

Methodological analysis of the personnel training pedagogical space in the agro-industrial complex

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Abstract. The agro-industrial complex is undergoing changes, experiencing personnel shortage. The article presents the experience of analyzing the pedagogical space state of agricultural personnel training using the general scientific concept "space". The concept "pedagogical space" is based on the concept "teacher". The whole society as a self-developing and self-learning system is "pedagogical space" in which in the modern world there is a process associated with the formation of spiritual and moral values, principles and professional qualities of the individual. The social space of the agro-industrial complex coincides with the pedagogical space of agricultural personnel training. In the article the practice of functioning of agro-industrial complex in Russia is discussed, which reveals the problems of workers: a personnel shortage, training programs backlog from requirements to the specialists competence, the reluctance of those, who received and are receiving agricultural education to work in rural areas. The authors draw attention to the fact that the agro-industrial complex problems are always associated with more general society problems. Their analysis, in turn, entails the need to refer to the society as a whole, which leads to the consideration of other society subsystems. Referring to the concept "space" allows to enhance the effect of analyzing the problem.

1 Introduction

The key words "economic space", "political space", "cultural space", "socio-cultural space", "legal space", "humanitarian space", etc. are more and more appearing in the articles today. The "geopolitical space" is almost defined as the leading factor of all events taking place in the human world at all.

It seems that the concept "space" has begun to push out even the concept "system", "tarnished", "by positivism and scientism", although space simply represents one of the models of a super-complex system. Of course, there is a certain subjective moment in this fact, a reflection of the near-scientific fashion trends (mostly this term appears either as a synonym for the terms "territory", "place", "environment" or as a metaphor). But there is also a reflection of an objective reason in this trend: an increase of ideas about how complex a society or a social universe is as an object [1-2].

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When carefully observing and studying socium (socium – megasocium, social universe, i.e. the whole set of macro- and microsociums as subjects of social space in all their connections and forms), researchers get the impression that its understanding is no less difficult task than the understanding of the space (cosmos). Although the cosmos is the unlimited spaces surrounding us and countless visible and invisible abysses, and socium is here, next to us. Apparently, it is assumed that the philosophical and general scientific application of the concept "space" to the super-complex structures will allow to expand and deepen the understanding of the laws operating in the Universe, open the way to the construction of more adequate models of self-organizing multi-faceted (polyhypostatic) systems.

"Space" is a general scientific concept. The scientists have been clarifying this concept just before our eyes. Physicists continue to argue about the nature and properties of physical space, especially in connection with the fact that they have come to the border of the reality they observe and "touch" with the help of Large Hadron Collider (LHC) and other new tools, perhaps no longer physical, but subphysical phenomena of space ("physical vacuum").

1.1. New concepts of "space"

Along with computer science, new concepts have widely come into use. In the modern information-saturated world, operating with these categories suggests the idea of realizing that the phenomena behind them have not just come to the human world, but in one form or another have always been present in society. Only they did not have real names: "information space", "virtual reality", "virtual space" [3-5].

Interacting with the surrounding world, people extracted or "downloaded" from it continuously not only the energy they needed for life, along with its material carriers, but also the equally necessary information about the world and about themselves, which was recorded in oral speech, writing, drawings, dances, games, rituals, photographs, records and other phono recordings, movie shots, and, finally, in all the various forms of recording that came with computers and the Internet. The recorded information was and still is the "secondary world" that accompanies the person. Its spaces are both informational and virtual spaces. Interaction with this world almost as with the real accompanies a person throughout his life.

Spaces can be also classified due to their structural properties. If the space is filled with the objects, that are relatively stable, and it is itself stable, then such a space is defined as stable, close to the model of space in classical science. If the space is filled with the objects that continuously change in the course of their interaction, then such a space looks like an unstable one, close to the model of non-classical science. If there is a continuous birth or annihilation of the objects that fill the space, then it is a self-generated or self-destructing post-non-classical space.

It is not accidentally that spatial characteristics are attributed to phenomena that do not have a material nature themselves (space: conceptual, psychological). The point is that the essence of the scientific phenomenon that we call "space" is fractal. This concept is used to distinguish an object of mixed spiritual and material nature. If the concept "space" did not have a spiritual side, then Dante would never have been able to present the hell to the world, purgatory and paradise of "Divine Comedy". The concept "fractal" is genetically connected to many scientific and philosophical concepts: "first fundamental principle", "atom", "molecule", "cell". In the fractal you can see the reflection of the entire material and spiritual structure. The fractal represents a new level of generalization of knowledge about the primary elements of reality: changing, continuously moving, proportionally repeating.

1.1.2 "Educational" or "pedagogical space"

In many articles, starting from the 90s, the following concepts have been appearing: "pedagogical environment", "educational space", "pedagogical space". One of the most popular among those listed is "educational space". The phrase "pedagogical space", which is close to it, is referred less often, and mostly in the meaning of a metaphor, rather than a scientific concept. But it seems to us to be the most appropriate name for the phenomenon that is the subject of our discussion.

Of course, the concept "educational space" is also correct. However, it is already the concept "pedagogical space". The educational space is only a part of the pedagogical one. Limiting of the pedagogical educational space, in fact, is an attempt to limit the socializing function of socium, its impact not just on the shaping of a certain type of personality, but also on the personality development, deployment, intrinsic forces of the person as an open and unlimited process.

It is not without reason that the appearance of the term "educational space" coincided with the beginning of a series of transformations in the Russian system of education and training (in the Russian pedagogical space). One of the main directions of these transformations was the integration of Russia into the European Educational Space within the framework of the Bologna process. In the descriptions of the educational space the emphasis is made on the concept "education". The educational process and everything connected with it is defined as educational "services": the teacher (the seller who provides services and, in general, the "seller") – the student (the consumer of this "service" and, in general, the "buyer – consumer"). Why is the emphasis placed on the educational space, i.e. "a place" where many relations and connections are subjectively set, where special activities of various systems (state, public and mix) are carried out for the development of the individual and his "socialization"? Because in the structure of the pedagogical space the educational space is most easily subjected to positive changes or pushed to the brink of disaster. It is enough to change the goals of education, change the standards, or/and reduce or increase funding through the system of state institutions.

2 Materials and Methods. The meanings of the category "pedagogical space"

The concept "teacher", suggested by N. Moiseev, is the basis for identifying the phenomenon that we define as a pedagogical space. Under this concept, he meant "not only teachers working in secondary or higher schools, but the very system of formation, preservation and development of collective knowledge, morality and memory of the people, the transfer of all accumulated to the next generations..." in his work "The Teacher system and the modern environmental situation". It is necessary to differentiate the concepts "teacher" as a profession and "teacher" as a universal vital function of socium. The latter means something more than teaching a subject according to the program: this is a sense of responsibility for the fate of the "people of the planet" – their biological species, which will have to overcome the difficulties of survival in the coming decades. Humanity has reached the threshold beyond which the new morality, new knowledge, new mentality, new system of values are needed. Who will create and enshrine them? This future depends on how the next generations will be able to absorb this anxiety for the future, to understand and realize their own responsibility.

So, according to Moiseev, "teacher" is an attribute of a complex developing system, its subsystem responsible for self-preservation and development of the system. It includes, in addition to the teachers who are professionally engaged in education and training and all those who have to do this periodically, directly or indirectly (parents, grandparents, managers and supervisors of various ranks, writers, journalists, production masters, etc.), "...the very system of forming, preserving and developing collective knowledge, morality and memory

of the people, passing on all the accumulated knowledge to the next generations...". In addition, the teacher system implies the student system, i.e., in fact, it is a teacher / student relationship system (in society, almost all individuals are required to visit the student status and be always ready to receive this status again and again; some professions require a professional to be both a teacher and a student). The student will already be able to consolidate the fruits of his apprenticeship in his apprenticeship to the extent and to the extent that he learns to teach himself and others. In addition, the student teaches the teacher with his problems, i.e., while learning, he unconsciously teaches. In the pedagogical space, each individual is a teacher and a student in one person. The pedagogical relationship is ideally a relationship of mutual empathy.

There are already many spheres in the society in which the professional activity is absolutely inseparable from the continuous replenishment of the employee with new knowledge: education, science, medicine, military affairs, civil service, art. **The agro-industrial complex (AIC) has already belonged to the same sphere and increasingly needs employees who continuously enrich their knowledge: "Live and learn"**. This emphasizing of the subject-object elements of the teacher system means that it coincides with the *socium*.

Thus, ***socium as a whole, as a self-learning and self-developing system, is a pedagogical space***. In this sense, the pedagogical space is the hypostasis of a self-creating or self-destroying social universe. Makarenko, implementing his pedagogical concept in practice, showed the coincidence and transition of purely pedagogical relations into social ones. His colony, conceived as a pedagogical group, turned into a special one – a society that combined both material production and the "production" of a new person, a collectivist. Today, the struggle for pedagogical space is very important. One of the most important functions of the teacher due to N. Moiseev is the formation of the morality of both social groups and society as a whole. The modern world is filled with the struggle between social groups on the basis of differences in their interests, spiritual and material values. So, like society as a whole, the pedagogical space is the arena of this spiritual and moral struggle.

At the end of XX – beginning of XXI century, there is sharply increasing influence of the mass media (information space) on consciousness and, consequently, the behavior of people. The mass media seek to establish real control, to consolidate their spiritual hegemony. Often with their help, there is also the spread of such a mass disease as "social idiocy"? by which we should mean a state of consciousness of society when it cannot adequately reflect the surrounding social reality. Thus, one of the highest human scientific and technological achievements, instead of becoming a source of enlightenment for the people (a source of light for knowledge, truth), often becomes a source of darkness – delusions, superstitions, lies and slander. Participating in the formation of personal, including moral, qualities of a person, pedagogical space is included in the construction of social space, i.e., so far only the only space known to us, in which geniuses appear: prophets, scientists, inventors, generals, artists, politicians, etc. But it is in this same space that the greatest scoundrels, egoists, indifferent, cowardly and simply traitors, thieves and murderers also appear and manifest themselves in *socium* [6-9].

Of course, N. Moiseev meant the morality of real humanism, which is based on the universal norms of morality, which found the certain form of expression in the world religions, and at the level of science were revealed in the imperatives of ecology. And much work is needed to integrate the norms of traditional religious moral teachings with the imperatives of ecology and introduce them into the personal and social consciousness. This work can be carried out in the pedagogical space (socio-cultural, informational, educational) by its subjects. In the future, the fate of using the opportunities of the information and pedagogical space as a whole (for good or for harm) will depend on the conscientious or

unscrupulous performance of their duty by all those who stay in the pedagogical space and realize their stay in it as their duty to the country, humanity, and God.

3 Results

Based on the foregoing, we conclude that the pedagogical space of agro-industrial complex coincides with the social space of agro-industrial complex, in which all the problems of the socium, to which it belongs, are reflected. The real solution of the personnel problem of the AIC requires the gathering of information about the real structure of the AIC, the real socializing and pedagogical possibilities of each element of its structure. Among the listed problems of the AIC in the beginning of the article **it is the problem of the reluctance of people who received and are receiving the agricultural education to work in rural areas which most clearly refers to the coincidence of the social and pedagogical space in the AIC**. So, the result is: any real improvement of the agro-industrial complex will also mean the improvement of its properties as a pedagogical space. **The specifics of the territorial space of the agro-industrial complex** in the Russian Federation and its **pedagogical functions** are the following. The territorial space of the agro-industrial complex consists of two parts: agricultural and industrial. The industrial mainly merges with urban and suburban spaces. The agricultural sector is heterogeneous, and it is here that the shortage of personnel is most critical. Agrobusiness workers who live near the agricultural and industrial territorial space feel that they are being deprived of social benefits.

Two trends in the agricultural space of the Russian Federation are confirmed by the researches: the tendency to shift the center of gravity of the rural population to the South of Russia and the migration of the part of the rural population to the suburbs, which formed places of relatively more densely populated rural areas around cities. The situation dictates the need to determine the form of residence of agricultural workers. According to the Sulakshin Analytical Center (Center for Scientific Political Thought and Ideology), in some regions of the Russian Federation the proportion of depopulated villages has exceeded 20% (mainly in the regions of Central Russia and the North). Only in the period between the 2002 and 2010 years, the number of depopulated villages increased by more than 6 thousand. More than half of all rural localities have between 1 and 100 inhabitants. Objectively, the choice of the form of residence of agricultural workers is carried out among the following three types: a farm (a separate farm-type settlement), a traditional village (a rural-type settlement) and a shift method of working while living in the city. Each of these forms has its own disadvantages and advantages. From the pedagogical point of view all these types have different pedagogical activity, which are shown in the following Table 1:

Table 1. Types of settlements of agricultural workers in ascending order of their pedagogical activity

Types of settlements of agricultural workers	Their pedagogical activity
A shift method of working-type settlement	The least pedagogical activity;
A separate farm-type settlement	Medium pedagogical activity;
A rural-type settlement	The highest pedagogical activity

The farm or farm-type of settlement can justify itself only if there are good roads, which can be used relatively quickly to get to the centers where the farmer can get the social services he needs: high-quality health care, children can go to school, college, university and get a quality education.

The shift method has the advantage that the employee, living permanently with his family in the city, is equal in the use of social benefits with those who work in the city. But long-term separation from the family negates this plus.

The most optimal is the preservation of rural settlements (villages). Therefore, the number of specialists who do not want to work in rural areas has increased, and the number of rural residents entering agricultural universities has decreased.

Not only for more effective development of the AIC, support staff, linking their lives in the countryside, in communion with motherland nature, not only for economic prosperity of Russia, but also to preserve its culture and civilization must stop the further buildup of desolating (depopulation) villages. Rural settlements require the same attention as endangered plants and animals.

In this regard, many researchers point out the trends of "shifting the center of gravity" of the rural population to **the South of Russia**. Historically, the relatively densely populated rural areas of Central Russia and the Volga region are becoming empty, and the villages of the North and North-West of the country are becoming depopulated, while the southern rural areas, on the contrary, have been developing quite actively in recent decades.

Thus, it is possible to draw a conclusion about **the processes of concentration of agricultural activities** over the past 10 years, **which are concentrated within larger economic units**. It can be assumed that the economic crisis, with insufficient support from the state, further stimulates this process: small enterprises and farms go bankrupt, monopolization in the industry increases. For example, T. G. Nefedova analyzes in detail the spatial contrasts in the settlement of Russians in rural areas, saying that **the population for decades migrated not only to cities, but also to their rural suburbs**, which formed settlements of relatively more densely populated rural areas around cities. In her book "Ten Topical Issues about Rural Russia" (2013), T. G. Nefedova draws the attention to the fact that the suburban-peripheral differences for a vast country with a relatively sparse population serve as a key parameter of the organization of its socio-economic space. T. G. Nefedova cites statistics that proves that the density of the rural population within the regions of the European part of Russia decreases significantly as it moves away from the centers. Thus, in addition to the above-mentioned trend of shifting the rural population to the South of the country, the researchers also distinguish the "suburb-periphery" axis.

4 Discussion. Social therapy in the pedagogical space

The educational sphere of modern society is a space of social activity of people aimed at mastering objective spiritual values as a necessary subjective need of the individual. In the context of information progress, the need for management and self-management of the educational process, which is a "social contract", on which the humanistic orientation of the development of modern society depends, is actualized.

Social therapy in Western society has already become in fact a social institution, although it is obvious that its activities have not fully met the needs of society yet. Social therapy or clinicistics should include the activities of social actors who, in accordance with their socio-class or group ideas about the norm, ideal, etc., direct it (activity) to improve social microsystems (small social groups, individuals), including themselves. Accordingly, it is necessary to distinguish between the group and personal social therapy. The social experiments of R. Owen and E. Mayo are a classic example of the former. In economics, a type of "social therapy" should probably be consulting assistance. Legal assistance from the

advocacy to the public should also be considered a form of "social therapy" if it is successful and does not conflict with the public interest. Elements of personal social therapy are also found in the practice of psychoanalysis. Nevertheless, it is necessary to differentiate psychoanalysis, which since the time of Freud has already become a medical and psychological service, from the practice of personal social therapy.

As in a super-complex system, there is a constant need in socium to normalize the functioning of elements and subsystems that deviate from the norm [10-12]. Social clinicistics in relation to the individual can be tentatively defined as the practice of normalization by social methods of social deviations (social pathologies, deviations, social failure, insufficiency) in the behavior of the individual as an object and a social subject at the same time. The relativity and multidirectional understanding of social pathologies and deviations give rise to the problem of defining the subject of "healing".

Social clinicists apparently "heals" something in the personality (community) "responsible for the social and before the social" – "consciousness of responsibility", in contrast to the psychological "sense of responsibility". It, the social "consciousness of responsibility", must have the properties of a third-party judge, built into the structure of a person or community and performing continuous judgment over his actions. This function is performed in a person by the conscience, which internalizes the ideals of what is due. A person lives in two worlds at the same time: as a separate individual, an independent universe and as an element, a cell of society. Man also simultaneously lives in the present, the real space-time, and the potential imaginary space-time, which must be.

Due to the enormous changes taking place in the world, globalization, informatization, and the violation of traditional community-family forms of socialization, the importance of personal social therapy is currently increasing. The colliding opposite systems of socialization disorient the carriers of the "social", the effect of desocialization appears (migration waves to Europe). There is a lot of antisocial, destructive-minded, "under-socialized" individuals. There is a need for institutionalization of social therapy. The school (higher school) is the most important educational institution and the institute of secondary socialization of the individual. Social therapy can be considered as an integral part of the socialization of the individual. And this component is increasing today, with the awareness of the need to heal not only the body (medicine), the soul (psychology, psychiatry), but also the mind (ideology, based on a set of socio-cultural or socio-humanitarian disciplines).

5 Conclusion

So, we believe that socialization is becoming more and more the "therapy" as an additional socialization in the education system. If G. Tard defined the typical attitude of socialization "teacher-student", then at present in developed societies in the system of socialization, the relationship in the form of "doctor – patient" or "social therapist/teacher – social deviant" is simultaneously being established. In different historical and socio-cultural conditions this relationship becomes a variety of specific types and forms of expression and the role of subject and object: the subject as "father", "mother", "teacher", "doctor", as the manipulator, the judge; the object as a voluntary patient, as an individual, resisting social "therapy" is perceived as the practice of manipulating them as individual, manipulated, but being unaware that they are being manipulated. More concrete embodiments of the institute of "social therapy" should be considered the practice of Socrates' conversations with his students, the comforting activities of the hermit elders in Russia. Subjects (agents) of socialization should learn the skills of social therapy. The social therapy itself, developed within the framework of the professional activity of a sociologist, should be included in educational methods, their application is a matter of the teacher's skills. Methods of social therapy should complement the activities of professional psychologists at school.

A child born into the world, from the point of view of social requirements, is a "patient". From the first days of his life, he, under normal conditions, is involved in primary socialization, which to a large extent can be characterized as "intensive social therapy". The quality of this "therapy" depends on the quality of its subjects – the parent family, the orphanage, the foster family, etc. The main "social therapist" at this time is his mother and other closest people. He is taught communication skills, interaction with other people. And in the process of this "learning", the individual acquires "social health", the main feature of which is the moral norms acquired by the individual and the moral values recognized by him as a structure of consciousness of responsibility.

In connection with the pluralism of value-normative systems functioning in society and in connection with their dynamics in the social space, the social health of even full-fledged individuals needs constant support and correction [13]. The need for social therapy can be felt by both the objects and the subjects of "social therapy". It is obvious that a person is subjected to the personal social therapy throughout his life, first of all, by the following social institutions: family, primary collective, school, church, court, prison, art (especially literature, theater, cinema). All existing forms of social therapy (social clinicistics) should be differentiated into previously existing ones that performed social therapy at least latently, and new ones that arise. Under certain conditions, the individual becomes an agent of social therapy for himself. The health of students' consciousness depends on "social health", "social self-treatment" and secondary socialization. The modern school (higher school) today faces a difficult choice – to find the optimal ways of its development. The assessment of the ongoing changes is ambiguous, no matter how contradictory the assessments may be, the society, first of all, the teachers themselves are interested in building up the spiritual potential of the educational space [14-19].

Of course, social health in historical, socio-cultural and class relations is a "value" variable. However, due to the tendency to focus on the moral values of the "middle class" as its indicator, social health as a value tends to stability. The middle class (the economically, politically and spiritually active part of society) can be viewed as a modern hypostasis of a potentially possible standard of social health or "hegemon" (a Marxist socio-political concept), a driving social force that unites all those who are engaged in socially useful highly skilled intellectual and physical labor. The mechanism of educational process management has a great influence on the consciousness and behavior of young people. Only strict adherence to moral norms and principles during the years of study can become a kind of template that helps students to compare their life values in the future. Overcoming negative trends is possible only by overcoming the fetishization of machines in the learning process, a real increase in interpersonal human communication in the "teacher – student" system, improving the quality of the teaching staff and a real humanization of the pedagogical space.

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