THE EVOLUTION OF MEDIA THROUGH THE THEORETICAL OPTICS BY M. MCLUHAN¹

LA EVOLUCIÓN DE LOS MEDIOS A TRAVÉS DE LA ÓPTICA TEÓRICA DE M. MCLUHAN

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Abstract: Technology has come a long way to its contemporary state, from primitive tools to complex technical systems. Today, the Internet is a powerful media technology channel that, in terms of audience coverage and impact, can be compared with traditional media, newspaper, radio and television. The aim of the article is to identify the features of the development of media and media technologies from the standpoint of an evolutionary approach, including through the prism of M. McLuhan's media theory.

M. McLuhan is one of the first theorists who reflected on the nature of electronic media. In the discourse of M. McLuhan of particular importance is the position according to which the media are defined as a medium, i.e. means or channel of communication. In the historical evolution of a person, media technologies move from auditory to visual culture and vice versa. Media technologies, according to M. McLuhan, become something that unites people, breaks the boundaries in the classical concepts of space and time. Media technologies have a complex impact on a person as a subject of social practices; through a person, media technologies reshape the social fabric, making changes in temporal practices, practices of communication, memory and power.

Keywords: media, digital, digital media, media technologies, Internet, digital anthropology, Media Studies, M. McLuhan.

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Resumen: La tecnología ha recorrido un largo camino hasta su estado contemporáneo, desde herramientas primitivas hasta sistemas técnicos complejos. Hoy en día, Internet es un poderoso canal de tecnología de medios que, en términos de cobertura de audiencia e impacto, puede compararse con los medios tradicionales, los periódicos, la radio y la televisión. El objetivo del artículo es identificar las características del desarrollo de los medios y las tecnologías de los medios desde el punto de vista de un enfoque evolutivo, incluso a través del prisma de la teoría de los medios de M. McLuhan.

M. McLuhan es uno de los primeros teóricos que reflexionó sobre la naturaleza de los medios electrónicos. En el discurso de M. McLuhan tiene especial importancia la posición según la cual los medios se definen como medio, es decir, medio o canal de comunicación. En la evolución histórica de una persona, las tecnologías de los medios pasan de la cultura auditiva a la visual y viceversa. Las tecnologías de los medios, según M. McLuhan, se convierten en algo que une a las personas, rompe las fronteras en los conceptos clásicos de espacio y tiempo. Las tecnologías de los medios tienen un impacto complejo en una persona como sujeto de prácticas sociales; a través de una persona, las tecnologías de los medios remodelan el tejido social, modificando las prácticas temporales, las prácticas de comunicación, la memoria y el poder.

Palabras clave: medios, digital, medios digitales, tecnologías de los medios, Internet, antropología digital, estudios de medios, M. McLuhan.

Introduction

B. Gates is credited with the phrase according to which the possession of the world correlates with the possession of information. Despite the fact that the authorship of the proposition is questionable, its content does not actually raise any questions. The accent on the significance of information was already crystallized at the end of the 18th century, with the invention of the optical telegraph by C. Chappe (Figuier, 1868). With the first demonstration of the electromagnetic telegraph by P.L. Schilling in 1832 and obtaining a patent for the instrumental model by S. Morse in 1840, we are witnessing the evolution of information transmission technologies exponentially (Huurdeman, 2003). At the same time,

communication, which in the broadest sense can be read as the exchange of information, is not the prerogative of the High-Tech Age. Moreover, it is not limited to human interaction.

By and large, the whole world is in a situation of information exchange. Streams of information circulate between living beings, one of which is a human being. A feature of the information exchange initiated by a person is its (exchange) instrumental nature. A person, whose existence is taking place in the supernatural, technical world, is increasingly moving away from the so-called natural, intuitive information flows that can be read directly, without the need for special technical vocabulary or skills of its understanding. A person of the 21st century does not refuse natural information signals, whether it be colors, smells or tactile sensations. However, he increasingly relies on those information flows, the reading of which requires special technical knowledge. Probably, the key of this technical knowledge is speech, oral and written. To a certain extent, oral speech, as well as communication, is not limited by the anthropological framework. Mammals, birds and insects exchange sound signals. Written speech has become a unique invention of the mankind. This is a kind of cultural code that seems to have broken the boundaries of hic et nunc. With the development of writing, a person was able to transmit messages, overcoming the boundaries of space (to another place) and time (up to a different historical period). This is how rock art came down to us, depicting a mammoth and a saber-toothed tiger, which, probably, initially did not fulfill the function of transmitting information about the life and worldview of a caveman through the centuries.

The drawings were replaced by hieroglyphics; hieroglyphs were replaced by alphabetic writing. Since ancient times, writing and books have been central to the definition of literacy. For example, J.L. Borges interprets the world itself as a library, which is divided into many hexes, hexagonal galleries where books are stored; in

books, 25 symbols represent the whole world; a person is born in one of the hexes, moves through the hexes all his life and gets acquainted with the content of unique books (Borges et al., 2000). In a conversation with J.-C. Carrière, U. Eco formulated a militant thesis, "Do not hope to get rid of books!" (Eco & Carrière, 2011). The argument of the Italian thinker is based on the fact that since the end of the 20th century we are witnessing a constant change of the socalled high-tech storage media, from cassettes, floppy disks, disks and flash drives that carried bits, megabytes and gigabytes of information, respectively. In the context of the transformation of information and communication technologies in modern households, there may simply not be a device on which it is possible to read information from a cassette or flash drive; the book, in turn, is always open to reading. At the same time, the fact remains that in the famous novel by U. Eco, the insane blind monk Jorge destroys the great library (Eco et al., 1984); the universal source of information perishes in the flames of fire.

Historical aspect in the development of technology

Whatever is the universal mediator of information in the 21st century, it seems that reflections on the evolution of media technologies should be developed in a broader framework, in the context of the history of technology. Here the 19th century can be seen as a turning point. Without going into the details of the historical development of modern technologies, attention can be focused on two breakthrough technologies, telegraph and railroad. Both technologies have transformed linear optics in the perception of time and space; telegraph through instant messaging, railroad through instant movement.

Technological transformations in the second half of the 19th century began to attract the interest of not only engineers as

specialists in the field of technology. The technology became open to the masses and available for their use. Transformations of the technological, therefore, went beyond the framework of technology itself; they were woven into social and cultural practices, and became an organic unit of everyday practices. This has not passed by thinkers.

At the same time, technology came to the attention of philosophers long before the 19th century, back in the ancient era. In Plato's dialogues, it is included in the discourse of the shadows, matter, as an illustration of one of the objects that drive prisoners into the cave and do not let them out of it (Plato, 1997). Aristotle had directly addressed the problem of τέχνη, which he read as an art. In "Metaphysics" Aristotle distinguished two types of knowledge: knowledge "how" – a specific skill, – and knowledge of "what" is – theoretical knowledge (Aristotle & Lawson-Tancred, 1998). Practical and theoretical knowledge, according to Aristotle, go hand in hand with each other, one is impossible without the other. Nevertheless, the very knowledge of what is reveals to a person εἶδος of the thing, the pure idea of the thing and of the whole natural world. However, it was only in the 19th century when thinkers raised the question of technology, which was being improved, including through the discovery of what is and how to apply electromagnetic radiation. Among those thinkers was E. Kapp.

E. Kapp is on a par with major engineers who, in their technical developments, approached the philosophical questioning of technology (F. Reuleaux, I. Beckmann, A. Riedler). He introduced the concept "Philosophie der Technik" into scientific circulation, and proposed the concept of technology, the principle of organ projection (Kapp, 1978). If Aristotle saw the eidetic principle in the material in technology (which M. Heidegger would later call hidden (Heidegger, 1977)), E. Kapp set up an anthropological prism in understanding of technology. Thus, the telegraph becomes an

analogue to the nervous system, and the railway grid becomes a circulatory one.

contemporary philosophical discourses, technology is In increasingly read not only as a simple continuation of the body, but as something that totally organizes the existential practices of a person. J. Wajcman puts it this way: "According to Google's Eric Schmidt and Jared Cohen, in the 'New Digital Age' you will wake up to the aroma of freshly brewed coffee in a room where temperature, humidity, music and lighting will automatically adjust, and your high-tech bed will give you a light back massage, and it is also guaranteed to provide you with sound sleep, adjusting to your phases of REM sleep" (Wajcman, 2015, p. 380). Smart houses and smart cities are the future that is happening right in front of us. Artificial intelligence seems to be following us on the streets of the city. Law enforcement agencies are increasingly turning to this option in search of criminals by entering key data into the network (Doohan et al., 2022). Or AI helps doctors in diagnosing diseases at an early stages (Rajpurkar et al., 2022). Transforming everyday human practices, technology seems to have settled in the nature and structure of the social fabric. Novelists seem to express this most poignantly. Therefore, it is interesting to turn to two classic dystopias, "Nineteen Eighty-Four" by G. Orwell (Orwell, 2021) and "Brave New World" by A. Huxley (Huxley, 2006). F. Fukuyama called both novels "visionary". According to his position, those two systems that came out from the pen of English writers, on the one hand, "gave birth to two different technologies that were to emerge and determine the world for the life of the next two generations" (Fukuyama, 2003, p. 23), on the other hand, they posed a threat to democracy throughout the 20th century.

On the pages of "Nineteen Eighty-Four" we see the total devotion of the people to the party in the face of Big Brother. Faith and devotion to party ideals is realized on the basis of a well-established system of denunciations and informing. The problem is that a person turns out to be a key informer on himself. This happens for the simple reason that most of the rooms in Oceania are equipped with a telescreen, full-wall screen. The purpose of the screen is not only to broadcast information from the outside, but also to collect the data what citizens are doing, what they are talking about, how they shout at the "Two Minutes Hate". The power in the country is provided and supported by a tandem of the Ministry of Truth and the Ministry of Love, which constantly draw information from the television network stretched everywhere.

On the pages of "Brave New World" we can see another interesting technology named "bokanovskization". By and large, a person whom we observe and who we ourselves are in the 21st century does not exist in this new world. There are savages, but they are not included in the social hierarchy. A civilized society, in turn, is a high-tech version of the caste system. People taken out of a test tube are included in one of the higher (alpha, beta, gamma) or lower (delta, epsilon) castes. The key benefit of the new world is pleasure, stimulated technically, narcotic. If the ideology of "Nineteen Eighty-Four" can be defined as a love for Big Brother, then "Brave New World" broadcasts the ideological message, to buy and to enjoy.

In January 1984, the traditional broadcast of the final game of American football took place on CBS. Every year, global corporations fought for the right to promote information about their products and services in a single commercial during the Super Bowl broadcast. In 1984, Apple Corp. bought this right. Contrary to the traditional presentation scheme, the advertised product was never shown. Instead, a sixty-second drama unfolded on the screens of millions of Americans: masses of shaven-headed people in identical robes mindlessly listen to speeches from a huge screen; the head from the screen congratulates fellow citizens on the construction of the "garden of pure ideology". Then a beautiful girl in bright orange

shorts runs into the hall with a hammer in her hand; the girl throws a hammer and breaks the screen, which a second ago broadcasted: "We will win!". The video ends with a pathetic line: "On January 24th, Apple Computer will introduce Macintosh. And you'll see why 1984 won't be like "1984"" (Christoph, 2011). The world of total political ideology was destroyed by the new model of the personal computer, "Macintosh 128K".

Continuing the idea of the "survivability" of the great dystopias in the modern world, F. Fukuyama seems to implicitly bury "Nineteen Eighty-Four" with the entry of mankind into the 21st century, the availability of personal computers and the development of the Internet. His concerns center on "Brave New World", more specifically on the biotech content of the novel. The American philosopher even resorts to the words of the bioethicist L. Kass: "Unlike people crippled by disease or slavery, those dehumanized in the Brave New World type are not miserable; they do not know that they are dehumanized, and even worse – if they knew, they would not care. They are happy slaves with slavish happiness" (Fukuyama, 2003, p 37).

Technology and, in particular, media technologies transform the social world of a person. In changing the external, a kind of reshaping of space and time, technology has penetrated into the daily life of a person. In part, this prompted M. Heidegger in 1955 to utter a hymn to "Gelassenheit" (Serenity) of a person, detachment from things, from technology (Davis, 2009). In his speech, M. Heidegger expressed concern about the actual place of technology in the social as a whole. He referred to the time in Europe after World War II as the "Atomic Age". At the same time, not only the dangers that the so-called "peaceful atom", worried the philosopher. The key motive of his care is the technology that a person turns to in his daily practices; more precisely, total dependence, which follows the constant appeal of a person to technology. After all, a person from

the 20th century had learned to say "yes" to the technology; much less often is he able to say "no" to technology, which is necessary in order to be able to preserve, according to the German philosopher, the human nature.

However, our daily practices are not made up of biotechnologies or abstract technology per se. Since the onset of the COVID-19 pandemic, the social practices of people around the world have seemed to be anchored in a space between online and offline, direct and indirect communication. Media technologies have come to the forefront of attention of ordinary users and social researchers, which form the ability of a person to live in two worlds at the same time, the physical and the virtual.

Marshall McLuhan. Understanding Media

The question of what challenges media technologies create for human nature should be preceded by the question of what media is. M. McLuhan is among those researchers who were the first to pose a question about the nature and essential characteristics of media in the social and humanitarian framework. In this context, J. Miller wrote: "He (*M. McLuhan*) did what very few publicly did before. Namely: focused on the means by which we acquire knowledge. In the past, these aspects have been largely ignored, or at least the preserve of philosophers or neurophysiologists, and I think that McLuhan for the first time placed the nervous system right at the center of the discussion of ordinary communications and human knowledge in general" (Stearn, 1967, p 235).

The Canadian culturologist and philologist M. McLuhan is called the guru of the media era for a reason. He seemed to feel the end of the era of the so-called "typographic man" and the advent of the era of a new man, whom M. McLuhan had called "electronic" (Katz & Katz, 1998). The professor of English literature did not spend his

intuition only within the framework of his courses; he had written books that, in a certain sense, shaped the direction and style of studying media in a social context, i.e. "The Mechanical Bride: Folklore of Industrial Man" (1951) (McLuhan, 2001), "The Gutenberg Galaxy: The Making of Typographic Man" (1962) (McLuhan, 2008), "Understanding the Media: External Extensions of Man" (1964) (McLuhan, 1994).

Conflicting views on the role of M. McLuhan in the development of media studies coexist in the professional literature. Some media theorists assert the vital influence of the thinker on the development of media sciences; others deny the originality of M. McLuhan's theses, indicate the inconsistency of his reputation among other pioneer media theorists (Katz & Katz, 1998, p. 309). For example, Donald and Joan Theall seem to accuse M. McLuhan of "failing to successfully convey ideas of Contemporary Poetry and Art for Communication Researchers" (Theall & Theall, 2021, p. 46). According to them, the Canadian philologist, being a connoisseur of English literature, learned the basic provisions in his study of the media from there. They call J. Joyce one of the key sources of the thinker's theoretical inspiration; M. McLuhan's books in their interpretation were called "the road to Finnegan" (Theall & Theall, 2021, p. 46).

The peculiar language experiment "Finnegans Wake" first came off the printing press in 1939 (Joyce, 2012). The essence of the experiment is presented in the so-called "auditory reading", i.e. appeal in print to the difference between oral and written texts in order to create a kind of poetic counterpoint aimed at expressing the diversity and at the same time the conflict of the outside world, which is permeated with new communication technologies (Theall & Theall, 2021, p. 56). Donald and Joan Theall conclude the need to revise the work of M. McLuhan in the context of the English poetic tradition, which can be read as a source of inspiration in the

theoretical understanding of media in general. According to their position, M. McLuhan seemed to hush up the influence of literature (more precisely, contemporary literature) on his work, so as not to attack conservative values, which, first of all, are represented by the church (Theall & Theall, 2021, p. 63). The media are indeed questioning the authority of the church, for the reason that they have revolutionized the way in which knowledge is received and transmitted.

M. McLuhan has built a vision of the history and culture of mankind through the prism of the media. In this prism, the media are presented as a driving force of cultural change. Sound signals were replaced by oral speech; during the formation of ancient civilizations, specific music was added to it, which is produced by percussion instruments like gong and tam-tam; in a complex evolution from cuneiform and hieroglyphics, the alphabet and written speech took shape; another evolutionary leap is associated with the invention of the printing press, which seems to have democratized literacy; finally, from the end of the 19th century we are witnessing the transformation of media exponentially: telegraph, radio, telephone, cinema, television, computer, smartphone. According to M. McLuhan, each of these mediums penetrates into social groups and gradually grows, expands in them, and later changes the societies where it prevails.

M. McLuhan defines technology as "extensions" of a person, a continuation of his limbs (strength, speed) and sensitivity (sight, touch, smell) (McLuhan, 1994). In this sense, any technical option turns into communication, in the literal sense – with other subjects, in a figurative sense – with the outside world. Often, in the discourse about the first media theorists, M. McLuhan is put on a par with H.A. Innis. Despite the fact that H.A. Innis, like M. McLuhan, was a Canadian researcher, economics was his initial scientific field. In one of his key works, "Empire and Communications", he drew an

analogy between media technologies and transport (Innis, б. д.). According to his position, the media organizes society in the same way that a car organizes urban space. In turn, M. McLuhan calls this analogy into question. Media organizes society, but their influence, according to M. McLuhan, is indirect. Media directly affects not society as a whole, but individual recipients. M. McLuhan even builds a kind of causal relation: each new media affects the brain of the recipient of information; when processing the received information, the feelings of the recipient turn out to be influent; in the influence of new media – the subject as a whole, which, in response, changes social structures (McLuhan, 2008). Hence the controversial thesis that typography with strict rules in the organization of the text has designed the so-called "linear" thinking, which is primarily represented by the conveyor belt and railways.

However, the mediation of the impact of the media on society does not negate the strength and depth of this impact. This is reflected in M. McLuhan's "bestseller" phrase, "media is a message" (McLuhan, 1994). Probably, the Canadian thinker for the first time in social and humanitarian research practices changed the focus from the meaning of the message to the technology of its transmission. By and large, he argues that the media dictate to us not what to think, but how to think. This affects the social environment, the organization by the subject of his daily, work and other social practices. In a certain sense, this statement by M. McLuhan turned out to be prophetic: the phenomenon of self-isolation during the COVID-19 pandemic demonstrated that today the workflow is organized around a computer and a smartphone; the workplace is decentralized.

New technological media, according to M. McLuhan, by and large continue the confrontation between oral and written speech. In "The Gutenberg Galaxy", the media theorist offers metaphors that highlight the contrast between them, the media of "heart" and

"mind" respectively (McLuhan, 2008). Following the Old Testament thought, he emphasizes that in the beginning there was an oral word as a continuation of the ear and a reflection of the heart. Oral communication still differs from its textual counterpart; it acts as a conductor of worldly, universal wisdom; it enriches / saturates with information each of the participants in communication. The printed word, in turn, is aimed, as a rule, exclusively at the one who reads it, it acts hic et nunc; that is why it is selfish in a certain context, expanding the horizons of its reader directly.

The specificity of obtaining information, according to M. McLuhan, further determines the worldview and behavior of the subjects of social practices. M. McLuhan turns to another analogy, this time borrowed from the sphere of art: cubism seems to create the image of an "acoustic" person, someone who feels and lives life multidimensionally and simultaneously; classical art, in turn, refers us to the "printing" or "typographic" person who receives information sequentially (since, according to M. McLuhan, the medium every time indirectly affects social practices, the consistent way of receiving and processing information can be compared with what M. Heidegger called "calculative thinking" (Davis, 2009)). Behind the spoken word in this logic stands metaphysics, religion; behind the written one – the development of nations and empires in all directions, including space.

Distinguishing media according to the type of mind and heart leads M. McLuhan to two important concepts. The first indicates the historical transformation of the media, which is associated with the movement of the worldview that has passed, in the A. Comte's discourse, for example, 3 stages, religious, philosophical and scientific (Comte, 2008). However, unlike A. Comte, who saw the apogee of human thought in science, M. McLuhan argues that in their technological development, the media return to the heart, the spoken word. This resonates with the second concept, within which

the Canadian thinker distinguishes the so-called "cold" and "hot" media (McLuhan, 1994). Here, media is read not only as an intermediary between sender and recipient of information, but as a stimulus that involves the audience in creating a complete picture. Due to the fact that cinema and television simultaneously affect several senses of the recipient, the viewer himself is left with a simple (i.e. less imaginative) work to connect all the dots on his screen. From here, television becomes, in M. McLuhan's terminology, a "cold" medium; unlike the radio, which forces listeners to complete the picture on their own. The following illustration seems appropriate in the given context: in 1938, in the northeastern United States, a play was staged on the CBS radio station under the direction of O. Welles, "The War of the Worlds" based on the novel of the same name by H. Wells. The production turned out to be so good that more than a million Americans panicked, mistaking information about the Martian attack for a news report (Campbell, 2010).

M. McLuhan has opened the book "Understanding Media" with the following problem, "we suddenly discover in ourselves a passionate desire for things and people to manifest themselves in their entirety. In this new attitude one can find deep faith – faith in the highest harmony of all being. It is in this faith that this book is written. It explores the outlines of our extended beings in our technologies and looks for the principle of intelligibility in each of them" (McLuhan, 1994, p. 6). In other words, new media (for M. McLuhan, this is, first of all, radio and television) are certainly a continuation and expansion of a person. There is no doubt that individual subjects and social groups use such extensions for their own selfish purposes (as it seems, this is one of the key topics around which the plots of dystopias are still built). At the same time, the misunderstanding of media remains as a problem; media have not been understood neither by the person, nor by those groups that use

the media for manipulative purposes. For example, based on the results of the analysis of the US presidential elections in 1960, M. McLuhan came to the conclusion that effective manipulation is realized when the "right" medium is chosen, which corresponds to the content and context of the information (McLuhan, 1994).

According to R. Guins, in a study of how media "shape, expand and involve 'human sensory'", M. McLuhan stated that "the visual bias of Western culture poorly prepared the 'literate person' to understand the auditory tactility of new electronic media" (Guins, 2014). By and large, it took culture more than three thousand years to return from the limitations of literacy (written culture) to the socalled "resonant world of acoustic space", which since the second half of the 19th century increasingly transforms the social environment and the whole world around human beings (Marchand, 1998). Material for the analysis of M. McLuhan from the second half of the 1950s became television. In his opinion, regardless of its content, television, which was dynamically spreading through North American households, marked a renaissance in classical (more precisely, traditional) acoustic culture (Katz & Katz, 1998). Starting with the books by W. Benjamin, in the intellectual tradition of the 20th century a certain "alarming" attitude of intellectuals towards technology was formed (Benjamin, 2008). Unlike the craft tradition of the Middle Ages, in which craftsmen created unique works, the conveyor "learned" to stamp works of art. In this phenomenon one can find positive features; for example, a contemporary person through replicating images of world culture (on postcards, in books and albums, including their online analogue) had the opportunity to "touch" the beautiful even in the space of his apartment. However, the benefit of a replicated culture does not negate the wariness that has crept into the discourse of thinkers. Probably, this anxiety was expressed precisely Spanish more by the philosopher. J. Ortega y Gasset, in the term "revolt of the masses" (Y Gasset,

2021). According to his position, the era of universal literacy and electronic media did not open up new horizons for humanity; it brought power to the masses, an irrational and uncontrollable force.

M. McLuhan in this discourse of the intelligentsia of the first half of the 20th century offers a different prism in the understanding of new media, which seems to inspire hope for the future. Hope is emerging in overcoming the critical stance on the technology media that has expanded with the spread of electrification. Electrification has overcome spatial and temporal differences; according to M. McLuhan, it also has the potential to overcome linguistic and cultural differentiations. Written language strengthened national state borders, reduced human sensory to a single channel for perceiving information – vision. The new electronic culture, according to M. McLuhan, in turn, offered mediums that connect different sense organs with a minimum decoding of the messages they transmit. The age of electricity in this context turns into a kind of technological utopia, in which national borders are overcome and everyone finds their place, which implies rights and responsibilities. This is what M. McLuhan called the "global village" (McLuhan, 2008). The village is not a rolling back of mankind; on the contrary, it is a new form of human existence as an organically built-in social (as a member of a group or groups), national (citizen of a country), natural (living being), planetary (inhabitant of planet Earth) and cosmic unit, which is open to a greater understanding of the surrounding world and taking responsibility for what happens in it. This collectivism of electronic culture is opposed to the egoism of typographic culture. According to M. McLuhan, a person in the era of new media, seems to refuse to realize himself at the expense of the collective; in the global technological village, he develops in consonance with the development of the environment.

Until recently, such a utopia sounded very plausible. In the 21st century, in the era of universal connectivity, the boundaries between

cultures, languages, and even countries seemed to be completely erased. A counterexample arose in 2020, when, due to the aggravation of the epidemiological situation, some countries began to refuse entry to Chinese citizens, and in March, international flights were canceled around the world. Thus began the COVID-19 pandemic, demonstrating that the idea of national boundaries is not a vestige of the past. At the same time, the pandemic also demonstrates that for public and private communications, in the age of high technologies, a subject with an Internet connection is enough. The thesis about overcoming the spatial framework through technology does not lose its relevance.

The key point that is read in the books by M. McLuhan can be reduced to the thesis that the alphabet is one of the historical forms of media; electronic media, in turn, received in the 20th century a cultural influence that is comparable to the invention and spread of the alphabet. In "Understanding Media", M. McLuhan decomposes media as a trivium and a quadrium of posthumanist epistemology. Hence the close relationship between media and literature, M. McLuhan refers to literature as a foundation, where the distinction "between auditory and visual perceptual types" was formed (Katz & Katz, 1998). M. McLuhan forms his trivium from dialectics, rhetoric and grammar. The dialectic contains the potential of critical thought in the analysis of the visual; in turn, rhetoric (the power of persuasion) and grammar (the structure of sentences and prepositional constructions) underlie the comprehension of the auditory. Visual and auditory are represented in the culture of each era. However, their share varies in the historical dynamics of cultures. In the 1960s in dissonance with philosophers' reflections on new existential foundations, including the linguistic turn (Rorty, 1992), M. McLuhan concludes that, just like language, the media "shape the way we perceive the world" (McLuhan, 2013).

Reflections on the past, present and future of media M. McLuhan

holds, among other things, through the prism of a combination of technologies with the bios. This idea was first voiced in "The Mechanical Bride", where a person was read as the "genital organs of the machine world" (McLuhan, 2001, p. 47). Such a "sexualized" view of electronic media seems to be a precursor of the concept that in the 1990s has proposed J. Baudrillard under the name of Telematic Man (Baudrillard, 2009). In the French post-structuralist tradition, Telematic Man is a synthesis of corporality with a screen. M. McLuhan, in turn, continues the sexual analogy with the concept of "hybrid energy that will be released by the combination of literary and electronic modalities, a connection that highlights the broadcast aspect of media, especially in their digital configuration" (Cavell, 2014). Therefore, electronic media are understood by M. McLuhan as an acoustic space characterized by sensory involvement. This space is "skewed, curved and bumpy", as opposed to the "straight and homogeneous" print culture (McLuhan, 1994). heterogeneous research requires non-verbal ways of understanding. Thus, M. McLuhan compares media research with the construction of a new architecture, which is characterized by contours rather than straight lines, just as a film rolls up linear frames to create a sense of an organic process (McLuhan, 1994).

Conclusion

Technology can be defined as a tool invented by human beings. It evolved together with mankind and to a certain extent set the vectors of anthropogenesis. In any case, contemporary technology forms the specifics and affects the quality of social practices that a person implements. Such a vision of technology is not accidental; from the second half of the 19th century in the philosophical discourse, the concept of organ projection is formed, according to which

technology is read as a continuation of a person (E. Kapp).

Canadian thinker M. McLuhan seems to have been developing the concept of his German predecessor, focusing on the media. According to the position of the media theorist, electronic media technologies can be understood as a medium, a means of communication. They went from the simplest sound signals to signs on various surfaces (from rock art to the modern alphabet) and, finally, to an electronic signal.

Despite the inconsistency of the figure of M. McLuhan among media theorists, the epistemological value is the view of electronic media, according to which the author offers a kind of "Renaissance", turning prism, which, among other things, is used in the concept of the global village. The value of this view is due to the trend towards ever greater convergence of users of modern communication technologies, which today is represented, for example, by social networks.

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