

**EEIA-2018**  
**2018 International Conference "Education Environment for  
the Information Age"**

**SPHERE OF ECOLOGY AS A FIELD OF SOCIAL FORMATION**

Evgeny V. Titov (a)\*, Evgeny O. Cherkashin (b), Tatiana V. Makhareva (c)

\*Corresponding author

(a) Dr.Sc. (Education), Professor, Moscow Metropolitan Governance University, Professor of the Department of Ecology and Industrial Safety, Bauman Moscow State Technical University, Moscow, Russia,

e-mail: [titov.evgeny.v@gmail.com](mailto:titov.evgeny.v@gmail.com)\*

(b) PhD (Education), Senior Researcher, Centre for Strategy and Theory of Personality Upbringing, Institute for Strategy of Education Development the Russian Academy of Education, Moscow, Russia,

e-mail: [evgenicherkashin@gmail.com](mailto:evgenicherkashin@gmail.com)

(c) Leading Specialist, Public Joint Stock Company «Vimpel-Communications»,

e-mail: [Tatianamakhareva@mail.ru](mailto:Tatianamakhareva@mail.ru)

***Abstract***

The environmental field determines the development of society and is an important component of social practice covering different areas of a society.

While acting in various subject areas, including ecology, people participate in social interactions, which turn into social relations and are fixed in the form of statuses, or positions of people in society.

Knowledge, which in unity with the relations is created and shown in activity and communication, forming the sphere of ecology as cross-disciplinary field of knowledge are not less important component of social practice for existence and development of society.

That is why ecology is the sphere of social relations that are necessary for the existence and development of society and are the complex of statuses and subjective positions.

The environmental sphere as a medium of social formation is becoming a multi-component form, including social, natural, anthropogenic and somatic components. The system-forming component of the sphere of ecology as a medium of social formation is its social component, the content and structural changes of which ensure the change of the natural, anthropogenic and somatic components of the environment.

The interaction of a person with a social environment according to the subject-subject type should be regarded as a necessary and indispensable condition for the process of social becoming, in which seniors act as subjects of their own development and development of society.

© 2018 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Position, ecology, activity, social formation's environment.



## 1. Introduction

The modern world is developing in the context of two interrelated processes: globalization as creating a global community with a common economic, political and cultural space and greening as the penetration of environmental knowledge, practices, and values in the various spheres of social life (Cherkashin & Titov, 2017; Graham & White, 2016; Patterson, 2015). Together, these processes led to the formation of a special sphere of society - environmental sphere (ecological spheres of society). The environmental sphere is considered by the authors of the article as a domain activity, which determines the development of society and is an essential component of social practice, encompassing all areas of social life and ensuring the social formation of the younger generation. Acting within various subject areas, including in the sphere of ecology, all social and age groups of the population, especially to enter into an independent life of the young generation are included in the social interactions that are "crystallized" in certain social relationships, secured in the form of status - people positions society (Bolt, 2017; Carmi, 2017; Titov & Cherkashin, 2016). Being an area of social practice in which the activity of people is aimed at the cognition and transformation of living systems and the environment; the influence of production on living systems and their environment; connected with the nature of personal and social relations, the sphere of ecology becomes the environment of social formation.

## 2. Problem Statement

A person becomes an object of socialization objectively, not necessarily realizing himself in this capacity (Mudrik, 2013). Assimilating with the cultural norms, values and taking mastering social roles, a human being consciously or unconsciously is involved in the formation of their own subjective position. The role of the participant combining the functions of the subject and the object is assigned to the person in this process is not accidental, which is explained by the dual essence of socialization as a combination of two multidirectional processes – adaptation and isolation of a person in a particular society (Mudrik, 2013). When a person is involved in these processes consciously and deliberately, placing responsibility for improving their subject position, we consider it expedient to talk about his/her social formation. In this process, the person acting as the subject of socialization, deliberately directing his/her activity on the assimilation of cultural norms, the development of social roles and holds responsibility for the fullest realization of his/her personal potential.

In this regard, the following questions should be asked. Can we consider the sphere of ecology as a social formation of the environment? Can we apply to the sphere of ecology equate socialization as a process occurring independently of the will and desires of the individual and social development as a conscious acceptance/non-acceptance by the individual of certain social norms with the formation of a specific subject position?

## 3. Research Questions

- In order to characterize the ecological sphere as a social formation of the environment, it is necessary to clarify the notion of "Social education" and to identify the context of this process as the formation and development of a substantive position in the field of ecology;

- Consideration of the possibility of research as a means of social formation of its subjects in the field of ecology;
- Discussion of the content of the "Environment" of the concept and propose its own model for the social formation of a four-component environment in the field of ecology;
- Consideration of the possibility of the functioning of the ecological sphere as a social formation of the environment in the context of subject-object and subject-subject interaction between the individual and the environment. The natural interaction between the individual and the environment.

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

The aim of this study is to examine the environmental sphere as a social formation of the environment

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

We used a set of theoretical: study and analysis of the literature on the topic of research, analysis of teaching experience in the field of environmental education, simulation and empirical methods: observation, questionnaire, interview, study the products of educational activity.

#### **6. Findings**

The concept of "social formation" in content is close to the concept "social maturation", which D.I Feldstein understands "real older child process implemented in dual process socialization - individualization in which the formation of significant identity in their active subject creativity" (Fel'dshtejn, 1999). In this context, socialization acts as assigning human norms of human coexistence, and individualization - as a permanent opening, approval of (understanding, branch) and the formation of himself as the subject. Social maturation - is socialization in the broadest sense.

By improving the substantive position in the context of the social formation, the authors of the article understand the process of forming a consistent and relatively stable system of relations with people based on the understanding and acceptance of universal (human and nature-oriented) values and ensuring the ability to strike a balance between these values and the demands of social roles in certain areas of public life. The existence of a person's objective position is not only socially adapted, but also acts as a subject of his own development and, to a certain extent, of the whole society or its individual parts.

The process of social formation is bidirectional. Even consciously learning the cultural norms and mastering social roles, a person inevitably experiences regulatory pressure from society, speaking at the same time as the object of socialization, the receiving properties of the element of society. The impact in the direction of "society → man" is the first part of the process of social formation.

On the other hand, carrying out joint activities in various public spheres, which involves the assimilation of social roles, people transform normative role-playing activities in a situation of choice, thereby declaring himself as an individual. For example, engaged in a problematic situation in the field of ecology as a subject of research activity of the person knowingly and intentionally provides a choice by the study and resolution of these situations, thus acting as the subject of the formation of human personality. Aside and declaring himself as an individual, a person has an impact on social relations. This aspect of

social formation is characterized by a projection in the direction of "man → society". Thus, providing the personality of a formative influence, the society affects the human socializing complex factors that are refracted through the subject position in each of the moment of impact, make the environment of social formation that includes all sectors of society, including the sphere of ecology. This corresponds to ecopsychology prevailing notion that mental processes and states, and, after them, and anticipatory structure of consciousness, including those reflected in the subject position, should be regarded as products of the system of functioning of the "man-environment".

The sphere of ecology as a social formation of the environment is a multi-component form, human exposure to the different nature of factors. The concept of "Sphere of ecology," the content of the wider concept of "Educational environment" adopted in ecopsychology interpretation that allows the consideration of a subject position in the context of social formation takes into account the formative influence of a single individual in the social relations in this sphere. Structurally-substantial modeling the human environment and interact with it, because of its theoretical and practical importance of shape in a separate direction ecopsychology (Gifford, 2014; Sörqvist, 2016). As evidenced by the materials of seven Russian conferences held in recent years. The greatest interest from the standpoint of this paper are the views of psychologists (E.A. Klimova, V.I. Panova, V.A. Yasvina) and environmental (N.F. Reymersa, T.A. Akimovoy, V.V. Haskina) the composition of the human environment as a subject in the field of environmental activity.

The environment of existence and development of man as a person and as an individual, according to E.A. Klimov, includes the social-contact part (the personal example of others, their culture, experience, lifestyle, activities, behavior, relationships), the information part (social norms recorded in one form or another: habits, customs, traditions, customs, laws, taboo), somatic part (own body and its states), the subject part (material conditions of life, studies, work, life, including ecological conditions) (Klimov, 2001).

The notion of "Environment surrounding of the person" Panov covers its following varieties: physical as a totality of physical and chemical properties of a human habitat, spatial as a totality of spatial-objective properties and relations of the environment, natural as an aggregate of natural objects that act as objects of perception, personal relationship and interaction, complex of opportunities for life, social as a space of communicative and interpersonal interactions, internal (mental) as a system of mental structures and modes of action, acting as a psychological conditions and opportunities for work and human development (Panov, 2006).

For the psycho-pedagogical designing developing student-centered environments V.A. Yasvin developed a model of the "project field" education environment, the education process comprising entities and three functionally interrelated component educational environment: the social, spatial and substantive and Technology. Of particular interest is developed in this model approach to the examination of the educational environment based on an evaluation of the qualitative and quantitative characteristics (modality, latitude, intensity, etc. of generality.) (Jasvin & Ushakova, 2000).

Under the environment of human life, T.A. Akimov, V.V. Haskin understands the totality of the social environment, including socio-economic, socio-psychological and cultural environment, the natural environment, a biotic and abiotic environment, a man-made material environment that includes an arte-

natural, quasi-natural, industrial and residential environment (Akimova & Haskin, 1994). As a basis for identifying the components of the environment, they used their nature.

The detailed model of the human environment was presented by N.F. Reimers. According to his views, the environment consists of four interrelated subsystems: the natural environment itself (including self-sustaining and self-regulating anthropogenic modified natural objects and phenomena, as well as the population density and the interaction of people themselves as a biological factor), the agrotechnical environment (anthropogenic modifications of the natural environment, which are supported only by man), the artificial environment (artificial world created by man and not having natural analogues) and the social environment (cultural and psychological climate, intentionally and/or unintentionally, consciously and / or unconsciously created for the person, social groups and mankind by the people themselves and consisting of the influence of people as socio-biological beings on each other in groups directly and through the means of material, energy and information influence). The social environment integrates with the natural one, generated by agro-technics and artificial environments into the overall set of the human environment (Rejmers, 1994).

On the basis of the above concepts we have developed a four-component model of the sphere of ecology as an environment of social formation with the use as a basis for structuring the sphere of ecology nature of the factors that make up the environment, and the channels of their influence on man as a subject of social formation. As a result of selectivity of perception by a person of the properties and relations of the environment, its structure has a relative character, which depends not only on the environment itself, but also on the activity performed by the person and its States in the conditions of this environment (Heras, 2017; Panov, 2006).

According to this model, environmental sphere as a social formation environment is a set of components:

- social, influencing by translating social norms and roles directly in the audio-visual contact, observation, communication and collaboration (source - the people around them, their way of life, behavior, relationships, activities experience) and indirectly in the course of communicative activity through verbal and symbolic models (source - media, legal, and educational publications, works of art and natural objects that have been modified for the purpose of transmission of cultural values) (Fujitani, McFall, Randler & Arlinghaus, 2017; Stojanovic, McNae, Tett, Potts, Reis, Smith & Dillingham, 2016);

- natural, affecting directly through visual, auditory, tactile, gustatory and olfactory sensations in the audiovisual contact and indirectly through observation and model (art and research) in the cognitive activity (source - the objects and phenomena of animate and inanimate nature);

- anthropogenic affecting directly through visual, auditory, tactile, gustatory and olfactory sensations, and indirectly through the research model (verbal, iconic, full-scale, and others.) during the activity ensuring the satisfaction of existential, physiological and socio-economic needs (source - man-made and modified man natural objects and phenomena);

- somatic affecting directly through kinesthetic and interoceptive sensations and indirectly through the model (ECG, X-rays, medical history, etc.), obtained in the course of biomedical research (source - own human body and its state). The considered components of the sphere of ecology as an environment of

social formation have a different impact on a person, which is determined by the content of a specific situation and the maturity of the subjective position.

As a rule, the most important for the person as a subject of activity, which can be described as immature attitude subjective or passive, has a somatic component of the social formation of the environment. The second most important is the social component. The third most important place is occupied by anthropogenic factors. Finally, the least impact on human activity has a natural component (unless, of course, does not take into account the extreme situations - natural disasters and catastrophes of natural origin).

For a person with a subjective position, the components of the medium are arranged in a slightly different sequence. Along with the somatic component for a person as a subject of activity, along with the somatic one, the ecological component begins to play a priority. A person perceives the natural component of the environment as a continuation of somatic, and the action of social and human factors is perceived as a secondary or at least subordinate position.

Thus, the environmental sphere as a social formation environment acts for the person as a collection of various properties and relations of social, natural, human and physical nature, perceived by them directly or indirectly, speaking for the subject only as an opportunity for activities that it can implement or not (Panov, 2006).

Let's get consider possibilities of functioning of the sphere of ecology as an environment of social formation in the context of two different types of human-environment interaction (Panov, 2006). When the subject-object interaction between man and the environment are the external factors changing the situation in which it is formed, or otherwise the mental state that involves changing the properties of only one hand, performs the function of the object (human or environment). As has been shown, the sphere of ecology is the domain of social relations, which are at an early stage of development, as evidenced by, in particular, the absence of a fully functioning system of social norms and their corresponding sanctions designed to regulate social relations in the sphere of ecology, acting as the socialization of the means and providing social formation process. This gives reason to believe that social relations forming the sphere of ecology and regulating their social institutions, acting as components of the environment of social formation, are not yet able to create conditions for the formation of a subjective position. Dysfunction of socio-pedagogical mechanisms that ensure the functioning of the sphere of ecology as an environment of social formation, in turn, causes the formation of a passive position of contemplation and waiting (object position, object position) (Mudrik, 2013). Therefore, the subject-object interaction of the person and a social component of the sphere of ecology as an environment of social formation at the present stage is not capable to provide formation of the subject position.

Other possibilities are opened when considering the interaction of a person and other components (natural, anthropogenic, somatic) sphere of ecology as a medium of social formation according to the subject-object type. In this case, the function of the subject, materially or ideally transforming the properties and relationships of the object, is always performed by a person. Even endowing the natural object with the properties and relations of the subject, man does not act as a condition and result of development for him. The only thing that "natural" object "achieves" with such interaction is preservation of its integrity. The content and mechanisms of interaction between man and natural objects in the context of the formation of

a subjective relationship to individual natural objects and nature as a whole in the works of S.D. Deryabo and V.A. Jasvin are the subject of special study. On the same "conditions", a person as a subject of social formation interacts with his anthropogenic and somatic environment. Therefore, the subject-object interaction of a person acting as a subject of social formation, with a natural, anthropogenic and somatic component of the sphere of ecology as a medium of social formation creates conditions for the development of a subjective position.

## 7. Conclusion

Let's get imagine the sphere of ecology as a medium of social formation in the context of subject-subject interaction. In this type of interaction between a person and the social component of the medium, speaking in relation to each other as a result of conditions and mutual development, create favorable conditions for the formation of a subject position, and to change the social relations in the sphere of ecology. Changing himself as a subject of social formation, a person changes the social environment, which then, in turn, ensures the further development of the person as a subject of its own development, creating conditions for real socio-cultural development and reproduction of the individual and society. Consideration of human interaction for the subject type-subject with natural and man-made environment, constituting a sphere as environmental medium social formation, in the context of forming a subject position was inappropriate, due to the effects of substance sources constituting natural and man-made environment. An exception is a somatic human environment, which at certain stages of personal and human physiological development may subject-subject interaction. Conclusion so, environmental sphere as a social environment is becoming a multi-component form, including social, natural, anthropogenic and somatic components. The backbone component of environmental sphere as a social formation of the environment is its social component, substantial and structural changes that allow a change of the natural, built and somatic components of the environment. These changes are achieved through a subject-subject interaction between man and social component of the environmental sphere. Human interaction with the social environment of the subject-subject type should be regarded as a necessary and obligatory condition of social formation process in which high school students act as the subject of its own development and society. Social formation of the younger generation provides for the development and institutionalization of social relations that make up the environmental sphere.

## References

- Akimova T.A., Haskin V.V. (1994). *Osnovy jekorazvitija: uchebnoe posobie*. Moscow, Izd-vo Ros. jekon. akad., 312 p. [in Rus.].
- Bolt C. (2017). *Environmental Education in the Public Sphere: Comparing Practice with Psychosocial Determinants of Behavior and Societal Change* (2017). Education Doctoral. Paper 320. [https://fisherpub.sjfc.edu/education\\_etd/320/](https://fisherpub.sjfc.edu/education_etd/320/)
- Carmi S. (2017). Social Class and Social Status. last reviewed: 29 september 2017. DOI:10.1093/OBO/9780199828340-0085
- Cherkashin E., Titov E. (2017). *Ecology as Field of Social Relations*. 2017 International Conference "Education Environment for the Information Age" (EEIA-2017), Moscow, Russia, June 7-8, 2017. DOI:[dx.doi.org/10.15405/epsbs.2017.08.26](https://dx.doi.org/10.15405/epsbs.2017.08.26).
- Fel'dshtejn D.I. (1999). *Psihologija vzroslenija: strukturno-soderzhatel'nye harakteristiki processa razvitija lichnosti*. Moscow, Mosk. psihol.-soc. institut, Flinta, 670 p. [in Rus.].

- Fujitani, M., McFall, A., Randler, C., Arlinghaus, R. (2017). *Participatory adaptive management leads to environmental learning outcomes extending beyond the sphere of science*. *Science Advances* 14 Jun 2017: Vol. 3, no. 6, e1602516. DOI: 10.1126/sciadv.1602516
- Gifford, R. (2014). Environmental psychology matters. *Annu Rev Psychol.* 2014; 65: 541-79. DOI: 10.1146/annurev-psych-010213-115048
- Graham, H., White, P.C.L. (2016). Social determinants and lifestyles: integrating environmental and public health perspectives. *Public Health.* Volume 141, December 2016, Pages 270-278. <https://doi.org/10.1016/j.puhe.2016.09.019>
- Heras, M. (2017). *Ecological Psychology: Overcoming the Metaphor of the Brain-Computer*. 03 October 2017. <https://www.bbvaopenmind.com/en/ecological-psychology-overcoming-the-metaphor-of-the-brain-computer/>
- Jasvin, V.A., Ushakova M.A. (2000). *Jekspertiza shkol'noj obrazovatel'noj sredy*. Moscow, Biblioteka zhurnala «Direktor shkoly», 128 p. [in Rus.].
- Klimov, E.A. (2001). *O srede obitaniya glazami psihologa*. 2-ja Rossijskaja konferencija po jekopsihologii: materialy. Moscow, Izd-vo MGPPi, pp. 8-9 [in Rus.].
- Mudrik, A.V. (2013). *Social'naja pedagogika: uchebnik dlja stud. uchrezhdenij vyssh. prof. obrazovanija*. 8-e izd., ispr. i dop. Moscow, Izdatel'skij centr «Akademija», 240 p. [in Rus.].
- Panov, V.I. (2006). *Vvedenie v jekologicheskiju psihologiju: uchebnoe posobie*. 2-e izd., pererab. i dop. Moscow, NII Shkol'nyh tehnologij, 184 p. [in Rus.].
- Patterson, M. (2015). *Environment and Social Interaction*. *The International Encyclopedia of Interpersonal Communication*. First published: 01 December 2015. <https://doi.org/10.1002/9781405186407.wbiece031.pub2>
- Rejmiers, N.F. (1994). *Jekologija (teorija, zakony, principy i gipotezy)*. Moscow, «Rossija Molodaja», 367 p. [in Rus.].
- Sörqvist, P. (2016) Grand Challenges in Environmental Psychology. *Front Psychol.* 2016; 7: 583. Published online 2016 Apr 25. DOI :10.3389/fpsyg.2016.00583
- Stojanovic, T., H. McNae, P. Tett, T. W. Potts, J. Reis, H. D. Smith, and I. Dillingham. (2016). The “social” aspect of social-ecological systems: a critique of analytical frameworks and findings from a multisite study of coastal sustainability. *Ecology and Society* 21(3):15. <http://dx.doi.org/10.5751/ES-08633-210315>
- Titov, E., Cherkashin E. (2016). *Readiness of senior high school students for self-determination in the ecology domain as an ability to form subjective attitude*. SHS Web of Conferences, Volume 29. 2016 International Conference “Education Environment for the Information Age” (EEIA-2016), Moscow, Russia, June 6-7, 2016 DOI: 10.1051/shsconf/20162901071