

RPTSS 2017
**International Conference on Research Paradigms Transformation
in Social Sciences**

**INFORMATION PROSPECTS FOR SOCIO-CULTURAL
DEVELOPMENT: CONTRADICTIONARY GROUNDS**

I.V. Aladyshkin (a)*, S.V. Kulik (a), A.N. Michurin (a), N.E. Anosova (a).

*Corresponding author

(a) Peter the Great Saint-Petersburg Polytechnic University, Polytekhnicheskaya St., 29, St. Petersburg, 195251,
Russia, i-bez@yandex.ru, +7 911 735-62-43

Abstract

The article discusses the reasons for the relevance of the information paradigm in the analysis of the modern social development and the specific features of the corresponding socio-technical transformations. Particular attention is paid to the problem of the genesis of the attitudes to the information society and its place in the national historiography. The focus is made on the changes in the scientific interest in the information parameters of the recent social development in Russia and on the new priorities of the research into social and humanitarian fields. Currently, the discussion of the problems of the "information explosion" is losing its popularity in the Western scientific space. It seems that the hopes for the information transfiguration of the society are now abandoned. The researchers are paying less attention to the long-term forecasts and hypotheses of full-scale social transformations, and they are becoming more concerned about the specific questions of the integration of information technologies into different social and cultural areas. In Russia, the informatization of social and cultural areas is mainly discussed in scientific and functional terms due to the fact that the researchers were hesitant to introduce Western analytical strategies and considered the issue as an opportunity to "withdraw" from the pressing social and economic problems of the Russian society. The article concludes that the exaggerated praise of the information paradigm often covers up the fact that the information concepts, being the continuation of the neo-industrial paradigm, have changed little in the description of socio-technical development prospects.

© 2018 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Information paradigm, information society, postindustrialism, analytical strategies.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

At the end of the second stage of scientific and technological revolution (STR), which took place at the turn of the 20th century, information prospects of social development gained popularity among scientists and researchers. The awareness of the growing influence of information was the basis for many new theories and concepts that explained the underlying socio-technical changes (Russel, Davies, Miller, 2008, p. 94-97). The processes associated with the "information revolution" were increasingly identified as crucial in terms of STR, and the emergence of the concepts of the future "information society" changed the emphasis in socio-technical forecasts.

2. Problem Statement

The information prospects of socio-technical development were in the focus of attention of both Russian researchers and their western counterparts already in the 1960s, but due to the pressure of an ideologically verified model of the analysis of commodity production, the issues of the growing importance of information were abandoned by the scientific society. It was not the Soviet, but the Russian researchers who took a special interest in the problems of the steady informatization of the society in the 90s of the last century and especially at the beginning of the new millennium (Aladyshkin, Kulik, 2015, p. 685). Then, the ideas of the information society evoked maximum interest in the national historiography, as evidenced by a huge number of publications, articles, and scientific works devoted to this particular subject (Raschupkina, 2015, p. 35). Ultimately, the ideas of the information society supplemented, and sometimes replaced various concepts of the post-industrial society.

Today, the scientific interest in the information parameters of social development is weakening and noticeably changing. The hopes for the information transformation of the society were not quite satisfied. The attention of the researchers is less drawn to long-term forecasts and hypotheses of full-scale social transformations; it has rather shifted to particular questions and contradictions of expanding the integration of information technologies with various sociocultural areas. Today, the ideas of information prospects of socio-cultural development together with the ideas of information society have lost their uniqueness and turned into a routine subject for the discussion of scientific society, which is often characterized by the abstractness and vagueness of theoretical reasoning.

So, the ideas of the information society have been widely discussed in the national historiography (Trachtenberg, 2004), but the reasons for the popularity of this set of ideas, supported by the state as well, were hardly mentioned. In 2008 the President of the Russian Federation approved the "Strategy for the Development of the Information Society in the Russian Federation". In accordance with this document, it was assumed that Russia has a chance to join the top 20 world leading countries in terms of the development of the information society by 2015. However, these were only plans and strategies, the implementation scope of which somewhat cooled the ardor of the national researchers in the glorification of new information horizons of socio-cultural development.

3. Research Questions

So what contributed to the popularity of the information paradigm? What is the basis of the astounding popularity of responsive information society in Russia? And the main question arises: how much the explicit informatization of the society corresponded with the conceptual schemes of the information society and to what extent the prognostic elements of the latter were adequate to the technological growth?

An extremely important role of information, knowledge and information technology in the life of society was admitted already in the late 60s. This was facilitated by the perceived qualitative changes and the expansion of the scientific environment, caused by the escalation of information technologies. Since the early 80s, the informatization of society has been in the center of attention. The fixed growth of information by the exponential curve is referred to as “information boom”. Due to the development of telephony, radio, television, traditional and electronic media, with the invention of microprocessor technology and personal computers, rapid computerization and the advent of the Internet, not only the volumes but also the social importance of information has grown (Lyon, 1989, p. 118). A number of reasons contributed to the awareness of the importance of information, among which, first of all, are the following:

a) The advancement of the production system, as well as the social, economic and political life of the society, changes in the dynamics of the processes in all spheres of human activity.

b) The increased dependence of all spheres of social life on information support, which came as a result of the revolution in the field of telecommunications, followed by a wide computerization. Thus, with the use of microprocessors, a new era began in the processes of complex automation of production, followed by a multiple reduction in the number of machines and mechanisms, maintenance personnel, etc. At the same time, the automation of information spread to other areas of the economy - management, finance, etc., involving state institutions, the political system, culture and life, and penetrating into the everyday life of the population.

c) Improvements in the field of mass media, including the means of its storage, transmission and processing. Informatics and information technologies have turned into an independent technological field, and information technology has become a special branch of industry, facilitating the interconnection of technology and information. Due to the improvement in the means of transmission, storage and processing of information, a sharp increase in its volumes and significance, consequently, raised the requirements for its quality (timeliness, completeness, reliability), thereby stimulating further improvement of the appropriate equipment and technologies.

d) The development of the information industry and its commercialization. The number of people engaged in the field of information technology, communications, information products and services has increased noticeably, and the share of the latter in the GDP of the industrialized countries has grown. Indeed, since the 80s, information services have become a leading sector of the economy for some countries. For example, in the United States by this time, 3% of employees were employed in agricultural sector, 20% - in industrial sector, 30% - in the service sector, while 48% of employees were involved in the development of information processing tools. In terms of the transformation of information into a mass product and the shift of the aggregate demand towards informational needs, the information industry

has developed "by leaps and bounds", changing the production hierarchy in the industrialized countries. For example, in 1994 the world production of goods increased by 3.5%, while the sales of telecommunications equipment increased by 20% (Balashova, 2013, p. 8-11).

Indeed, informatization not only implies technical and technological and production nuances, but it also represents a multifaceted process that permeates all spheres of public and private life. Radical changes in the field of production and technology, as well as in the field of socio-economic relations and culture, religion and everyday life led to reconsideration of the views on technological prospects and modern society as a whole. As a result, the concept of an information society, formulated firstly by the Japanese scientists, began to gain popularity. Yu. Hayashi, professor of the Tokyo University of Technology, who wrote a report "The Japanese Information Society: Topics and Approaches" in 1969, is rightly considered to be the author of the term "information society" (Kalinkina, 2010, p. 494). The features of the information society were outlined in the reports submitted to the Japanese government by a number of organizations, such as the Economic Planning Agency, the Computer Development Institute, the Council on the Structure of Industry (Amirzhan, 2014, p. 52). One of the first and well-known advocates of the concept of the information society was the Japanese researcher I. Masuda, the author of the book "Information Society as a post-industrial society" (Masuda, 1981).

The concept of the information society was widely recognized in the late 80s - 90s, which put the new-industrial theories aside. Future society was then referred to as an information society if more than 50% of the population was employed in the field of information, and socio-economic development depended, first of all, on the production, processing, storage and dissemination of information. Information was declared the most significant economic element and inexhaustible reserve of humanity, thereby replacing the key values of the industrial past, i.e. labor and capital (Elakov, 2001, p. 81-83).

4. Purpose of the Study

The technical advancement was again a key factor for changing not only the production processes but also the way of life and the system of values (Simakina, 2012, p. 24). The idealization of socio-economic development trends once again led to conclusions that the information, not the material goods, will be the driving force for the development of society. There will be another set of values and the intellectual growth, creativity and cultural values will be the top priorities. Thus, the illusions of neo-industrialism were put on a new "information" ground radically changing the whole set of values and even the human nature. But to what extent these hopes are justified? The question assumes the purpose of the study - to identify the points of contradiction of the optimistic prospects of the information social and cultural development.

5. Research Methods

The glorification of information, that is often quite vague, covers up the fact that the information concepts, being, in fact, a continuation of neo-industrial paradigm, have changed little in the general picture of the prospects for socio-technical development. With all the variety of methods of socio-humanitarian thought in the evaluation of information perspectives, the traditional ways of social and

humanistic analysis with some innovations of futurology (extrapolation, probability analysis, regression and correlation analysis, simulation and so on...) still prevail among researchers.

6. Findings

The popularity of the information paradigm is largely due to the fact that it responded to the technical and economic guidelines of the leading industrialized countries. The countries with the well-developed information industry, such as the United States of America, the countries of Western Europe, Japan and others are the first on the way of developing the information society. In these countries, the investments in the innovations in the information industry and in the development of computer systems and telecommunications are one of the top priority state policies supported by the government (Ponarina, 2012, p. 20-21). In some industrialized countries, state programs for building an information society have been adopted (Elakov, 2001, p. 81-83).

The new information paradigm of understanding the prospects of social development was successfully integrated into the general context of the new-industrial theories, remaining, in fact, their logical continuation. By the 1980s, most concepts of neo-industrialism, developed by R. Aron, J. Galbraith, W. Rostow, E. Jacques, J. Furaste, P. Drakker and other prominent western scholars, had lost their popularity, and, what is more, their relevance to the socio-economic and technological changes of that time. In the course of time, the flaws and conventionality of new industrial societies, which were referred to as "post-capitalist" (R. Darendorf), "post-industrial" (D. Bell), "telematic" (G. Martin), "post-civilizational" (C. Boulding), "post-economic" (G. Kahn), "super-industrial" (A. Toffler), "post-Protestant" (S. Altrom), "post-bourgeois" (J. Lichtheim), "programmable" (A. Touraine), "postmodern" (A. Ettzione), "technotronic" (Z. Brzezinski) and even "post-oil" (R. Barnet), and also "the world's village" (Mack Luen), became increasingly obvious. Once again "refreshing" the industrial covenants with informational discourse, the new concept of the "information society", to some extent, left behind the flaws and blunders of neo-industrialism for the time being, shifting the unsatisfied hopes for new information prospects (Pronina, 2008, p. 77-83). It is quite clear that their development was promoted by the awareness of the scarcity of the resources on the planet and their importance for the industrial development. The information development, as is proposed, will make it possible to make up for the decreasing resources of matter and energy by creating most optimal means of life support.

In socio-technical concepts of the last century, the key role was given to a number of different factors, including economic factors (services, innovation or network economy and venture businesses), social factors (the transformation of social structures and relations with the emergence of new classes), political factors (democratization and deideologization), scientific factors (the transformation of science into a key productive force), general cultural factors (globalization) and many others. A new factor in the form of information parameters of modern society changed little in the very principles of its representation and did not solve contradictions in understanding the key trends in social transformations and technological development (Romanov, 2010, p. 30).

Information parameters, on the contrary, often contribute to the abstractness and vagueness of the conclusions. The declaration of information prospects by no means abolished commodity production, and it remained the basic structure of the modern society. Only today the traditional production dimensions

are enlarged with the "informational" aspects such as the "pollution" of the information space, the problems of adaptation and the "gap" between the "information elite" and the consumers, the toughened ideological control, etc.

It should be noted though that the forecasts of the transformation of the entire world into a common computerized information community were in line with one of the main issues for social and humanitarian analytics that is the progressive globalization of the world cultural space. The development of information technologies that have penetrated into all spheres of human social activity and become global, evoked the ideas of common and integral, omnipresent technological system. But obvious informatization of the society far removed from the conceptual schemes of the information society, which largely remained only predictions.

However, both new-industrial and information concepts are purely theoretical models closely connected with the general guidelines for socio-economic development of the leading countries, but they have a hypothetical status that cannot be verified when applied to real history (Bakaeva, (2009), p. 142). Any design of the future reflects present attitudes and expectations. The information prospects of social and humanitarian analytics of modern society prove that futurology, in terms of the current socio-technical tendencies, sometimes correctly recognizes certain aspects and elements of forthcoming transformations, which gives it certain plausibility. Yet futurology, even in its short-term predictions, is far from the vision of the real development of the socio-technical system as a whole. The latter, in any case, proves to be more complex and, under modern conditions, is subjected to a much more multifaceted process of socioprogenous development, which is by no means reducible to the separate aspects of life in the industrialized countries.

7. Conclusion

Summing up it is necessary to note that the new-industrial and information theories of the last century have turned into integral, but not defining elements of the methodological basis of the analysis and not playing a significant role for the western researchers today. However, in the national intellectual environment these theories are still put at the forefront of technical knowledge and taken as the guidelines for the technical development. Such situation cannot be explained by the lag of the national technical theories or the hesitation of the Russian researchers to introduce western analytical strategies. Many experts choose the term of the "society of high technologies", abandoning such terms as post-industrial, technotronic and others. The questions related to the kind of technology and to the specifics of its implementation are of minor importance. The main thing remains, in understanding modern society the focus has finally shifted to a technical component, which has now permeated all spheres of social life and all current and forthcoming processes as well as the principles of their perception.

References

- Aladyshkin, I.V., Kulik, S.V. (2015). Contradictions and prospects of the synthesis of technical Sciences and the Humanities in technical education. *International scientific conference "Modern technologies and development of Polytechnic education" / Ed. edited by Becker A. G., et al, Vladivostok. September 14-18, 2015. Vladivostok: far Eastern Federal University. 684-688.*

- Amirzhan, K.Zh. (2014). The development of the theory of the information society. *Bulletin of Omsk University, "Law", 3*, 51-54.
- Bakaeva, Zh.Yu. (2009) Regularities of the modern information society from the standpoint of the post-nonclassical picture of the world. *Proceedings of the Russian State Pedagogical University. A.I. Herzen, 92*, 136-142.
- Balashova, M.A. (2013). Information society: Theoretical base and Russian practice. *News of Irkutsk state economic Academy, 5 (91)*, 5-12.
- Elakov, A. (2001). Modern information society. *Higher education in Russia, 2001, 4*. 78-85.
- Kalinkina, N.N. (2010). The contours of information society formation in Russia: Informatization of society and development of information infrastructure. *Vestnik Nizhegorodskogo universiteta im. N. And. Lobachevsky, 3(2)*, 494-499.
- Lyon, D. (1989). *The Information society. Issues and illusions*. Moscow: INION.
- Masuda, Y. (1981). *The Information Society as Post-Industrial Society*. Washington, D.C., USA: World Future Society.
- Ponarina, N.N. (2012). Globalization and the information society. *Society, Politics, Economics, Law, 1*, 19-24.
- Pronina, L.A. (2008). Information culture as a factor of information society development. *Analytic of cultural studies, 1(10)*, 75-91.
- Raschupkina, M.G. (2015) Genesis of ideas about the information society. *Bulletin of the Volzhsky University. V.N. Tatishcheva, 2 (24)*, 106-109.
- Romanov, A.N. (2010). The development of the information society: Russia in line with global trends *Bulletin of the financial University, 9*, 125-135.
- Russel, A., Davies Dzh., Miller G. (2008). *Information revolution. A way to corporate reason*. Moscow: Alpina Business Books.
- Simakina, M.A. (2012). Transformation of the quality of life in the information society. *Modern research of social problems, 2012, 3*. Retrieved from <https://cyberleninka.ru/article/n/transformatiya-kachestva-zhizni-v-informatsionnom-obschestve>
- Trachtenberg, A.D. (2004). The Information revolution and information divide: what happens in Russia? *Scientific Yearbook of the Institute of philosophy and law Ural branch of the Russian Academy of Sciences, 2004*, 329-343.