

Modern Information Society as a Research Problem

Vitaly Y. Ivlev

National Research University of Technology
Bauman Moscow State Technical University (BMSTU)
Moscow, Russia
E-mail: vitalijivlev@yandex.ru

Marina I. Ivleva

Plekhanov Russian University of Economics (PRUE)
Moscow, Russia
E-mail: stm602@yandex.ru

Abstract—The specificity of the modern stage of information society development and its translation into the works of scientists is analyzed. The distinctive aspects of the information society are being studied that impact the development of the personality and have become the object of research activities for modern thinkers. The N. Postman philosophical conception of the information society is considered as having as its subject the ontological and epistemological aspects of information as a social phenomenon. It is noted that modern techniques and methods of information transfer change not only the social reality, but also the inner world of a personality, and first of all, such an aspect as personal value system, that determines the close interdependence between media ecology and personal ecology; in this connection, threats for the formation of personality's and individuality's being in modern society are analyzed. The N. Postman point of view is studied, which implies the need to humanize the modern information society through the purposive formation of media consciousness as the ability to critically comprehend, process and control information. The conclusion is made about the importance of the ecology of communication and the mass media as a necessary condition for the preservation of the deep foundations of personality's being.

Keywords—*information; information society; media ecology; communication; media consciousness; mass media; personality*

I. INTRODUCTION

Changes in social life, due to the modern stage of its development - the emergence of the information society, cover all its spheres, promoting the convergence of various forms of social activity, which cause the appearance of a new sociocultural situation in society. Socio-philosophical analysis of the information society is one of the most important topics in the study of modern philosophy, and it determines the greatly different conclusions of representatives of various philosophical school of thought [1], [2].

Practically in all spheres of human activity, ever-increasing mobility, promptness, flexibility in adapting to new technologies are observed, which make it possible to mitigate the abrupt change of technological platforms through a smooth natural transition to network forms of social and public organization. In economics, this is the efforts of large enterprises to organize their internal INTRANET networks; in the political system, this is the

interactivity of various political technologies in media relations and with the informatization of society, and finally, this is the global information network — Internet.

The modern information society is a highly complex system of communication flows supported and distributed using the latest technologies [3], [4]. This system forms the environment of human social habitat, acts as a factor in the formation, regulation and development of the social consciousness as a whole and the human personality, in particular, has a direct impact on social bonds and relations between individuals. That is why the theory of social communications has become today the subject of active scientific study and practical implementation.

Researchers of modern society place emphasis on various factors of its development – economic (F. Machlup and others), technological (Z. Brzezinski and others), cultural (J. Baudrillard, Z. Bauman and others) and put forward mixed assessments of the place of the information society in the progressive development of human culture and its influence on the personality, his value orientation and understanding his place in the world.

II. DIVERSITY OF APPROACHES TO THE PROBLEM OF STUDYING THE INFORMATION SOCIETY

M. Castells builds his conception of a network society, focusing on the assumption that information is the basis of social organization, forming a new social morphology due to the fact that social structures are represented by them as network ones [5]. Information networks, influencing the organization of time and space, have recently become one of the characteristic features of social organization, constituting the information system at the national, international and global levels of communication. The conception of physical distance in communication has lost its meaning under the conditions when computer networks unite people from the most far-flung corners of the planet, and their communication in real time lasts regardless of whether they are next to each other.

Charles Leadbeater, in his “Living on Thin Air” book, published in 1999, argues that in modern conditions, well-being is reproduced primarily not through physical efforts, but ideas, knowledge, skills, talent and creativity, and in the context of “new capitalism” the most creative force becomes knowledge, in contrast to the “old capitalism”, based on such material elements as natural raw materials, land and

machinery. Being smart, inventive and skillful in using information networks is, according to Leadbeater, the key to a new economy [6].

These beliefs were endorsed by many well-known scientists, including Peter Drucker, who argued that the development of the modern economy depends on people who can work effectively with information, namely, create it and use it in practice.

Many researchers of the information society are optimistic in their conclusions about positive trends determined by it in the structure of social processes of modern society. So, from the point of view of T. Stonier, the information society is an era of plenty, in which "everyone is an aristocrat, everyone is a philosopher" [7]. T. Stonier believes that a developed industrial society will solve the problem of food shortages, and later the information society will completely eliminate dependence on material needs in general, providing the necessary products in abundance. Thus, according to T. Stonier, for the first time in history, social problems will be solved a priori, before their actual appearance, by correct prediction.

Russian philosopher V.L. Inozemtsev writes that on the way to the "post-economic society" information technologies and resources become drivers of transition from labor to creativity, from activities motivated by the economic market laws, to creativeness aimed at self-realization of the personality [8].

Other thinkers are not so categorical in their positive assessments; they note that the increasing role of information in the society's life poses new research questions and leads to the emergence of new, previously non-existent problems. The attention of scientists, and first of all, philosophers, is also directed to the study of changes in the society's culture caused by the advent of the "information age", namely, the fact that information has become a comprehensive component of social group and interpersonal relationships that forms social ideology and public opinion [9]. This process began earlier with the introduction of such media as radio broadcasting, and then television, which many times increased the audience and simultaneously focused the impact on it. Media-overload of the society has led to changes in the formation of social consciousness, when the information environment gradually constitutes the preferences of individuals – from political to fashion ones, and the important factor in this process is the role of symbols, thanks to which people identify themselves as one or another social group and orient themselves in the process of interpersonal communication [10], [11].

III. ANALYSIS OF INFORMATION SOCIETY IN N. POSTMAN'S PHILOSOPHY

Nowadays one of the widely known is the conception of the role and place of information in the modern society, proposed by the American scientist Neil Postman, who studied the subject of his research in ontological and axiological aspects. Following M. McLuhan, who formulated the well-known postulate "the medium is the message" [12], Postman performs a philosophical analysis of information in

close connection with the means of its transferring, namely, "media". By this term, Postman means not only the media, since they, as the thinker believes, did not exist until the establishment of capitalist society. Despite the absence of these means, information was produced, generated and transferred in a society from the beginning of its existence, therefore, for Postman; "media" is any way of communication. Investigating the modern stage of social development, the information society, Postman focuses his attention, first of all, of course, on the mass media, analyzing how they changed not only the society's culture as a whole, but also the individual consciousness of the personality [13].

Postman pays special attention to the fact that the mass media present in the culture have a dominant influence on the formation of its intellectual and social preferences. Moreover, in his opinion, they impose special ideas about reality, primarily through the symbols used to exchange meaningful information. These media metaphors, as the thinker defines them, classify the world for us, organize it, structure it, expand it, narrow it down, color it, and ultimately give ground to what the world is.

The communications media change both the social world and the inner world of a personality, the person's value system. The decisive role in the start of this process, according to Postman, was played in the 19th century by the telegraph, the predecessor of the future information society technologies – an invention that allowed much faster information exchange than by the previous method. However, this new opportunity for the rapid news exchange has also modified the value perception of information: since then, not only what can be used for successful socio-economic life has become important and valuable, as it, according to Postman, has been until now, but also something that just has a novelty.

The telegraph generated the idea of context-free information, the idea that the information value should not be determined by any functions that it can perform when making decisions in the social and political sphere and when choosing a course of action in them, but can also be caused by the curiosity of the public. As a result, the telegraph turned information into a commodity, a "thing" that could be bought and sold regardless of possibilities of its future use or its meaning. Further development of broadcasting and television allowed not only to learn information quickly, but also extended the context-free perception of this information to mass perception.

The society's value system regarding the status of information have changed, the values of the possible speed of information dissemination, the scale of the audience covered by it, and the novelty of the data that are not required to be meaningful and useful have come to the fore.

According to Postman, in the modern information society, certain means of information transfer have reached the status of "metamedia" – a tool that not only directs and determines our knowledge about the world, but also information about by which ways and how to get this knowledge. In the 70s-80s of the 20th century, such a role was played by television, which organized the communication environment, in advertising and thematic programs purposefully delivering

information to the viewer, which telephone systems to use, which books to read, which movies to watch, which radio programs to listen to, etc. Since the 1990s, computers have also begun to play this role, and a metaphor, formulated by Postman in relation to television, has become fair in regard to them: both computers and television have become the invisible to people background radiation of the modern social and intellectual universe. They are present everywhere; people constantly turn to them both in the search for information and for the organization of their social life.

While the person of the information society does not consider the issues of his own existence in the flow of information, the society and the state control this flow with the help of three technical means. The first of these is bureaucracy, first analyzed from a scientific point of view as a social phenomenon in the works of M. Weber. The rationalization of social life, its complication entailed the need for bureaucratic regulation of society, and in the conditions of the information society also the volume and speed of information flows are added to these factors. According to Postman, the information explosion resulted in the "bureaucracy effect": the more complex the information management techniques became, the more people and organizational structures were needed to manage these techniques themselves. Thus, huge amounts of information have led to the emergence of "bureaucratic techniques", when more and more bureaucracy became necessary to manage and coordinate bureaucrats, for which new bureaucratic structures were needed. From an organization serving social institutions, the bureaucracy has become their master.

At present, the bureaucracy solves not only the organization problems of the social life, but also what constitutes problems of social life as such, and this, according to Postman's point of view, poses a considerable danger to society. Since the bureaucracy was originally organized for the most effective management of production organization, the only value for it is the value of efficiency, and when it proceeds from this value in solving moral, social and political issues, to the detriment of humanistic values themselves, the consequences for modern society can be fatal [14].

The second instrument of control over information in modern society is expertise. The difference of modern experts from experts of previous centuries, according to Postman, is as follows. Firstly, they are ignorant in all matters that do not relate directly to their specialized area of activity, secondly, they have the last word not only in technical matters, but also, as in the case of the bureaucracy, in social, psychological, moral ones, that is, in those that necessarily require breadth of vision and wisdom of life, which the experts do not have.

Finally, the third instrument, as widely used both in expertise and in bureaucratic organization, is the special structure of procedures and social technologies that help to achieve the desired result in managing the information society. These include IQ tests, the Unified State Exam (USE) system, unified standards of behavior, classifications, and

public-opinion polls. Often, their role in reducing the diversity and quality of information that society gets remains unnoticed, thus, one also fails to notice their role in rethinking traditional concepts.

As Postman rightly points out, no test can serve as a measure of human intelligence, since intelligence as a general concept is used to determine a personality's ability to solve real-life problems in various non-standard new situational contexts. Depending on the conditions of the situation and the type of problem that needs to be solved, one and the same personality may, according to its abilities, act successfully or fail. If we are forced to believe that with the help of the test it is possible to reveal the exact "amount" of intelligence, the intellect becomes nothing more than the points obtained as a result of testing. The test turns an abstract and complex concept into a precise technical term, and deprives of its very essence.

IV. PERSONALITY TRANSFORMATION IN THE INFORMATION SOCIETY

Postman continues the line of research designated and established by M. McLuhan [15], bringing the study of media ecology to the level of personality ecology, first stating the fact of the direct impact of media on the formation and existence of personality, and then turning to the statement of a question of how the information transfer system affects the deep essence of the human personality, what threats to the very foundations of the personality are carried by the mass media information system, with its data transmission speed and audience coverage.

The reason for such a serious threat, according to Postman, is the change in the existential foundations of information, which resulted from mass media wide spread occurrence, when the public was given access to large amounts of information in a short period of time. The problem, as the thinker believes, is what goal is set in the process of disseminating information through the mass media: in modern society, this is the goal of quick access to any information, regardless of its content, and not the goal of obtaining high-quality, meaningful information necessary for the development of society, its economic relations or for the realization of the personality's essential needs. The novelty and ability to entertain the one who perceives it has become valuable characteristics of the mass information. As a result, the content of the "being informed" conception has changed in modern society. The mass media actually provide the consumer, according to Postman, with misinformation – this is not a lie, but information that misleads him, is irrelevant, fragmented and superficial; information that creates for the personality an illusion of cognition of the subject in question, but in fact leads away from the true knowledge.

Therefore, according to Postman, there is so important issue of the mental, political and social consequences of the information effect on the personality from the mass media, first of all, television and computers, as a medium that has the ability to reach the maximum audience. This issue is directly related to the problem of the ecology of the

personality, its integrity and concentration on the values and goals that are essential for the existence of man and mankind.

Postman continued his research in the book "Technopoly", published in 1992. Over the past decade from the date of the previous book publication, computerization has become an inherent fact of social and economic life, but it not only became a catalyst for positive social change, but also aggravated, in the opinion of the scientist, those problems of the personality ecology that have been determined by the rapid development of the mass media during Twentieth century. By the term "technopoly", Postman means the modern stage of the information society development, and its representative, the so-called "technopolist", is a person who is convinced that getting as much information as possible is the only urgent need of the world.

Without denying the importance of information and the technology development for society, Postman draws attention to the threats to the human personality's being that exist in the modern information world and emerge due to the fact that the personality has ceased to be the most important value in it, and information has taken this place.

Innovative technologies and information transfer means are created primarily to generate, store and distribute large amounts of data with unprecedented speed up to this time. When asked what problem does information solve, the answer follows: "How to receive and distribute as much information as possible in faster and more convenient manner for the consumer." As a result, information receives metaphysical status as a mean and a goal of human creativity [16]. The scientist notes that we are accustomed to spend our lives searching for access to information, without thinking about what the purpose of obtaining information is and what kind of information it should be.

In other words, in the environment in which Technopolia flourishes, the link between information and human goal setting is broken, that is, information appears randomly, not specifically intended to anyone, in huge volumes, at a high transfer and dissemination speed, and at the same time isolated from any theory, meaning and purpose. In modern culture, the idea of human progress was replaced by the idea of technological progress, and the goal of consuming information is not to get rid of ignorance and prejudices, but to adapt to the demands of new technologies. We consume information, being unable to control this process, without thinking about the fact, that society can suffer from an excess of information just like from a lack of it, if information is meaningless and there are no mechanisms to control its existence [17].

In the Technopoly environment, the one, who get used to consider technological progress as the greatest achievement of humanity and the only instrument for solving the deepest troubles of society, feels oneself comfortable. In pursuit of information for the sake of information, social, psychological and moral issues fade into the background [18].

Postman sees the only possible way out of this anti-humanistic situation in the life of modern society in the

formation of the media consciousness of both society in general and the personality in particular. Media consciousness means the ability to think critically, control information, separate from its huge flow the data that are really important and serious in the context of consequences for the life of a personality and society, not to be a passive consumer of information of any content, the main advantage of which is its novelty. This task requires the education of a personality already within the school, both secondary and higher, which requires a change in the curriculum.

Currently, the media consciousness of teachers, as Postman writes, is focused on the question of how television and computers can be used in education and for education monitoring (it's curious that over the past thirty years since the book was written, despite rapid, often intermittent changes in the information environment, practically nothing has changed on this issue, except that the attention of modern teachers is focused not on television, but on the possibilities of computerization of education and use of the Internet to reduce direct communication with the teacher in the educational process). While the vital question, according to the scientist, should be put exactly the opposite: how can one use training, education for the development of the personality and its critical thinking abilities, in order to learn how to control information received through the mass media, television, computers?

The problem of technology impact on the development of society and personality is one of the most common in modern philosophical studies, and has received a variety of solutions and estimations in the works of numerous thinkers [19], [20]. The qualitative characteristic of N. Postman's beliefs is that he specifies the conception of innovative technology primarily as information transfer technology [21] and studying the specifics of its existence within the framework of media ecology researches, traces, among other things, the problems of personality being determined by its impact.

V. CONCLUSION

Postman continues the line of research designated and established by M. McLuhan, leading the study of media ecology to the level of personality ecology [22], first stating the fact of the direct impact of media on the formation and being of a personality, and then proceeding to the statement of question of how the information transfer system affects the deep essence of the human personality, which threats to the life-purpose basis of the personality are carried by the mass media information system, with its data transmission speed and audience coverage.

Thus, according to Postman, in the modern information society the conditions has been formed under which the value of an intelligent and educated human personality disappears, and its place is taken by an uncritical information consumer whose spiritual life is successfully controlled by society. Therefore, the scientist tirelessly draws the attention of his readers and followers to the vital importance of developing the media ecology, the ecology of the mass media and communication, on the whole. Given the active

influence of the media on the personality and society [23], social values and culture, this thesis of Postman's philosophical briefs remains timely to this day.

REFERENCES

- [1] M.B. Oseledchik, M.L. Ivleva, V.Yu. Ivlev, "The fractal nature of implicit knowledge", Proceedings of the 3-rd International Conference on Arts, Design, and Contemporary Education (ICADCE 2017). Series "Advances in Social Science, Education and Humanities Research", 2017, vol. 144, pp. 673 – 676. DOI: 10.2991/icadce-17.2017.163
- [2] V.Yu. Ivlev, M.L. Ivleva and V.P. Sedyakin, "Information Metaphors and Classification of Information Sciences", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSSES 2018). Series "Advances in Social Science, Education and Humanities Research", 2018, vol. 283, pp. 874 – 879. DOI: 10.2991/cesses-18.2018.193
- [3] A. Mattoni, A situated understanding of digital technologies in social movements. Media ecology and media practice approaches. *Social Movement Studies*, 2017, vol.16, no. 4, pp. 494 – 505.
- [4] F.I. Sharkov, V.V. Silkin, I.E. Abramova, N.V. Kirillina, Violation of information ecology in media space, *Vestnik Rossiiskogo universiteta družby narodov. Seriya: Sotsiologiya*, 2018, vol. 18, No. 4, pp. 765 – 775.
- [5] M. Castells, *The Information Age: Economy, Society and Culture: The Rise of the Network Society*. Oxford, UK, Blackwell, 1996.
- [6] Ch. Leadbeater, *Living on Thin Air: The New Economy*, Viking, 1999.
- [7] T. Stonier, *The Wealth of Information: A Profile of the Post-Industrial Economy*, London, Thames-Methuen, 1983.
- [8] V.L. Inozemtsev, *Za predelami ekonomicheskogo obshchestva: Postindustrial'nyye teorii i postekonomicheskiye tendentsii v sovremennom mire [Beyond the limits of the economic society: Post-industrial theories and posteconomic trends in the modern world]*, Moscow, Academia, Nauka [Science], 1998.
- [9] N. Couldry, A. Hepp, Conceptualising mediatization: Contexts, traditions, arguments. *Communication Theory*, 2013, vol. 23, no. 3, pp. 191 – 202.
- [10] N.N. Gubanov and N.I. Gubanov, "Mental Bases of Social Solidarity", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSSES 2018). Series "Advances in Social Science, Education and Humanities Research", 2018, vol. 283, pp. 998 – 1002. DOI: 10.2991/cesses-18.2018.219
- [11] N.N. Gubanov and N.I. Gubanov, "Mental Responses to Risks in Modern Society", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSSES 2018). Series "Advances in Social Science, Education and Humanities Research", 2018, vol. 283, pp. 1003 – 1007. DOI: 10.2991/cesses-18.2018.220
- [12] M. McLuhan, *Understanding media*, New York, Mentor, 1964.
- [13] N. Postman, *Amusing ourselves to death: Public Discourse in the Age of Show Business*, Penguin books, 1985.
- [14] N. Postman, *Technopoly: The Surrender of Culture to Technology*, New York, 1992.
- [15] R.K. Logan, McLuhan's Philosophy of Media Ecology: An Introduction. *Philosophies*, 2016, vol. 1, 133 – 140.
- [16] V. A. Inozemtsev, M.L. Ivleva, V. Yu. Ivlev, "Artificial intelligence and problem of computer representation of knowledge", Proceedings of the 2017 2nd International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2017). Series "Advances in Social Science, Education and Humanities Research", 2017, vol. 124, pp.1151 – 1157. DOI: 10.2991/iccessh-17.2017.268
- [17] B.N. Zemtsov and T.R. Suzdaleva, "Ecological Law of Russia: Milestones of Formation", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSSES 2018). Series "Advances in Social Science, Education and Humanities Research", 2018, vol. 283, pp. 329 – 332. DOI: 10.2991/cesses-18.2018.74
- [18] N.I. Gubanov and N.N. Gubanov, "Criminal behavior: biological, social and personal conditionality", *Vestnik slavianskikh kultur – bulletin of slavic cultures-scientific and informational journal*, 2018, vol. 48, no. 2, pp. 53 – 66.
- [19] V.Yu. Ivlev, M.B. Oseledchik, "Methodological principles for the introduction of modality categories in modern scientific cognition", Proceedings of the 3-rd International Conference on Arts, Design, and Contemporary Education (ICADCE 2017). Series "Advances in Social Science, Education and Humanities Research", 2017, vol. 144, pp. 541 – 545. DOI: 10.2991/icadce-17.2017.128
- [20] N.N. Gubanov, N.I. Gubanov and L.O. Rokotyanskaya, "Prospects for the Development of a Universal Theory of Truth", Proceedings of the International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSSES 2018). Series "Advances in Social Science, Education and Humanities Research", 2018, vol. 283, pp. 801 – 805. DOI: 10.2991/cesses-18.2018.177
- [21] N.P. Stephens, *Toward a More Substantive Media Ecology: Postman's Metaphor Versus Posthuman Futures*. *International Journal of Communication*, 2014, vol. 8, pp. 2027 – 2045.
- [22] E. Barkova, M. Ivleva, O. Buzskaya, M. Buzskij, Ecology of culture in the space of social and humanitarian knowledge, Proceedings of the 2017 2nd International Conference on Contemporary Education, Social Sciences and Humanities, 2017, pp. 12 – 15.
- [23] S. Cottle, Rethinking media and disasters in a global age: What's changed and why it matters, *Media, War & Conflict*, 2014, vol.7, no.1, pp.3 – 22.