

ISCKMC 2022**International Scientific Congress «KNOWLEDGE, MAN AND CIVILIZATION»****CHANGES IN NEW COMMUNICATION FEATURES AFTER THE
OUTBREAK OF THE COVID-19 PANDEMIC**

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Abstract

The authors of this article made an attempt to consider the emergence of a new cognitive style, the so-called "clip thinking" or "clip consciousness" in the framework of a configurative culture, as well as its development and transformation in the educational process of university students (higher educational institutions) during the COVID-19 pandemic. The aim of the work is to build a hypothesis about a change in the approach to educational methods in particular, and to the institution of education in general, in connection with the peculiarities of thinking of representatives of the information society, in particular, students, as well as the peculiarities of the perception of information through the so-called "clips" - out-of-context quickly replacing each other, fragmentary theses and judgments containing a bright image without essential content. Presumably, the social consequences of the COVID-19 pandemic had a catalytic effect on the processes associated with the transition of society to the prefigurative stage of intergenerational communication and entry into the post-industrial epoch in general. Based on the theory of the stages of development of civilization by M. McLuhan and the theory of the evolution of society by E. Toffler, conclusions were drawn about the relationship between changes in society and the transformations of the processes of perception, processing and storage of information.

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1. Introduction

Algo-cognitive culture, which includes society and algorithms and unites them in one space, is a natural feature at the modern, informational stage of the development of society. In modern society, the problem of receiving and processing information has reached a new level. Information, which took hours spent on books to search for two decades ago, became available by pressing a couple of buttons on the smartphone screen. In this regard, the process of assimilation of information has undergone a change.

The processes of getting and assimilating information became more complicated from one era to another, and contained the imprint of the time in which they appeared. The linear system of getting and processing information, that is, information obtained from the context of books, was replaced by newspapers, where the process of presenting information stopped be so strongly tied to the context: the newspapers contained more fragmentary, often unrelated set of brief facts (theses). The emergence of telecommunications was accompanied by short and laconic conversations, in which only factual squeeze was presented. Cinematography, which introduced elements of visualization and further contributed to the change of human consciousness by introducing the techniques of clip culture, was eventually replaced by a sharp entry into the world information space of computer technologies, replicating "clips" and making them the main unit of information consumption.

In Alvin Toffler's book *The Third Wave* (2004), the transition to post- and then super-industrial society is accompanied by changes in the infosphere as well. Methods of communication and exchange of information become publicly available, information is produced in large quantities and is also massively absorbed. However, it is worth highlighting the quality, as well as the way of assimilating information: information is fragmentary and mosaic, contains vivid images that quickly change, and therefore are not remembered. Information is mostly illogical, does not contain integral models, and thus is a set of letters, from the surface of which a modern person "snatches" fragmentary information, weaving them into the context of his own beliefs and framework. Information and images that arise in a person's consciousness are unstable, often replace each other: this is a set of extra-contextual theses.

Essentially, the phenomenon of clip thinking is a cognitive style, since it is one of the new ways of perceiving and memorizing information, and also contributes to the rapid switching between different sources of information.

According to the theory of the gradual development of civilization by McLuhan (1998):

...society, being at the present stage of development, is transformed into an "electronic society" or "global village" and sets, through electronic means of communication, a multidimensional perception of the world. The development of electronic means of communication returns human thinking to the pre-text era, and the linear sequence of signs ceases to be the basis of culture. (p. 263)

The educational process is undergoing changes and will continue to change in the future, due to the peculiarities of consciousness and the formation of clip thinking in most representatives of humanity.

One of the features of a configurative culture, in which peers learn mainly from their peers (Habermas et al., 1974). One of the features of a configurative culture, in which peers learn primarily from their peers, is the academic paradigm of interdisciplinarity. That is, in order to be demanded and competitive specialist, a person has a need to be competent not only in matters related to his own profession, but also to have sufficient knowledge in related disciplines. A developer who knows not only the programming language, but also technologies related to his field, will be more competitive. In modern culture, the scale on which the quantity is laid outweighs the quality in the absolute majority. Despite the sad consequences for experts in a certain field, such convergence generates a large number of interactions between completely distant specialties – information and scientific fields.

The COVID-19 pandemic also affected modern culture: the process of receiving and transmitting information in the "person-to-person" system has changed. The main method of teaching at universities, namely academic lectures, in connection with the advent of coronavirus infection, switched to a remote format by connecting all participants in the lesson (teacher / teachers and students) to a platform that remotely broadcasts information regardless of the distance of the participants in the lesson. The information received by students in online lectures acquires characteristics that correspond to the culture of the information society. Even the auxiliary material becomes the property of clip culture: presentations prepared for such classes carry limited thesis information, the slides in them often replace each other, and can be torn off from each other in meaning (a rule that says that on one slide presentation should contain only one main thought or idea). Teaching aids in such lectures are not often used, and if they are used, it is usually in the format of an e-book or a file located on a computer, tablet or smartphone.

2. Problem Statement

In the modern world, the problem of information consumption (its colossal volumes) is most acute. In this regard, there are adaptive changes in the behavior of human beings. Responses to the emergence of an algocognitive society, a person has a mechanism of stereotypical thinking – clip thinking. It implies a new view of the world, which will be considered in this article.

3. Research Questions

Perception of information through a clip is a characteristic feature of people belonging to generation Z. Such thinking is characterized by fragmentary perception, even fragmentation, fragmentation and the inability of an individual to collect all the fragments into a single canvas of the text, summarizing the necessary information. On the one hand, this kind of thinking allows young people to use a scanner and search for necessary information in various sources of knowledge (books and the Internet), on the other hand, it interferes. However, this kind of thinking prevents young people from immersing themselves in the problem, looking for information more intently, since such people lack the necessary range and attention time that is scattered.

4. Purpose of the Study

The purpose of this work is to cover the phenomenon of clip thinking and consider it more comprehensively. Special attention in this article will be paid to the influence of such thinking on the education process in the era of the onset of the covid-19 pandemic. The new reality has greatly changed the approaches to learning and allowed us to look at the learning process in different ways. Thus, the model of obtaining information by subscribers was changed, and people were able, on the one hand, to receive information through the screen of a smartphone or computer, and on the other hand, there were problems with the quality of information that people consume, as well as the way it was stolen (that is, what people used to find in books, reading for a long time, is now well perceived by generation z only through bright and often changing images).

5. Research Methods

The post-figurative type of culture, which Mead (1988) writes about, and to which our society is actively moving, has a number of features in this process. The search for information and the accumulation of knowledge about the world, which does not come from a mentor or a parent, but implies being among people close in age, is partly caused by the emergence of social institutions and new concepts. Educational and educational organizations that accompany the path of a growing and maturing person assume constant close interaction with "others" (Habermas et al., 1974), who, in essence, are us. The set of character qualities, age limits and even the peculiarities of perception and thinking are the same, the difference lies in the set of knowledge obtained from various sources, including older adults, kindergarten, school, university and various sources, the main of which is digital space (information posted on the Internet).

Digitalization and the pandemic, as well as the transfer of the educational context to the online space, on the one hand, divided the usual general educational environment in which a person is and learns, and on the other hand, due to the steady formation of a new cognitive style, strengthened and expanded the educational field in all its coordinates. It is even possible to highlight the general characteristics of this type of perception of information by getting an education. Obtaining knowledge is often the desire of the person himself (due to the constant satiety of information, information hunger can be felt much more painfully). The knowledge itself has become less profound, the facts and data that a person uses in everyday life have become the most superficial and fragmentary, but the process of obtaining information has become literally continuous. From all the information sources that the development of the media space and the global Internet in particular provides us with access to, a person receives a huge flow of information that allows him to be in the environment and endlessly receive knowledge and information from it concerning any field (including areas of interest that differ from professional ones).

The COVID-19 pandemic, which began in March 2020, accelerated the formation of a stable clip consciousness due to the fact that people, literally, were locked inside their apartment, and their only way out of this kind of deprivation was to constantly be in the information environment by searching for

information and content on the Internet. Knowledge is obtained through platforms originally designed to host other kinds of information (often entertainment content or platforms for informal communication).

Over the past year and a half, we have come closer to the concept of a “global village,” invented by McLuhan (2005), many times faster than in previous years and decades.

Instead of turning into a colossal library of Alexandria, the world has become a computer, an electronic brain, exactly as it is described in unassuming science fiction. And as our feelings come out, Big Brother penetrates inside. Therefore, if we fail to realize this dynamic, then one day we will find ourselves immersed in an atmosphere of panic, befitting the small world of tribal drums with its universal interdependence and forced coexistence. (Koshkin, 2020, p. 120)

At its core, society is now approaching global digitalization, replacing a single human consciousness with a global consciousness, and the main feature of which is that the main thing in this system will not be a person, but an algorithm.

The COVID-19 pandemic, however, has brought not only problems of globalization and digitalization of society, but also a number of positive aspects. Due to the fact that obtaining information and various information has completely moved into the media space, people have equal opportunities: getting equal access to all information and the opportunity to independently and freely acquire knowledge in disciplines that somehow arouse interest. As mentioned above, in the modern world, in order for a person to become a highly qualified specialist in society, it is necessary to gain knowledge not only from his own sphere, but also from those spheres that are in an adjacent field. Physical remoteness has become a symbol and an opportunity for people to expand their own competencies and even master new professions by obtaining information from various sources: online courses, webinars, master classes that were recorded on video and left in the media space, a large number of literature read from the screen of devices, and not printed pages of books. A large number of universities and companies (including Ivy League Universities and multimillion-dollar corporations) have opened access to courses previously available only to a narrow elite, "elite" – specialists working within these areas. People from different social groups, different genders and ages, were able to get a large amount of proven knowledge and gain new knowledge, master the programs of the best universities, get new professions and change the trajectory of education (and sometimes the working trajectory) without leaving home. The efforts that need to be made to gain access to information, the time to search for it or to travel to the location of this information have been reduced, and also costs have often been reduced, since information is often presented in the public domain or at a minimum price.

6. Findings

It seems appropriate to begin the discussion of the results obtained by analyzing the results of other related studies in this field. Thus, Olga Kokhanaya (2012), in her work devoted to the new realities of media education, comes to the same need for interdisciplinarity. The departments of Journalism and Communication Studies in this matter cannot perform the entire scope of functions. To solve the problem

under discussion, it is necessary to adjust the qualifications of philologists, cultural scientists, historians, sociologists, psychologists. Relying on the same McLuhan (2005), Kokhanaya (2012) comes to a conclusion related to our work: in the process of modernization, media education acquires special attention as a factor of socialization of the individual (Krainyukov, 2019).

The next work on a similar topic can be called simply a Tendentifundamental work in this field. Namely, the work of Sergei Kraynyukov concerning the "clipization" of modern man's thinking. The work was written in 2019 even before the pandemic, so a number of theoretical and methodological problems identified by Kraynyukov can be answered within the framework of this article. If we concretize the mentioned problems, then, according to Kraynyukov, we can distinguish: the insufficiency of theoretical understanding of the phenomenon of clipness and the mental reality described by it, insufficient terminological certainty, ambiguity in assessing the phenomenon of clipness, as well as the lack of psychological methods for studying clipness and the picture of the world in virtual space (Kushnir, 2020).

So, this work is also aimed at the theoretical understanding of the phenomenon of "clipness". The intertextual connection of this concept with the aspect of psychological reality described by it, especially in the context of accelerating the processes of digitalization, according to the authors of the work, can only be considered in an interdisciplinary way. For example, the philosophical and anthropological interpretation of intergenerational communication omitted by Kraynyukov (the mentioned works of M. Mead) make it possible to identify patterns of "acceleration" of information exchange (especially of a cultural nature). Returning to Toffler (2004) and McLuhan (2005), it is safe to say that their theoretical and methodological developments in the field of identifying and understanding new concepts and trends (including from the point of view of terminology) allow us to answer another problem identified by Kraynyukov.

If we talk about the lack of psychological methods for the study of "clipness" and "virtual" worldview, then it is worth referring to the research of Evgeny Kushnir. Here are just some methods of studying these phenomena: inverted class"; discussions; brainstorming; debates; forums; round tables; seminars-discussions (group discussion); the method of paradoxes; the method of cases (situational analysis); ACCSA (the method of L. Yastrebova); SWOT analysis; intellectual maps, mental maps (mindmapping); basket of ideas; visualizer schemes; cinquaines; the "fishbone" or "fish skeleton" technique. Especially E. Kushnir highlights the prospects of using gamification in pedagogy for meta-analysis (Soldatkina, 2016).

Elements of an interdisciplinary meta-analysis of pedagogy to identify philosophical and psychological trends in the development of society can also be found in the works of Professor Soldatkina regarding the media image of the teacher and his transformation. Thus, the media image of the teacher is interfaced with educational portals that are gaining popularity, built on the principle of video courses and video lectures grouped around the traditional lecture form and the figure of the lecturer as the main carrier of knowledge and scientific authority. Accordingly, new media are in a productive search for a new educational media style that would make the educational process more attractive to the modern generation with its habit of technological innovations and fundamentally different channels of obtaining information, as well as to the game presentation of even serious scientific or analytical issues (Semenovskikh, 2014).

All of the above sufficiently proves the fact that not only the topic of this work itself is relevant, but also the results presented in the previous section. If we compare the theoretical and methodological state of the designated area (and we can compare it with the works from 2014 (Pronin, 2014), then the mentioned trend towards interdisciplinarity becomes obvious. The intentions outlined by the fundamental works of Mead (1988), Toffler (2004) and McLuhan are finding more and more of their confirmations. And now it seems most appropriate to proceed to the conclusion.

7. Conclusion

The algocognitive society in which a modern person lives implies constant and close interaction with information in the media space, which has recently been represented, for the most part, by the global Internet network and a whole pool of resources hosted on this network (portals, forums, electronic sources). The COVID-19 pandemic has accelerated and practically brought to the point of bifurcation the dissemination of information and facts that were previously available only to a group of people who were dedicated to this, who are narrow specialists. Demand, as is well known, generates supply: these changes have led to the inevitable installation that knowledge and mastering skills from different, overlapping and complementary fields are necessary for a highly qualified specialist. A person who is well versed in one topic cannot be as successful as someone whose knowledge base includes information on many topics (in fact, it is not even professional knowledge that comes to the fore, but the general level of erudition and culture of a person).

The clip consciousness formed by the majority of contemporaries (representatives of youth from 14 to 35 years old), and actively formed by people of all ages who have access to the global Internet and any device that supports access (computer, laptop, tablet, e-book or smartphone), leaves its imprint on the way and, most importantly, the quality of information assimilation. Information is perceived out of context (because it is tied to a common environment), differs in mosaic and fragmentation, there is no integrity in it. Such information can often be contradictory and not even be checked for inaccuracies and truthfulness. Facts may not pass verification and spread through the so-called "word of mouth", contain subjective (often unintentional) distortions that are associated with the peculiarities of perception and past experience of a person. The facts may not be related to each other, the understanding and analysis of the situation, as well as the convergence of facts into the overall picture and the understanding of the world by a person, may be distorted and be subjective, not objective.

Since the feature mentioned above is inherent in all contemporaries, we can say that the culture of modernity has moved to the perception of information through "clips" in the development of the infosphere of a superindustrial society, which leads to an inevitable change in the ways of teaching the younger generation in the framework of obtaining professions (a prolonged period of training, up to training and retraining throughout a person's life), as well as gaining knowledge about the surrounding world.

References

- Habermas, J., Lennox, S., & Lennox, F. (1974). The public sphere. *New German Critique*, 3, 49–55. <https://doi.org/10.2307/487737>
- Kokhanaya, O. (2012). Media education and the younger generation. In: *Theoretical and Practical Issues of Journalism. Available via Baikal State University*. <https://cyberleninka.ru/article/n/mediaobrazovanie-i-podrastayuschee-pokolenie>
- Koshkin, A. V. (2020). *Dialectic Horizon*. Aurora.
- Krainyukov, S. V. (2019). Influence of modern information technologies on the worldview. *Social Psychology and Society*, 10(4), 23–41. <https://doi.org/10.17759/sps.2019100403>
- Kushnir, E. (2020). Clip thinking / consciousness of students as a psychological-pedagogical and scientific-methodological problem. In: *Herald of Education*.
- McLuhan, M. (1988). *Laws of Media: The New Science*. University of Toronto Press.
- McLuhan, M. (2005). *Gutenberg Galaxy: The Formation of a Printing Man*. Academic Project; MIR Foundation.
- Mead, M. (1988). *Culture and the World of Childhood*. Nauka.
- Pronin, V. (2014). Clip thinking of a student in distance learning. In: *Vestnik of Lobachevsky University of Nizhni Novgorod*. <https://cyberleninka.ru/article/n/klipovoe-myshlenie-studenta-v-distantionnomobuchenii>
- Semenovskikh, T. (2014). The phenomenon of “clip thinking” in the educational university environment. In: *Naukovedenie*. <http://naukovedenie.ru/PDF/105PVN514.pdf>
- Soldatkina, Y. (2016). The media image of the teacher in modern media: the main directions and factors of transformation. In: *Theoretical and Practical Issues of Journalism*, 5(24), 261–277. [https://doi.org/10.17150/2308-6203.2016.5\(2\).261-277](https://doi.org/10.17150/2308-6203.2016.5(2).261-277)
- Toffler, E. (2004). *The Third Wave*. AST Publishing House.