Features of informatization of sociological knowledge

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The article assumes an analysis of information as one of the most important socially significant resources of modern civilization. The authors stressed that main paradigm characteristic of modern social theory can be expressed by the thesis about the impossibility of direct access to social phenomena. In modern civilization, information is becoming one of the most important socially significant resources. The authors think that its role as a strategic resource increases with the development of network technologies that accelerate data transfer and facilitate the search for necessary information. The authors are confident that the role of higher education in this process is key. But it itself is faced with a huge number of problems, one of which is improving the quality of its functioning and guaranteeing the results of its activities. This problem is closely related to the implementation of innovations. The authors suggest that innovation in education should be understood as an innovation designed to resolve the current problem situation in order to optimize the educational process, improve its quality or organize favorable conditions for the assimilation of material by students. Based on a critical approach to reform the current system of higher education the paper touches upon the need to change the process informatization of humanities education. The authors conclude that the development of humanities education in the information society is aimed at implementing an interdisciplinary approach, ie should ensure the effectiveness of the development and application of humanities knowledge and form a conscious responsible choice in a variety of cultural meanings, cultural self-determination.

Keywords: transformation, informatization, social reality, communicative theory of society, the formation of an information society in Ukraine, infosociety, globalization, network

Особливості інформатизації соціологічних знань

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У статті передбачається аналіз інформації як одного з найважливіших соціально значущих ресурсів сучасної цивілізації. Автори підкресили, що основна парадигма, характерна для сучасної соціальної теорії, може бути виражена тезою про неможливість прямого доступу до соціальних явищ. У сучасній цивілізації інформація стає одним із найважливіших соціально значущих ресурсів. Автори вважають, що його роль як стратегічного ресурсу зростає з розвитком мережевих технологій, які прискорюють передачу даних та полегшують пошук необхідної інформації. Автори вважають, що роль вищої освіти в цьому процесі є ключовою. Але саме воно стикається з величезною кількістю проблем, одна з яких – підвищення якості його функціонування та гарантування результатів його діяльності. Ця проблема тісно пов’язана із впровадженням інновацій. Автори припускають, що інновації в освіті слід розуміти як інновації, покликані вирішити поточну проблемну ситуацію з метою оптимізації навчального процесу, поліпшення його якості або організації сприятливих умов для засвоєння матеріалу учнями. Інформація, що розглядається в контексті сучасних інновацій, стає ключовим фактором успішного навчання. Автори обґрунтують, що розвиток гуманітарної освіти в інформаційному суспільстві спрямований на впровадження міждисциплінарного підходу, який має забезпечувати ефективність розвитку та застосування гуманітарних знань та формувати свідомий відповідальний вибір у різноманітних культурних значеннях, культурному самовизначенні.

Ключові слова: трансформація, інформатизація, соціальна реальність, комунікативна теорія суспільства, становлення інформаційного суспільства в Україні, інфосоціум, глобалізація, мережа
Особенности информатизации социологических знаний

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В статье предполагается анализ информации как одного из важнейших социально значимых ресурсов современной цивилизации. Авторы подчеркнули, что основная парадигматическая характеристика современной социальной теории может быть выражена тезисом о невозможности прямого доступа к социальным явлениям. В современной цивилизации информация становится одним из важнейших социально значимых ресурсов. Авторы считают, что его роль как стратегического ресурса возрастает с развитием сетевых технологий, ускоряющих передачу данных и облегчающих поиск необходимой информации. Авторы уверены, что роль высшего образования в этом процессе является ключевой. Но сам он сталкивается с огромным количеством проблем, одна из которых – повышение качества его функционирования и обеспечение результатов его деятельности. Эта проблема тесно связана с внедрением инноваций. Авторы предлагают понимать нововведение в образовании как нововведение, призванное разрешить сложившуюся проблемную ситуацию с целью оптимизации учебного процесса, повышения его качества или организации благоприятных условий для усвоения материала студентами. Основываясь на критическом подходе к реформированию действующей системы высшего образования, в статье затрагивается необходимость изменения процесса информатизации гуманитарного образования. Авторы приходят к выводу, что развитие гуманитарного образования в информационном обществе направлено на реализацию междисциплинарного подхода, т.е. должен обеспечивать эффективность развития и применения гуманитарных знаний и формировать осознанный ответственный выбор в разнообразии культурных смыслов, культурное самоопределение.

Ключевые слова: трансформация, информатизация, социальная реальность, коммуникативная теория общества, формирование информационного общества в Украине, инфосообщество, глобализация, сеть

Begining in the second half of the twentieth century, we can talk about the formation of a new type of methodology, which some researchers suggest calling post-nonclassical. An attempt to build a model of social processes that claims to be "objective" in the sense of not being burdened by any point of view, by directly addressing social phenomena, as history shows, inevitably ends in ideology. On the other hand, every social phenomenon is usually considered in some aspect, understood within a limited set of preconditions, and any further interpretation is carried out according to private rules ("horizon of knowledge"). This means that in social life there is no situation that is not affected by interpretation, moreover, the social phenomenon is never fully disclosed. The thesis is marked by the rejection of the traditional social science orientation to "objectivism". Today, the idea of communication as an essential characteristic of society itself is very relevant. The paper presents a theoretical generalization and a new solution to the scientific problem, which is to determine the phenomenon of social reality in the context of sociological education, which finds its expression in the implementation of comprehensive understanding of the social through the prism of transformations in education. This allowed us to propose a complementary concept of social reality, within which society is presented as a special dimension of human existence. The course of development of scientific knowledge and its methodology shows that gradually, from century to century, in the process of accumulation of knowledge and improvement of methodology, both the object and the subject of knowledge, as well as its methodological tools change. The need to move to a new social ontology is not limited to the spread of post-classical ideas. Prerequisites for such a transition were formed in previous periods of development of science and social knowledge. Understanding the conditions under which it became possible to move from understanding the external world as a set of things to the view of the world as a reality. This goal is due to the evolution of the meaning and significance of the concept of reality in philosophy and science of modern times, when reality changed from physical to multilayered, and then the
upper layer – social reality - thanks to modern assessment of the role of language in shaping the world. The inclusion of the individual in society became possible through the formation of the individual as a social entity. The individual, thus, was reduced to an individualized social. The turn to the individual became apparent with the emergence of phenomenology, which, focusing on the human life world, makes the transition to a subjective social ontology. The peculiarity of the current stage of development of the methodology of scientific knowledge is that social knowledge focuses on communication, dialogue of intersubjectivity, where identity and self-identity are achieved, because they are important not success but the search for understanding between different social actors.

The logic of the development of scientific knowledge is only one side of the process of spirit development. There is considerable interest of scientists in "post-classical metaphysics" (Halapsis), which is a project rather than a conceptualized and methodologically designed field of knowledge. In our opinion, it makes sense to further consider this project as what most corresponds to modern reality, and moreover, as something that is justified by the logic of historical and philosophical development of ideas about social reality. In social reality, it is not always possible to distinguish between what is and what is created by the subject himself, reality is not only some objective reality, but also the existential world of the social agent. An active approach to social reality determines the wide amplitude of interaction of a person, any other social subject with the given: development – appropriation – constitution and allows to remove the dichotomy of object and subject.

The specificity of modern communication involves the articulation of fundamentally different aspects of social theory. The complexity and ambiguity of modern communicative processes make it necessary to create a universal theory of communication. And this, in turn, requires the identification of the theoretical foundation of communication theory as the conceptual core of the authentic theory of society, as well as applied social disciplines.

In today's dynamic society, value-semantic variability is necessary and the influence of the advanced development of education on the formation of social innovations is recognized. The dynamically changing conceptual field of modern educational practices, aspirations and attempts to humanize and humanize education, taking into account the realities of the information society are favorable factors for creating and implementing the concept of sociological education, which allows different ways of implementation.

It is well known that the phenomenon of information was first considered by K. Shannon and N. Wiener in the forties of the XX century. In our time, when the information society is becoming a reality, interest in the concepts of "information" and "information interaction" The question of the emergence of information and its value is of particular importance. For the first time the formula for calculating the amount of information was proposed by K. Shannon (Shennon, 1963, p. 43) The most important achievement of K. Shannon was the introduction by him of a quantitative (tropic) measure of information transmitted by the source. The scheme of information interaction in N. Wiener is already more complex than that of Shannon. During World War II, N. Viener developed methods for extrapolating aircraft trajectories and was interested in information not in itself, but as a means used where there is a control process. Information in the process of control according to Wiener plays an auxiliary role (Viner, 1968, p. 38).

The understanding of information by A. D. Ursul (information as transmitted reflected diversity), V. I. Kashperskiy and others undergoes certain changes in the interaction with the communicative approach. So, if earlier V. I. Kashperskiy defined information as a functional relation connecting external practical interactions in human activity and internal changes then later he came to a different definition: information is a concept related to "cognitive and communicative the sphere of human activity"," denoting" the totality of information about any events and facts" (Kashperskii, 2001, p. 59). Disputes about the essence of information continue to this day. It is significant in this respect that in our philosophical science for more than three decades there have been two opposing concepts of information – attributive and functional. "Attributeists"(Ursul, & Petrushenko et.al.)qualify information as a property of all material objects, that is, as an attribute of matter... "Functionalists" (Melik-Gaikazyan, & Chernavsky et al.).
"On the contrary, they associate information only with the functioning of self-organizing systems" (Abdeev, 1994, p. 162). Dm. Ivanov bases his understanding of information on the concept of "communication". He argues that in order to find out what information is and why its role is so great in modern society, it is necessary to distinguish between "message (or message), interpretation (or perception) and communication. A message is a thing, that is, a transmitted product of a person's intellectual activity; interpretation is "thought", that is, acquired knowledge; communication is just an operation of transmission, broadcasting" (Ivanov, 2004, p. 358).

The peculiarity of sociological knowledge is determined primarily and mainly by its object – by what constitutes the source of its (knowledge) formation – social reality. It is important to emphasize that social reality is a reality created by people themselves. This circumstance has far-reaching consequences that will affect the content, nature of knowledge about social phenomena, in their knowledge, in contrast to natural phenomena. Natural objects have properties given from nature, these properties are unchanged, characterize the object always and everywhere, retain their certainty when "colliding" with other phenomena, without them the object can neither exist nor be thought of.

Social phenomena, since they are a product of the joint life activity of people, will have properties depending on how this life activity will be organized. The quantitative and qualitative measure of concentration and manifestation of these properties in a phenomenon will depend on the actions of people. The traditional orientation of the social sciences towards "objectivism" in this case does not stand up to scrutiny. Social phenomena and processes appear not as a reality independent of a person, but in the form of the effect of consent / disagreement of subjects, the effect of their mutual influences. The communicative field of agents is determined by the rules, when the interaction of horizons makes conscious intentions and volitional decisions secondary. In this case, the possibility of a different look at the subject of consideration becomes mandatory, with the need for demand. The novelty of this approach is that "sociality" is not something that is predetermined (a kind of "meaning-in-itself"), but the effect of consent/disagreement between subjects, the effect of their mutual influence. For the world-text, the author is not so important, his who created (artist, writer ...), the text itself is important and the one who perceives it, discovers new meanings in it. The author dies in the text Thus, the "objectivity" of the analysis of the social sphere is always the possibility of a different look at the subject of consideration. The modern approach to sociality does not exclude objectivity as such, but the very understanding of objectivity is transformed.

The modern theory of communication forbade the "realism of social structure" (P. Bourdieu), forbade the material nature of the social world and suggests thinking of the latter as a mutual transition, a mutual transformation of the result and the mode of action, as a set of practices, among which the language is considered the main one. The importance of communications for human relations and social life is noted by N. Luman, defining society as a system of communications. At the same time, "no social system can arise without communication, therefore the emergence of social systems is governed by the improbabilities of the communication process, the ways of overcoming them and transforming them into probability" (Luman, 2000, p. 78).

Revealing his idea of information, N. Luhmann distinguishes it from knowledge and believes that one should speak not about an information society, but about a society based on knowledge. "Information is not a stable, portable and persistent entity. Rather, it is an event that, being actualized, loses the character of information. ... Interest in information is associated with the pursuit of the unexpected. Information is the distinction between what could be and what happens or is reported" (Luman, 2000, p. 40).

So, it should be noted that since the introduction of the quantitative measure of information by K. Shannon to the present day, the concept of "information" has undergone significant evolution. At the present stage of research, such properties of information as its communicative function, the ability to induce action, emergence and value characteristics of information come to the fore. ... Critics of the Internet, who call its content "information trash", imply precisely this difference between data and information. In the discussion between attributivists and functionalists, in our opinion,
the position of the functionalists looks more justified.

“Information technology was usually considered a 'soft product', but human psychology is even softer. Information is, first of all, a form that carries content, reflecting the essence of phenomena. It is "hard" in relation to human desire, pure consciousness ... There is no logical connection between hard and soft – between them ... a mythical abyss, where any rational constructions fail. Information technology creates the desired information bridge, turning a product into a service through the animation of things” (Kashperskii, 2001, p. 63). Despite the adequacy of the characteristics of information technologies, the above definition of information is incorrect, since it only formally compares the pair opposition of the categories of essence and phenomenon with a pair of form/content. In modern social theory, based on the theory of differentiation, a correct working definition of information is possible, which reveals not only its static formal-meaningful characteristics, but also reveals the specifics of the formation and development of information processes and communicative activity in modern society.

In this regard, the problem of operating the model is removed, but there remains a problem associated with the very process of modeling, because before creating any model – material, cybernetic – the researcher must build an imaginary model. At this stage, he should take into account the fundamental difference of natural sciences and socio-humanitarian models, namely – the difference in the purpose of constructing models. Conducting experimental research is the main purpose of constructing models in the natural sciences, whereas in the socio-humanitarian field knowledge is the ability to interpret complex phenomena or processes.

An educated person finds support of his existence in subjective experience: values, beliefs, knowledge, abilities, etc. She or he understands change, masters and controls them, designs them for the future through goal setting. Innovative education focuses primarily on the formation of creativity and, at the same time, critical thinking, coupled with tolerance. It is oriented towards human growth.

It should be noted that global information society, market economy and scientific and technological revolution require from the person new social and individual qualities. In particular, the essential skill in postmodern society is the ability to give advice considering changes. The fact is that information society does not lack information, but it lacks wisdom, how to use it. Society demands every citizen to be intellectually independent, that is, he or she should not trust others to think instead of him or make a choice. As M. Lipman rightly points out, we must learn to think on our own. Nobody will teach us this, unless it will put us in the research community, where it is relatively easy to achieve this goal. M. Lipman notes that critical thinking is responsible for the democratic way of education, shapes the mentality of not only generations countries of consolidated democracies, but also democratizes the mentality of the citizens of the newly independent states (Lipman, 2005, p. 41).

The importance of critical thinking grows in times of social change that impede the success of action, require constant adaptation to new political, economic situations, and effective solution to problems that can not be foreseen in advance. In particular, the information society has greatly increased the possibility of choices and complexity of problems that need to be addressed. Conditioned by the informatization transformation is quite significant, because it includes “modeling of information processes, restructuring of organizational structures, document flows, legal norms as well as appropriate training and retraining of personnel. This is a programmed alteration of the social information environment, the creation of fundamentally new automated ways and conditions for the making, replenishment, processing, transfer and use of knowledge, an effective method of intellectual activity” (Lipman, 2005, p. 97).

The topicality of the issues of communication today is due to the fact that the modern high school was replenished with new educational directions, which with full rights can be called interdisciplinary (public relations, social work, and others). The specialties of the traditional philological cycle also include the applied aspect (linguistics and intercultural communication, linguistics and information science). Many Western universities also have departments and faculties of communication. Research programs are expanding, connected with the study of the peculiarities of communication in the industrial,
political, educational, medical and other social spheres. All these directions are connected with the providing of information flows in modern society both on the interpersonal and global level, both with the help of traditional (oral language, typing text) and modern (television, Internet) means.

The theoretical core, around which discipline of this profile are grouped, is again the theory of communication. The theory of communications in English-speaking science in the 90s was developed, first of all, on the issues of the mass media, as well as new communication realities of marketing and management that come as a result of the symbiosis of mass-media and market technologies (communicative management, advertising communication, corporate identity, marketing communications, etc.) Specialist-communicator of the sphere must have some knowledge of the basics of the communicative process and the skills of information and communication activities in different environments (economics, production, management, ecology, culture, health care, agricultural production, mass physical culture, recreation and sport, cultural and tourism exchanges, fuel and energy complex, small business, political, social, scientific, financial and banking spheres). A representative of new professions (spokeswoman, advertising and communications manager, expert, consultant, consultant in state, commercial and public institutions and organizations, structures) need to be familiar with the main theories and concepts that relate to the field of information, communication and the formation of public thoughts, to have the skills of information and communication, advertising, reference work, to be able to self-study and independent research.

Gregory Bateson and Niklas Luman propose a new approach to information understood as "a kind of difference that makes a difference in a later event" (Luman, 2000, p. 34–35), when information is viewed as a concept expressing the distinction by a social subject of new properties of some phenomena or processes, capable of making a distinction in subsequent social activities. In modern society, people master new social qualities of information, expressing new qualities of human (social) relations.

In understanding social communication from the point of view of social significance for the concept of information, the most valuable form is social information. The socially significant qualities of social information and social knowledge differ. Social knowledge is hypotheses and theoretical conclusions built on the basis of information analysis that reveal the inevitability of the system's transition to a new state and describe the mechanism of this transition and the sources of forces that condition it. The concept of social information and knowledge are relative: those information about various social spheres of social reality, which are information within one system, can act as knowledge in relation to the system of a lower level. However, social information and social knowledge should be distinguished by their functioning in cognition and management of social processes. In relation to knowledge, information acts not as a special kind, but as a result of its processing into a perverse form” (Kemerov, 2003, p. 24).

The formation of the information society in Ukraine leads to significant changes in the social qualities of information. These changes are to a certain extent associated with the formation of social and legal qualities of information. For example, on the basis of the principles of regulation of information relations set forth in Article 3 of the Law of Ukraine "On Information, Information Technologies and Information Protection" (2006), certain normative and legal characteristics of the social qualities of information are distinguished.

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In accordance with this, the following socio-legal characteristics can be distinguished: the generally recognized need to ensure freedom of search, receipt, transfer, production and dissemination of information in any legal way; the importance of openness of information on the activities of state bodies and local self-government bodies and free access to such information, except for cases established by federal laws; the need for equality of languages of the peoples of Ukraine in the creation of information systems and their operation; demand for information security; the value of the reliability of information and the timeliness of its provision; the generally recognized importance of privacy, the inadmissibility of collecting, storing, using and disseminating information about a person's private life without his consent.

Along with the philosophical and legal aspects, one can also distinguish the philosophical and economic aspects of the social qualities of information. One of the most important social qualities of information is its cost. The market value of information on a certain material medium can be estimated as follows. It consists of the cost of the medium, the cost of creating (or searching and collecting) and preparing information, as well as a certain markup determined by the subject of ownership of this information based on certain subjective and objective conditions of the market of information products and services.

In fact, in this aspect, an analogy is drawn between the cost of information as its social quality and the cost of material objects of property. Nevertheless, despite the former heuristic and a certain efficiency, this analogy in modern conditions is not strict. Moreover, it is impossible to reveal the multidimensionality of information properties in the standard understanding of its material carriers. The standard approach does not apply to spiritual property, expressed in certain information. The social qualities of such information are determined by the social qualities of the spiritual property expressed by it. In turn, the spiritual property of a social subject is associated with his own information (Uzvishin, 2000). We need a transition to understanding the development of creative abilities to develop new information products. The demand for this transition is recognized in connection with the recognition that the issue of a transition to a procedural interpretation of the multidimensionality of social qualities of both material carriers and information itself is ripe. The social quality of information is the ability to record the dynamics of creative abilities in social activities. Accordingly, the social qualities of information include the ability to record the results and opportunities for further development of innovations in social activities.

Conclusion

Thus, social qualities of information can be called innovative. Such social qualities of information express to a large extent the dynamics of the development of the creative abilities of social subjects to use the distinction of new properties of phenomena or processes in order to make distinctions in new types of subsequent activities. The innovative social qualities of information are closely related creative. They manifest themselves in the creative self-realization of the subjects of information activity and characterize the degree of novelty of the information used. The socializing qualities of information based on its effective use in modern conditions are expressed in new opportunities for the socialization of its subject and reaching a consensus with other subjects of social activity. The unifying (integrative) qualities of information realize new opportunities for the formation and development of the integrity, unity of social structures and new prospects for public dialogue in the context of an information civilization. Changes in the axiological social qualities of the concept under study in modern society are manifested in the fact that the most valuable is the information that, when used, provides the greatest opportunities for achieving success in social activities. Estimated and normative social qualities of information are associated with the fact that it can act as the basis for the formation of various normative
prescriptions and expectations, as well as assessments of information processes in public activities. Changes in the epistemological social qualities of information express the growing importance of its assimilation and processing for the knowledge of changes in new opportunities and threats to constructive social activity. Teleological social qualities characterize the possibilities of goal-setting in the process of information activity and the degree of its expediency.

Thus, the development of the social qualities of information in the modern world is determined by the processes of the development of social conditions of differentiation by social subjects of new properties of phenomena or processes, which creates the possibility of making differences in subsequent activities. Accordingly, it is necessary to create social conditions to limit the negative and all-round development of positive social qualities of information

REFERENCES