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## The Role and Status of Knowledge in the Post-Modern Interpretation of the Information Society Theory

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*The article describes the experience of the socially philosophic consideration of the status problem and the role of knowledge in the modern information society theory. The author points out and considers a totally different research, where knowledge, as a forming factor of modern society, plays the dominant role.*

*Keywords: post-industrial concept, information society theory, knowledge society concept, knowledge.*

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### Introduction

The emphasis that was laid on the technologic advance, the growth of economic value of information activity and codification of theoretical knowledge as determinants of the formation of a new society by postindustrial ideologists caused a wide range of theories that considered those factors as formative, including the information society theory. According to the supporters of this theory, the growth of knowledge accumulation and information gathering in the 20<sup>th</sup> century (which was of an exponential character) and the pace of the development of telecommunication and information technologies show the post-industrial society transition into a new quality of information society.

At first, the formation of the information society theory as a new ideologeme of the post-industrial vector of development of the

modern civilization was determined by practical realization of their technicistic ideal by the developed countries (first of all by the USA and Japan).

Before the post-industrial concept of Daniel Bell came out, the research of the Japanese scientists represented analytical programs of the increase of the role of information in the society, but all together they formed the “information society” concept that mainly functioned as a unique futurological image that has not yet transformed into a reasoned concept of prospects of the social development.

It is necessary to emphasize that there isn't one established concept of the information society; there is a variety of interpretations that often differ by the fragmentarity of the problem outlook, the absolute pluralism of the approaches and opinions, as well as by the use

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of a big number of terms and concepts which are frequently not constructive at all. There are many definitions of the information society, every one of which suffers from limitation caused by the methodological weakness of the information society identification criteria. Many famous Western and Russian researchers attempted to give them definitions. Thus, Frank Webster distinguishes: "...five definitions of an "information society" each of which presents criteria for identifying the new one. These are technological, economic, occupational, spatial and cultural information society. Of course these need not be mutually exclusive, though, as we shall see, particular theorists emphasise one or other factors in presenting their particular scenarios" (Webster, 2004, p. 14). However, all the numerous supporters of the information society concept as a new type of the social organization couldn't invent a universal, subjectivism free criterion according to which it could be possible to classify existing societies and periodization of the historical development. Webster points out that most of the information society definitions basically have quantitative characteristics (quantity of white-collars, percentage of the intangible sector in GDP, etc.), but quantitative variables themselves mean just more information – they don't mean the formation of a new type of the social organization. According to his figurative speech: "...we now have more cars than in 1970, but no one even tries to define us as a "car society" (Webster, 2004, p. 32).

### **Urgent problem**

Active discussion of the "information society" concept and of a great number of publications that represent different models of the information society don't give us a chance to discuss all variants of interpretations of this phenomenon in one article. We state a rational and realistic problem – out of the great variety

of the information society theories to point out the researches that are not based on quantitative criteria, but on the qualitative ones. Those are the researches that differ from the majority a lot. According to Webster, such researches: "...do not proceed from the assumption that nowadays there is more information (it's obvious), but from the assumption that the kind of that information has changed our lifestyle. This definition means that the theoretical knowledge underlies in our behavior..." (Webster, 2004, p.14). However, he acknowledged that there are only a few researchers who contend that the modern society doesn't need such a deep research of the meaning of information because meaning is informative itself. For them the modern society is the society where knowledge plays the dominant role, which has never happened before. Moreover, the British professor thinks that in regard to the society that's being formed it would've been better to use the term "knowledge society". This term: "... means much more than the piled up information bits. Although the priority of the theoretical knowledge is not considered in the information society theories well enough, there are still enough reasons to think of it as a characteristic feature of the modern times" (Webster, 2005, p.37 – 38). It's exactly those "changes of system" caused by the increase of the role of theoretical knowledge that were reflected in the works of Manuel Castells, Antony Giddens, Jean-François Lyotard, Mark Poster and others.

### **Example**

One of the leading theorists of the modern information society is Manuel Castells, who gave proof of the network logic of his baseline structure. The network society is a social structure that characterizes the information era of social development, though with a big variety of aspects depending on socially cultural and institutional specific character. The model

presented by Castells became a synthesis of empirical studies and a huge analysis which he has been researching for 14 years in many countries, including Russia. The model was mentioned in the trilogy: "The Information age: economy, society and culture" that was published in 1996 – 1998 and in Webster's opinion, that put him in one line with the leading researchers of the information age (Castells, 2000).

Castells differentiates the famous concept of the "information society" and his own concept of the "informational society". It's important that, in the former, information in the society plays the defining role, but in M. Castells's opinion, information and information exchange accompany the development of the civilization all the way along the whole human history and the term "information society" itself is of no analytical value to the definition of peculiarities of a new society. He uses the "informational capitalism" concept in which both, an adjective and a noun, have a certain meaning. The adjective emphasizes the process of expansion of information that symbolizes an absolutely new character of relations. The noun emphasizes the permanency of forms of economic relations (pursuit of profits, principles of market economy, etc.). The network society was born as a result of joining capitalism and information revolution. The dominating functions and processes of this society are organized on the basis of "networks" that connect people, universities and countries. It is necessary to acknowledge that the network form of the social organization has existed before, but the "new paradigm" of the informational capitalism that transforms the material ground of the society forms conditions for the pervasive prevalence of networks into all structures of society. Networks define a new social structure which is an extremely dynamic and open system that's capable to interpret innovations without disturbing its balance. Networks are the

effective tools for preserving and developing capitalist economy that is based on flexibility and adaptability. Using the argumentation of some theorists who reasoned the profound changes in the stratification system and pointed out new categories of workers, social groups and even classes (Robert Reich – "symbolic analysts", Alvin Toffler – "cognitariat", Peter Drucker – "knowledge worker"), Castells proves that informational labor is the basis of a new (network) society and that informational capitalism that is based on information labor signifies the change of era.

In the mid 1990s the concept of post-modernism is being developed in the foreign sociology along with the information society theory and its attention to the technological aspects. The concept emphasizes the formation of a new personality and the place of this personality in modern society. The discourse of post-modernism that tried to interpret the most important cultural transformations of the end of millennium means a lot to the modern social theory. The problematization of changes in the world of information, communications and technologies as a productive critical dialogue with post-modernism has a great theoretical significance. The question about the status of knowledge, about the right of rationality in its enlightenment interpretation to have a claim on the main criterion and meaning of the development of human culture and society is the key to understand the post-modern condition to the most famous exponents, such as Jean-François Lyotard, Mark Poster and Jean Baudrillard. A French philosopher Jean-François Lyotard researches the phenomenon of post-modern in the sphere of knowledge. In his famous research "The postmodern condition" published in 1984 he studies the problem of transformation of scientific knowledge in the information society emphasizing the range of problems in one of the "sectors" of experience – in

the world of knowledge and discursive practice – and researching virtualization as delegitimation of knowledge, model of delegitimation and post-modern era (Lyotard, 1998). The subtitle of the book “Postmodern condition: a report on knowledge” reflects the main purpose of the book which is to give a report on knowledge condition in the most developed Western countries for the Council of the universities of the government of the Province of Quebec. The post-modern idea of knowledge starts with the scepticism demonstrated by the author regarding the rule of consensus that admits that the real value of the statement between the sender and the receiver can be achieved under the condition of one universal mind. The author thinks that deep changes of the status of knowledge and information in modern society are interconnected and take place in two directions. First of all, the point is that the emphasis is transformed from the essential knowledge value into the result achievement, in other words, using the Lyotard terminology, in the direction of performativity in the organizational system. The author emphasizes: “The nature of knowledge cannot remain unchanged within this context of general transformation. It can fit into the new channels, and become operational only if learning is translated into quantities of information” (Lyotard, 1998, p. 17). The author means that reproductions and transmission of knowledge and information are determined by demand and by the possibility of operationalization and practical use. Secondly, Lyotard asserts that knowledge and information acquire properties of goods, and market mechanisms are needed in the information sphere. According to him: “The old principle that the acquisition of knowledge is indissociable from the training (Bildung) of minds or even of personality itself, is becoming obsolete and will become even more so. This attitude of the suppliers and users of knowledge to the knowledge they supply and use is now

tending and will increasingly tend to assume the form already taken by the relationship of commodity producers and consumers to the commodities they produce and consume that is the form of value (fomie valeur)” (Lyotard, 1998, p. 17). The display of the stated factors brings to the beginning of the situation of post-modern in science. Science is reviewed in such terms as subjectivism and relativism that are specific to all “grand narratives”. Science itself cannot find the reason to legitimation and loses trust.

The point of view of the American sociologist underlies in the traditions of post-modernism and in a new range of problems of the information society analysis. The sociologist belongs to the French intellectual tradition of structuralism and post-structuralism of Mark Poster. In the initial period of the formation of the information society ideology the value of theory and reliable information was emphasized, but in the next period there is a tendency to research unscientific information, prospects of forming the information society in connection with “loss of the privileged status of scientific discourse”. Researches of the problems of the scientific knowledge-unscientific knowledge ratio, the reliable and unreliable information ratio and information on the “true-false” scale became urgent. Theorists of post-industrialism ignored the language problem on the level of theory as well as on the level of social sphere. The concept of the “mode of information” developed by Poster is meant to “decode” the linguistic meaning of new forms of social interaction (Poster, 1990).

Unlike positive and optimistic supporters of the information theory, its critics do not tend to overestimate an increase of impact of information on social development and, moreover, to judge too soon about formation of a new type of society and changes in the nature of social and economic relations. Information society is not emphasized directly in the theory heritage of one of the most

famous English speaking representatives of the modern sociological idea Antony Giddens. Moreover, according to Frank Webster, he wasn't interested in the range of problems of information society and he thought about this idea skeptically. Giddens believes that the role of information in modern society shouldn't be overestimated; it has always been an "information" society and increase of information value doesn't mean that it's time to talk about forming a new type of society. We are observing the phenomenon that doesn't go beyond the existing social practice which is "informatization" of social networks. Even though Giddens doesn't acknowledge the existence of information society and doesn't point out the formation of knowledge society, the information processes, new opportunities and risks linked to them take the key place in his theory. The reflexive modernization theory developed by Giddens is very interesting to us scientifically as its theses have something in common with ideas of the theorists of knowledge society, such as Nico Stehr, Peter Weingart, Ulrich Ufer and others. His reflexive modernization, according to Webster, is an epoch which is "characterized by heightened social- and self-reflection as the basis for constructing the ways in which we live. If it is the case that, increasingly, we make the world in which we live on the basis of reflection and decisions taken on the basis of risk assessment (rather than following the dictates of nature or tradition), then it follows that nowadays enormous weight will be placed upon theoretical knowledge to nourish our reflection" (Webster, 2004, p.40). In the book "Reflexive modernization: politics, tradition and aesthetics in the modern social order" Giddens together with two other outstanding scientists U. Beck and S. Lash discusses how modern society, by means of reflexive modernization, transforms its basic characteristics, such as formations of class, stratum, occupations and nuclear families (Giddens, 1994). The key thesis of the reflexive

modernization theory is a thesis about increasing organization of social life that gradually loses "built-in" elements. "Built-in" elements are the elements that are controlled by society, not a person. Getting freed of built-in elements gives a modern person freedom of choice; people stopped trusting implicitly to their destiny and became its masters. The increase of reflexivity underlies in the basis of the increase of choice. By reflexivity Giddens means gathering of information that lets people obtain knowledge that is necessary for a conscious choice. One of the consequences of the phenomenon of intensified reflexivity is the increase of the role of theoretical knowledge. It was described by Giddens and is of interest to us. Even though he doesn't differentiate information and knowledge and first of all discusses abstract knowledge, he still emphasizes that the modern world is based on their accessibility and reproduction. In his opinion, the key role of knowledge becomes the indication of the forming society.

The modern stage of concept development of the information society is associated with generalization of new empirical data and extrapolation of trends. The researches in the sphere of transforming post-industrial and information societies into a knowledge society in which economic and social aspects of information society play dominant roles became much more active. Most of the American and European researchers started to emphasize on the role and meaning of knowledge, and not on the role of information. That caused a range of new definitions of modern society as the knowledge society. In English speaking countries people call it "knowledge society" and "knowledgeable society", in German speaking countries – "Wissensgesellschaft", French researchers call it "capitalism cognitif" and "societe de la connaissance". The concept of knowledge society as the future society became a point of

social interest. In the beginning of 1990s the researches that discussed emancipation of the knowledge society concept from the theories of post-industrialism and information society were published. The most important works were presented by an American economist Robert Reich "The work of nations. Preparing ourselves for 21<sup>st</sup> century capitalism" (Reich, 1999), the famous American economist, one of the developers of the modern theory of management Peter Ferdinand Drucker and his work "Post-capitalist society" (Drucker, 1993), the German sociologist who was one of the leading theorists of the "knowledge society" Niko Stehr "Wissen, Arbeit, Eigentum" (Stehr, 1994). It's important to point out that not only those works but the whole range of ideas and discussions devoted to a new and now determinative role of knowledge in economic and social organization were presented in various publications and turned out to be quite needed. This indicates a strong demand for the discourse of the knowledge society itself in the modern social theory.

Those researchers who see formation and development of a new type of society as a result of social qualitative changes that were caused by theoretical knowledge support the idea expressed by the founder of post-industrialism Daniel Bell about theoretical knowledge that can be detached from quantitative factors "analytically and, possibly, essentially". By the beginning of the 1960s a very important social change has occurred in the industrially developed countries: the number of skilled specialists and managers ("white collars") started to increase over the number of industrial workers. In 1959 the exponent of so called "managerism" Drucker foresaw the further development of this tendency and invented the term "knowledge worker" which means a cognitive worker or a knowledge specialist. In 1969 he coined the term "knowledge society", although only some people know that for

the first time the term "knowledge society" was used by an American political scientist Robert Lane in 1966 to describe the impact of scientific knowledge on the sphere of public politics and management. However, it was Drucker who brought the new term up to date in social context and developed it in details in his latter works in the 1990s. At the same period such key concepts to modern society as "learning society" (suggested by Robert Hutchings in 1968) and "life-long learning" (introduced by Torsten Husen in 1974) came to existence. It was associated with fixation of a special role of knowledge as the main factor of social transformations in modern society in the socio-political discourse.

Drucker presented his point of view on modern situation and prospects of development of the Western civilization in the aforementioned book "Post-capitalist society" published in 14 countries and translated into 8 languages. The name of its first chapter "From Capitalism to Knowledge Society" is quite significant (Drucker, 1999). According to Drucker, modern era is the era of radical changes of the basis of social structure – transformation of capitalist society into knowledge society (Drucker, 1999, p. 70-71). Drucker believes that only the Renaissance era and formation of the basis of the industrial society era can be called similar in their historic meaning. He emphasizes that this process happens under the influence of radical changes in the knowledge concept itself. "At the present time knowledge is systematically and intentionally used to define what kind of knowledge is needed, whether getting such knowledge is reasonable and what's needed to be done to provide efficiency and innovation" (Drucker, 1999, p.95).

In the beginning of the 1990s some remarkable attempts to invent preliminary versions of concepts of the knowledge society as post-modern interpretation of the information society theory were made. The range of problems

of the knowledge society becomes wide-spread in the works of German scientists Nico Stehr, Peter Weingart and Gotthard Bechmann.

Nico Stehr, who is a professor at the Zeppelin University in Friedrichshafen and one of the greatest researchers of the transformation processes of modern societies into knowledge societies, developed a separate scientific and philosophical knowledge society concept. His concept is consonant with the ideas of Webster and Giddens in a way, but in his discussions he goes much further postulating that we are already in the knowledge society, main characteristic of which is the desire of a person of the 21<sup>st</sup> century to make the whole life comfortable on the basis of knowledge, but not only its separate parts. The foundation of Stehr's concept is a wider interpretation of theoretical knowledge considered as "universal characteristic of a person". It includes theoretical knowledge as well as all knowledge codified, abstracted away from practical application and amenable to generalization (Stehr, 1994). He points out the following knowledge forms: informative knowledge necessary for understanding; efficient knowledge that is used in production; actual knowledge used in everyday practice. Stehr gives the priority to scientific knowledge that pushes other forms of knowledge out of their traditional niches, entering all spheres of social and individually private life and even those kinds that constituted on the basis of unscientific knowledge, such as traditional, ordinary, religious and philosophical knowledge. The strengthening of the social role of knowledge and its world-wide expansion makes "absolvent action potential" for people and society, but also entails unpredicted risks and uncertainties.

The German researcher Gotthard Bechmann, one of the most famous theorists, presented his interpretation of knowledge society which was rather informative and peculiar.

Bechmann considers modern society on the basis of synthesis of metaphorical macromodels that reflect its essential characteristics like modern society as information society, risk society and knowledge society. For Bechmann it is the unscientific knowledge involvement that is "central dimension of a new form of knowledge production" (Bechmann, 2010, p.30). Therefore, he emphasizes socially determined processes of expansion and reproduction of scientifically invented knowledge as well as universally recognized knowledge viewing knowledge society as modern stage of information society.

### Resume

According to this analysis, emphasis on information society as a research object holds general scientific meaning and information interactions take part in object domains of different studies and scientific fields. However, the emphasis on the increase of the role of knowledge in the society with computer and telecommunication technologies, value of scientific, theoretical knowledge and/or accurate information is common in foreign researches as well as in Russian researches in the context of ideology of information society.

Summing up, it is necessary to point out that the information society theory considerably enriched the concept of the modern stage of social development, but the process of its formation and development has been and still is complex and contradictory. Various interpretations of information society that recently became public considerably differ from the interpretations of the end of the 20<sup>th</sup> century. On the one hand, theorists of information society, unlike post-industrialists, rather consciously started to research private problems of modern society, "...which cannot allow this concept to have a claim on the status of integral social doctrine" (Inozemtsev, 1999, p.61). On the other hand, one

cannot help acknowledging that various recent interpretations of information society are notable for a great flexibility, transparency and adequacy of constantly appearing information innovations in society. Modern transformations in the considered concepts are not strictly determined in a technical and economic way; the problems of social development, politics and culture development are being researched. It's necessary to point out that the emphasis on the increase of the role of knowledge in the society with computer and telecommunication technologies is common in foreign researches as well as in

Russian researches in the context of ideology of information society.

In conclusion, it should be noted that informationalization of society states challenges to the modern social theory. Multidimensional and multilevel mosaic of the forming society assumes big variability of scientific researches of this phenomenon, such as economic, social, political, legal and philosophical researches. We believe that it is indicative of changes in the structure of information society caused by the change of the role of knowledge as well as of paradigm condition of modern researches.

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## **Роль и статус знания в постсовременных интерпретациях теории информационного общества**

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*В статье представлен опыт социально-философской рефлексии проблемы статуса и роли знания в современной теории информационного общества. Из всего многообразия его интерпретаций автор выделяет и рассматривает те кардинально отличающиеся от большинства исследования, в которых доминирующую роль играет знание, выступающее системообразующим фактором современного общества.*

*Ключевые слова: постиндустриальная концепция, теории информационного общества, концепция общества знаний, знание.*

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