). Hence the relevance and practical significance of the problem of the development of ecological consciousness as a form of social and individual consciousness (Panov, 2013). In general terms, the ecological consciousness is understood as those aspects of human consciousness in which the person's attitude to his habitat and his actions in relation to it is presented. The most popular are theories that relate to the relationship of man to natural objects. Although all researchers agree that the ecological consciousness of man is much broader and should include not only a natural, but also anthropogenic environment. The global nature of the phenomenon of ecological consciousness leads to the fact that each researcher treats it in the manner that is interesting or accessible to him.

## 2. Problem Statement

By now, there has been a certain experience in the psychological diagnosis of ecological consciousness in solving various research and practical problems. At the same time as the subject of diagnosis distinguish different features of environmental consciousness. As a result, various components of the habitat.

The main types of subjective attitude to the world of nature, according to the position of S.D. Deryabo and V.A. Yasvin, are determined by a combination of the type of perception (subjective or objective) of the world of nature and the relationship to it (pragmatic or non-pragmatic). Four combinations give four basic types of relation to nature: object-non-pragmatic, object-pragmatic, subject-pragmatic, subject-non-pragmatic. In addition to these relations (Deryabo, 1999, Yasvin, 2000) distinguish aesthetic type of relationship and others. This example clearly shows that the ecological attitude to the world of nature is assessed from the position of subjectivity and pragmatism of human behavior in the natural environment. But the habitat of modern man is not limited to the world of nature. Almost half of the population of the developed countries lives in an environment full of technical devices and social (communicative) interactions with each other. Therefore, the problem arises of diagnosing the ecological awareness of the consciousness and behavior of a person living at the junction of the natural, social and technogenic environment.

The creation of a full-fledged instrument for the diagnosis of ecological consciousness meets a whole range of problems on its way. The first problem is the lack of a sufficiently complete and methodologically developed concept of ecological consciousness. The second problem is the objective difficulty of diagnosing individual consciousness. Although a lot of experimental methods have been developed in cognitive psychology, they are, as a rule, labor-consuming either in part of the procedure or in the part of data processing.

Realizing these difficulties, we tried to make full use of the methods of diagnosing consciousness and psychometric procedures available to us at the stage of developing and testing each scale of the questionnaire so that the resulting instrument was easy to use.

### 3. Research Questions

Theoretically, the present study was based on the following theoretical assumptions.

First, as various studies show, ecological consciousness is a complex mental entity that includes cognitive, regulatory, emotional, ethical and other aspects. These aspects are studied by different researchers in a complex or individually, depending on the task of the particular study and the theoretical position of the researcher.

In order not to "drown" in this multifaceted (and, correspondingly, multifactorial) ecological consciousness, we chose, firstly, those manifestations of ecological consciousness that are the psychological condition for the proecological character of human behavior in specific situations.

Secondly, in order to determine the spectrum of such situations, we proceed from the fact that in real life a person interacts not with an abstract "environment" but with specific components of it, the relationship to which in the whole consciousness of the individual can be different and even conflicting. From the point of view of environmental threats, it is advisable to distinguish not only the natural environment but also the technogenic environment as such components of the environment, as well as the social environment in which the information environment takes a special place.

Thirdly, we believe that the real impact of ecological consciousness on the proecological behavior of its subject can be detected only in a critical situation of choice, when the subject of ecological consciousness and behavior must assume responsibility for a particular decision. And this should not be a cognitive choice between, relatively speaking, "ecological good" and "ecological evil", but a choice of "two environmental evils", when the subject himself does not know what his choice will be more environmentally friendly. Otherwise, the ecological consciousness will be represented by an abstract cognitive component, and not in the system of its relations with the proecological behavior of human behavior.

Fourthly, according to the ecopsychological approach to the development of the psyche, it acts as an object of study in four forms of existence: as actual, the actual (become) psychic reality, as an objectified psychic reality (alienated from its subject-human), as a becoming psychic reality (which takes the form of real existence) and as a virtual reality (existing as an opportunity) (Panov, 2014). Since the consciousness (in this case, the ecological one) is the highest form of the development of the psyche, then the ecological consciousness as an object of research will be considered in its three forms of being: actual (actual), objectified, becoming and virtual.

The most habitual (and quite complete by now reflective mass consciousness) is the opposition of the natural and man-made environment. It is the technogenic environment that acts as a predominant mode of human intervention in established biogeocenoses, and as a rule, negative interference leading to irreversible degradation of natural landscapes. In particular, the construction of cities, dams and transport systems (canals, tunnels, asphalt roads, etc.), the wide development of various minerals reached a planetary scale. The pathos of the "transformation of nature" was replaced by growing anxiety and pessimistic forecasts of the future technocratic civilization.

The conflict between the natural and social environment in historical retrospect has various solutions, which are reduced to two strategies - adaptation and accommodation. Adaptation at the forefront of the requirements of the natural environment (climate, resource base of the economy, etc.), and entailed an adequate change in the social environment (in the Marxist semantics - changes in the superstructure).

Accommodation meant a purposeful change of landscapes in the interests of social organisms and is represented by examples of transformation of flora and fauna of various regions of the planet as a result of intensive agriculture. Not technogenic, but demographic pressure on the natural environment came to the fore here. A classic example is the desertification of large areas, caused by unsustainable grazing of livestock.

The conflict between the technogenic and social environment has traditionally been viewed as an inevitable consequence of progress (in Marxist semantics as a conflict of productive forces and production relations). This conflict was considered (often illusory) the most manageable. In fact, more than enough examples of successful resolution - reducing working hours, social "package", the spread of mobile communications, tourism, etc. On the other hand, the environmental consequences are also quite obvious - growing mountains of debris, unreasoned development of resort areas and consumption of genetically modified products as individual examples.

From our point of view, the environment is divided in the ecological consciousness into three components: the natural environment, the technogenic environment and the social environment (including information). In a number of situations, these components of the environment are reflected in consciousness as opposing each other, conflicting. It is these conflict situations that actualize the ecological consciousness. In this case, one of the components acts as an object of influence, and the other as a condition (Panov, Mdivani, Khisambeev & Lidskaya, 2013; Panov, 2013).

#### **4. Purpose of the Study**

To develop a questionnaire that diagnoses the preferences of one or another environment in a conflict situation, first of all, four media were identified: natural, technogenic, social and informational. After this, situations were developed in which these environments conflict with each other. Each situation has been described as a task involving different solutions. Moreover, the conflict of each pair of media was represented twice, in two different tasks, where first one medium is the object of activity, and the second is a condition, and vice versa.

#### **5. Research Methods**

Below are two situations in which the conflict of natural and man-made environments is represented, but in the first case the technogenic environment is the object of activity, and the natural condition, and in the second case, on the contrary.

*1. In a small Russian city, an electrical substation breaks down. In order for residents not to be left without electricity, it is necessary to build a new one. The site chosen for construction involves cutting down a whole grove of healthy trees. The transfer of construction to another location will cost the city treasury much more expensive, and, most importantly, significantly increase the construction time. The recently elected mayor of this city has to be made a difficult choice. What would you advise him?*

*2. In the center of the factory yard is a small square. For 20 years, the administration of the plant takes care of flowers and trees, because this square is not only a favorite vacation spot for workers, but also the pride of the plant. Recently, the economic situation develops in such a way that the plant needs*

*technical modernization and re-planning of the territory. The old director of the plant understands that in this case he will have to sacrifice his beloved square. What would you do in his place?*

The final version of the questionnaire consisted of 12 situations that described in pairs the conflict interaction of all media: natural, technogenic, social and informational.

106 students of two Moscow universities, 61 women and 45 men at the mean age 25,6 (SD=1,2) took part in the flight study. Each subject had to determine how he would solve the proposed situations and deploy his answer in detail.

The results were subjected to content analysis. 5 independent experts were to evaluate each response in terms of preferring one of the conflicting media on the following scale: explicit preference for one medium - preference for one medium - no preference for any medium - preference for another medium - explicit preference for another medium.

## **6. Findings**

An analysis of expert assessments showed that subjects do not distinguish between the information and social environment. Deliberate preferences did not reveal either sexual or age-related significant differences. It was found that the subjects primarily prefer the natural environment, then the social environment, and, last but not least, the technogenic one.

The most habitual (and quite complete by now reflective mass consciousness) is the opposition of the natural and man-made environment. It is the technogenic environment that acts as a predominant mode of human intervention in established biogeocenoses, and as a rule, negative interference leading to irreversible degradation of natural landscapes. In particular, the construction of cities, dams and transport systems (canals, tunnels, asphalt roads, etc.), the wide development of various minerals reached a planetary scale. The pathos of the "transformation of nature" was replaced by growing anxiety and pessimistic forecasts of the future technocratic civilization. This, in our opinion, explains the preference of the natural environment in the conflict situation.

The conflict between the natural and social environment in historical retrospect had various solutions, but it was not technogenic, but demographic pressure on the natural environment came to the fore here. Unfortunately, this conflict has not yet been clearly demonstrated in the mind. Perhaps this is due to the abundance of natural resources and free territories in our country.

The conflict between the technogenic and social environment has traditionally been viewed as an inevitable consequence of progress (in Marxist semantics as a conflict of productive forces and production relations). This conflict was considered (often illusory) the most manageable. In fact, more than enough examples of successful resolution - reducing working hours, social "package", the spread of mobile communications, tourism, etc. On the other hand, the environmental consequences are also quite obvious - growing mountains of debris, unreasoned development of resort areas and consumption of genetically modified products as individual examples.

## 7. Conclusion

Thus, as a result of the study, it can be concluded that the artificial conflict situation proposed by the subjects made it possible to actualize their ecological consciousness, in which, first of all, the opposition of the natural and man-made environment is presented, whereas the demographic pressure on the natural environment is realized to a much lesser extent. At the same time, it is the interaction of the social and natural environment that deserves attention in connection with the development of megacities and the study of this interaction is becoming more urgent.

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