

Information Ecology in Structuring Sociocultural Space of Modern Society

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Abstract—The article studies potential application of an information ecology approach for the analysis of a contemporary stage in the development of an information society. It is illustrated using the example of this approach utilized to study a social element – sociocultural space. The article analyses distinctive features of information ecology as a modern philosophical approach based on holistic and systematic principles which provides new opportunities for the consideration of a human, subject as a center of sociocultural space compared to traditional postmodernism philosophy. By using holistic methodology, the authors develop the question of information essence and its place in society and culture today through subject-object relations; apply the notion of subject's navigation in sociocultural space considered as its inclusion and an ability to navigate in the system of connections between a person and modern information space.

Keywords—*information; subject; information society; information ecology; sociocultural space; navigation in sociocultural space*

I. INTRODUCTION

Modern society determined by rapid development of informative and communication networks and processes reveals notable renewal of sociocultural space. It naturally resulted in transformation of notional “coordinates” of human presence in this world that modified existence structures and discovered a new dimension of a planetary human and humanity. Possibilities of the information space provided a powerful impetus for the establishment of such communicative-cultural space that unites subjects in all the continents, builds cultural bridges, reveals new educational resources: a network of virtual museums, trips, online learning and discussion of scientific and social problems which, in its turn, became the basis of new scientific inquiries and knowledge areas. However, together with the potential of sociocultural development that was revealed thanks to new information technology, trends connected with substantial risks for a human, preservation of space for his

living, for the ecosystem on all the levels were also identified. V.A.Kutyrev was right to say that today “it’s important...to suggest some sort of a modus vivendi between realism and modernism that reflects our natural, objective macro world and post-modernism as, actually, the ideology of other, informative-virtual micro and mega worlds. Ecological problems that had been referred to nature not long ago, became relevant for the culture and for humans, in general – for the Existence [1, p.6].

Indeed, the content and nature of modern civilization development type activates foundations whereby the sociocultural system rapidly loses sustainability of its existence. Information determinism as a general organizational principle of society, culture and social interactions, is aimed at producing new information, innovative communication systems but not at the development of Human, Culture and Nature. Widespread information society concepts such as concepts by D.Bell [2], M.Castells [3], A.Toffler [4, 5], etc. transfer subject's properties as a doer and a source of approach to information, as a creator and “designer” of all social positions and messages – to the properties of information [6]. Thus, the subjective side in terms of rationale for information society fundamental properties recedes into the background. As a result, the society is constantly collecting, creating, translating, saving the information that, firstly, becomes outdated immediately, secondly, a person has no time to assimilate it, understand the essence, select significant and insignificant information, make a thoughtful and well-reasoned analysis and assess facts, texts, events and cultural phenomena in terms of their validity or invalidity. Such acceleration of social time integrates a person into the social space more and more so that he/she becomes “the weakest link” in the information universe as his/her capabilities – memory capacity, switching rate of cultural-notional programs, their “reformatting” are defined by internal rhythms of his/her nature that is organically connected worldview, moral culture, values, traditions that a person

cannot and should not refuse. That is why it is easy to explain intense searches of future social eco-focused strategies by modern philosophers that would preserve integrity and inherent worth of existence based on comprehension of sociocultural space content.

II. INFORMATION ECOLOGY AS A HOLISTIC APPROACH TO THE STUDY OF INFORMATION SOCIETY

A holistic information ecology approach that carries out a deeper and more multifaceted research, compared to previous social philosophic concepts, into society interpreting it as an integral, determined by valuable information system that is deeply and comprehensively connected with nature, is becoming relevant under these conditions [7]. As numerous types of different-scale communications interact in society, we see a qualitative change in the structure of its sociocultural space that is being assimilated by scientific programs and technology of modern management activities and, due to a significant influence of these processes on the existence and functioning of an information society, sustainable development of modern society is impossible without information ecology [8]. Information space ecology becomes a prerequisite for the development of a healthy anthroposystem as a form of complex interaction between separate individuals as well as groups of individuals [9]. The ecologic approach which pays special attention to the relation between a human and the ecosystem in general with information society being its integral part and based on systematic and holistic principles, reveals new aspects both of a society and a human viewed as a subject.

Today, an approach that considers information space as an ecosystem of a certain type that can maintain sustainable existence of other ecosystems is being actively developed as part of information ecology. Thus, following a comparative analysis of natural and human ecosystems, A.L.Eryomin defined information ecology as a science that studies regularities in the impact of information on the development and functioning of a human, human communities and humanity in general, on health and psychological, physical and social well-being, science that drafts events on the improvement of information environment [10].

In our opinion, information ecology may be constituted as a section of philosophic knowledge that studies information as an attribute of existence being an integral phenomenon and, thus, it includes existence of a human, culture, society, nature and space in their organic unity. Information ecology and its humanitarian elements do not substitute technical sciences on information and information security, do not lower the high evaluation of success experienced by modern technical information sciences, their significant achievements in the sphere of technology and communication as a result of globalization process impact on any local processes and links. However, it is now focused on the problem of a human and humanity being the subject of these modifications, on the rationale for planetary measurement of information society existence. The purpose of highlighting the subject is to recover the priority that is fundamental for a subject-object society which appeared

already in the most relic cultural layers in ancient times based on a human developing ability to exist through activity, thinking and language. As it is well-known, it made it possible for him not only to adapt to reality but also modify it in compliance with objectives based on the acquired experience and behavioral schemes.

III. SUBJECT AS THE CENTER OF SOCIOCULTURAL SPACE

Previously, throughout human history various general forms and mechanisms aimed at the update of information that constitutes the content of sociocultural space developed spontaneously: changes in philosophic worldview and world outlook systems, transformation of cultural meanings, public and state reforms, new material forms of subjective environment and production tools. Information preserved through traditions, ceremonies, rituals, forms of classic art, science, philosophy was transferred and shifted to sociocultural space in further epochs in the form of moral standards, assessment criteria, knowledge and values maintaining its meaning as cultural-informative space in demand during global evolution. However, the above-mentioned information elements received this status of cultural-informative past as a basis of civilization through the position of new human generations that were part of society and culture. These generations had their own status of a subject and implemented it in the process of informative-communicative “reformatting” of changing sociocultural reality.

However, today, the role of the subject in sociocultural space of an information society that is receding into the background impedes the operation of these functions – identifying modern and past, eternal and temporary, relevant and irrelevant in society. Contemporary events linked to the novelty of information acquire a particular meaning “here and now”. There events are, primarily, characterized in terms of tangible and material, physical content, their value and cultural meaning being diluted. Objectification of modern world reality in this context is a direct demonstration of subject’s role limitations, certain “deficit” of sociocultural subjectivity space that preserves unique human being that is purposefully not narrowed down to technology, organizational-systematic processes and structures.

A condition for the revival of interest in the subject as a center of sociocultural space in information society is the reflection of information ecology. First, we speak about the regulation of today’s spontaneous information flows – value-based and cultural limitation and “cleanup” from information garbage in compliance with a social need of self-identification and preservation of high values, ideals as a basis of self-identity development. In the course of history subject-object connection as a special space and today – as a special value – was maintained at all stages of world history and in all the epochs. Subjects, including society and humanity as a subject since early XX century, have always treated information as an object, thus eliminating the illusion of information self-regulation. Information is certainly a special object that in some cases approaches the subject in the fulfillment of its function – translation of content. However, information just imitates subject’s role: it would

never be able to fully perform it in the notional sense since the subject as an information source is the creator of such approach to the world as liberty, values and assessment, selection and limitation, distinction of possible and real, space and time, etc.

Maintenance and recovery of the initial “point” – the subject as the center of sociocultural space that defines and translates information as a condition of continuous human historical and cultural evolution and, in its turn, definition of evolution as a periphery category is the only chance to understand information as the object and overcome the illusion of its self-sufficiency in modern society. In general, to our opinion, this is another important function of information ecology that provides reasons for subject’s irreducibility to space-time of its current existence and preserving the ability to influence information processes.

IV. THE NOTION OF NAVIGATION IN SOCIOCULTURAL SPACE

Generally, at the level of modern society, subject’s communicative activity as a common form of existence becomes the basis for preservation and distribution of information because it defines the mode of human existence in the world. That is why in the context of information ecology, values that underpin communicative activities, determine the content of sociocultural space and center it. This space is not just the result of the influence exerted by information flow and determination on the part of communicative networks but is a form of information distribution generated by the subject. Accordingly, subject-information code is not only the basis of human capability to talk, understand and think, act that is transferred across generations, but, more importantly – a capability to transcend, i.e. go beyond the boundaries of any objective-informative system, to cover it – theoretically and practically – as something external to oneself, rise above it in order to develop ways to assimilate the object, include it in one’s own practices, projects, living and communication standards.

While searching for models of subject’s continuous transition to object and subjective goal-setting, contemporary science introduced a methodologically efficient notion – the notion of navigation that was successfully used by A.N.Paranina in geographical theory of natural and cultural heritage: “Today, one of the fundamentals of natural and cultural heritage studies is the notion of “navigation” in its widest interpretation – as movement and orientation not only in space-time but also in the structure of world information systems created using the experience of many generations including labyrinths of modern information space” [11]. Structuring of modern sociocultural space here is not just the arrangement of approach to the information itself, but is the clarification of links between the subject and information space. If the main navigator is a person as a subject, as the center of space-time continuum, then the human and humanity become immeasurably more responsible for the future, for enriching it with humanistic references as a basis that determines structures of future values and ideals. Thus, the most important objective of information ecology is to develop a capability of a contemporary human and society in

general to assimilate spiritual achievements of previous epochs, to assimilate and assess harmony, beauty and depth of cultural and natural spaces.

V. INFORMATION ECOLOGY AND PHILOSOPHY

Underestimation of the subject’s place and role as a carrier, creator, translator and keeper of information in this context makes it possible to understand the limited nature of definitions and interpretations of information ecology itself that prevail in contemporary science. As a rule, it is narrowed down to the rules of information infrastructure functioning, studying, for instance, the limits of placing advertisement in the city, the level of personnel awareness, etc. K.Harris sees information ecology as informative value of certain organizations, highlighting that changes in this condition may be harmful if they do not take into consideration the interconnection of various cohabiting information subsystems. K.Harris also speaks about the role of information management in terms of understanding and control of the whole information space [12]. Systematic methodology for information ecology developed by him is based on system’s interaction principles in terms of possibilities and conditions of this process regulation for controllability and maintenance of order. In Russian studies, information ecology is defined as “a science studying regularities of impact exerted by information on the development and functioning of a human, human communities in general, on individual and public relations with information environment” [13]. But if information influences the environment, then which authority has the right to control information and, in particular, its ecologic limits? Such an approach does not give a chance to answer this key question.

An information ecology approach based on philosophic principles of integrity and consistency reveals humanistic dimension of sociocultural space in information society by uniting nature, culture and society. At the same time, the information which extends the space and meaning of human existence in the world rather than technical or applied instrumental information, is prioritized.

In ecological-informative logics, communication activity has a double nature: as time – it structures subjects’ integrational activity; as a process of subjects’ self-development in terms of information processes, its aim is to define object’s boundaries, i.e. to precise this internal information dimension that needs to be assimilated by information society to develop sociocultural space as a form of human self-identity, cultural being preservation and values required for this purpose. Space here means time objectification that is important for preservation and content-related expression of human life, culture and society. But if information ecology is based on subject’s being and its aim is to restore its fundamental approach to the object, then, as a category, it should reflect all the attributes and significant values of the subject: attribution to the standards, assessment, meaning, understanding, identification of the genuine and the false, the beautiful and the ugly, the kind and the evil, the relevant and the irrelevant, etc. We would like to emphasize one more time that information considered as an object

should be integrated in its instrumental sense into social space-time and should target social objectives and ideals that are developed by subjects.

That is to say, in information ecology it is viewed as a tool for the performance of required and sufficient functions and objectives: drafting of models development programs for communicative culture, educational technology, standards for understanding and organization of partnership, etc. However, information certainly maintains its autonomy in terms of message transfer, status of meanings, symbols, texts necessary for the development of subject's modern media culture and media environment [14]. That is why the model of space-time continuum in modern information society is operational for the transfer of communication content into forms of their delivery and translation within sociocultural space. These forms in the context of information ecology limit contents and at the same time set its development rate that are expressed through the density of information processes, their intensity, informative-cultural content of information contacts and interpersonal relations, thus dictating future development areas. It's only within the limits of this common continuous form that both subjects and objects acquire a relevant meaning and status of contemporary or not contemporary content. However, subjective basis of such continuum also includes in the contemporary boundaries the past that is preserved in social memory, cultural values that represent certain aspects of universal information code.

Even though all the sacred and classical texts were created a thousand years ago, they are still relevant for many subjects including humanity as they still have an ability to update their inherent sense. On the other hand, information in a newspaper article can acquire the past status almost immediately after its completion. That is why the subject, on the one hand, is developed by information environment being the object to the extent they are interconnected. But the subject in its conceptual space-time expresses its unique existence as the one escaping from immersion into objectivized "now", determines the content value of informative messages. And that is why information ecology as the basis of structuring knowledge society space-time continuum turns out to be multifunctional.

It is required not only to systemize risks and assess modern information society destructions, but, first of all, to create models for continuous logic constructive development of human history, to identify endless richness of nature itself as well as human culture and to forecasts future areas of sociocultural space. Nevertheless, N.N.Moiseyev, the author of ecologic imperative who assessed the risks of contemporary existence better than others, was right to warn us: "only a really intelligent society would be able to overcome modern and even more so – imminent ecological problems, to survive in today's conditions" [15, p.181-182]. Thus, not just information as a determinant of contemporary world existence but rather subjects being the center of this society's sociocultural space content become the basis of information society formation and development, thus providing conditions and perspectives of its humanization –

establishment of high cultural standards in it as well as ways of personal development that are connected with it.

VI. CONCLUSION

Thus, modern philosophy addressing its major problem – the connection between the human and the world, the subject and the object – amid information society is detailed in the development of eco-informational area. Viewed in the context of universal-planetary worldview traditions as an integrity connecting information codes of the Universe, the Earth, its nature, culture and society, it reveals their correspondence not on the applied level (that is within the space of certain empirical objectives) but rather ontologically, i.e. revealing cultural-human, humanistic standard for informational organization of contemporary humanity existence [16].

As a result, it would be rightful to consider information ecology and worldview which expresses its essence as a basis that allows adjusting content-related parameters of sociocultural space in modern information society which justifies the need to include the subject in the process of finding solution to the problem of information flows volumes and content compliance with requirements of eco-focused human development [17]. It is also important to find "information measures" including information of the past and the future that is important for the preservation of human existence harmony. Unique features of their regulation demand their own development and conceptualization. That is why, philosophy that perceives information ecology as a justification of the need to "extract" the person from informative-communicative space where he was only a tool conducting information processes and grants him the status of the subject that can control and regulate these processes is a requirement for the protection of the human from technological-informative "absorption". Such subject maintains its unique ontological space as a unique spiritual individual.

Information ecology is a common recovery form of humanity's original and major property – to exist in the information world through the relation of the subject to its reflection and the relation to information itself. This is actually the recovery of information meaning as knowledge and basis for education, and together with it – a big anthropic-sociocultural shift to the second signal-system as a value conquered by the humanity in the historical past and that would be irrational to refuse without substantial reasons.

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