THE MODERN TRANSFORMATION OF INTERNET COMMUNICATIONS

ANASTASIIA BESSARAB[1,*], TETIANA HYRINA[2], OLEKSII SYTNYK[3], NATALIA KODATSKA[4], OLHA YATCHUK[4], LIUDMYLA PONOMARENKO[5]

[1] Department of Special Pedagogy and Special Psychology, Municipal Institution of Higher Education «Khortytsia National Educational Rehabilitation Academy» of Zaporizhzhia Regional Council, Zaporizhzhia, Ukraine

[2]Department of Journalism, Ukrainian Philology and Culture, University of the State Fiscal Service of Ukraine, Irpin, Ukraine

[3]Department of Multimedia Technologies and Mediadesign, Taras Shevchenko National University of Kyiv Institute of Journalism, Kyiv, Ukraine

[4]Department of Journalism, University of Customs and Finance, Ukraine, Dnipro, Ukraine

[5]Department of Cinematography and TV Arts, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

E-mail: [1]bessarab_a@meta.ua

ABSTRACT

The article considers the evolution of Internet communications with the development of digital technologies. How new information and telecommunication technologies not only change the forms and methods of communication between people but also call into question the survival of "traditional" methods and forms of communication. The specificity of modern communication systems is reflected; the classification of Internet communication is given according to the composition of participants, the time of receipt of the message and the response to it, and according to the nature of the sign means and forms used. The article also provides definitions for various stages of the formation of the Internet and prospects for development from Web 1.0 to Web 3.0. And the socio-psychological problems that arise with the development of Internet communications are considered, as well as the opportunities and limitations created by Internet communications in the future. These problems and limitations play an essential role in the transformation of current Internet communications, which in the future will become utterly decentralized with the transition to virtual reality. The key difference between Web 3.0 Internet communication will not be the principle of human interaction with the Internet but vice versa - the principle that "the Internet communicates with a person". The possibilities and limitations of such a transformation make it possible to single out only the main socio-cultural parameters of Internet communications due to electronic technologies. But they also make it possible to see that we live in an era of the formation of new approaches to communication, education, protection of human health and safety, and the organization of all life activities. Without considering the risks and limitations created by Internet communications, it is impossible to use the personal and social development opportunities they generate effectively.

Keywords: *Digital Technologies, Internet Communications, Web 1.0, Web 2.0, Web 3.0)*

1. INTRODUCTION

Speaking about the transformation of communication in the modern world, we first pay attention to the development of information and telecommunication technologies and digital media. More and more spheres of society and the activities of the contemporary man are determined by the development of various communication systems: from scientific research and industrial production to ways of everyday communication between people.

Social ties in the modern world are changing; they are becoming more diverse and inconsistent. Former social connections organized based on spatial proximity give way to communication "distance" ties (contacts occur at a distance, or we overcome distances to meet). New connections are short, fragmentary, intense, and not determined by the narrative sequence; connections have increased volatility. Mass media and media reconfigure the spatial and temporal parameters of perception and experience, allowing us to hear and act remotely.

We talk about the ability to transcend space and compress time through different generations of media (from writing to the Internet). Still, digital technologies are enhancing this ability on an unprecedented scale.

The emergence of electronic means of communication (beginning with the telegraph) opens up the possibility of fundamentally overcoming (and, perhaps, even removing) the territorial limitations of the scale of social networks. Now the necessary compactness is provided due to the high speed of information exchange, which makes it possible to neglect the time spent on information delivery and achieve a situation where, regardless of the geographical location of the network participants, from the point of view of communication processes, they are all "nearby" [1; 2].

New information and telecommunication technologies not only change the forms and methods of communication between people but sometimes call into question the viability of "traditional" methods and forms of communication. Thus, an illustrative example is the rapid growth in the popularity of online dating platforms, which replace classic offline dating. Such applications like Tinder and Badoo are used by very young people (the so-called millennials) and older people (generation X); moreover, women are more likely to build long-term relationships and men for short-term acquaintances.

Highlighting the specifics of modern communication systems, we can note the following:

1. Communication systems are based on complex computational processes (algorithms) [3; 4].

2. People cease to be the only agents of communication. As a result, it becomes more difficult to control the procedures and techniques of communication themselves. More and more communication formats are being built in the "machine-machine" or "machine-human" interaction mode (Digital Government, NeuroNet, Internet of Things, etc.) [5; 6].

3. Communication systems (that is, systems generating, broadcasting, transforming and storing information) fit more tightly into the daily regimes of human existence, ceasing to be the property of, for example, research institutes or advanced industries.

One of the modern trends is the formation of new models and methods of communication that allow not only to expand and make more convenient communication between people but also to expand the scope of communication between a person and non-human agents (things, artificial intelligence, etc.). Technological revolution 4.0 creates the infrastructure for the mass distribution of these forms of communication [7]. The fourth industrial and technological revolution implies a range of social, economic, structural, and organizational changes in all spheres of society, occurring due to the daily introduction of radio electronics, ICT (information and communication technologies) and ICT-based production and financial technologies. This revolution includes the development of industries 4.0 (automation and robotization of production based on digital technologies), digital economy (wide use of ICT in business, management, production, and finance based on digital platforms and networks), cardinal changes in the financial system (transfer of transactions to electronic form) [8-10].

2. RESEARCH METHODS

The methodological basis of the study is the general philosophical principles of science, objectivity, and specificity.

Using the method of abstraction, we considered several properties and relationships of Internet communications with the simultaneous separation of properties and features; generalizations were used to establish the general properties and characteristics of communication theories; based on the analogy, the socio-psychological problems that arise with the development of Internet communications were determined, as well as the opportunities and limitations created by Internet communications in the future.

Using a comparison of similarities and differences in stages of formation of the Internet and prospects of development from Web 1.0 to Web 3.0 was established, and also the general definition was formulated.

The systems approach was used in the complex study of large and complex objects - theories, concepts, approaches, and interpretations of mass and media communications, studying them as a whole with the coordinated functioning of all elements and parts.

3. THEORETICAL AND METHODOLOGICAL BASIS: THE CONCEPT AND CLASSIFICATION OF INTERNET COMMUNICATIONS

Currently, the Internet has become the essential infrastructural channel of modern society. Internet communications change people's whole way of life,

their style of thinking of a person, transform a personality, and expand their boundaries. Social mobility is increasing, new behaviour models are being created, and technologies for influencing mass consciousness are becoming more effective. The development of further information and communication technologies contributes to the internationalization of labour markets and strengthens their interdependence, individualization and pluralization of lifestyles. Thus, it can be argued that the Internet is a means of restructuring society and the main areas of public life (economy, science, politics).

Computer communications are understood as technical devices and software through which information is received and transmitted [11; 12].

The standard communication model (without the use of the Internet) is a model described by the "source - message - recipient" scheme [13].

And if ordinary means of communication between people can be classified based on such a model, then the Internet is too diverse. Each link in the chain "source - message - recipient" can be modified and varied. The source can be either an individual or a group of bloggers, the message can be news or e-mail text, and the recipient can be one person or an audience of potentially millions of people.

Depending on when the message reaches the recipient, Internet communications can be divided into synchronous and asynchronous.

1. Synchronous communications allow the exchange of information in real-time. This type of communication provides the opportunity for direct contact and is the most promising. (chats, video chats, video conferences, voice conferences, conversation)

2. Asynchronous communications allow you to transmit and receive data conveniently for each participant, independently of each other (forums, bulletin boards, conference recordings, e-mail, information portals, messenger channels) [14-15].

According to the composition of the subjects participating in the communication, the following types of communication can be distinguished (Fig. 1):

- "one to one";

- "one to the computer";

- "many to many";

- "one to many";

- "many to one".

Let's consider them in more detail.

1. The one-to-one model characterizes communication personally, such as correspondence via e-mail or more interactive messengers that allow you to create the feeling of direct communication with the interlocutor. Also, a variation of this model is the "from person to computer" model - communication with virtual artificial intelligence.

2. The many-to-many model. Each network user can address other users or groups either on their behalf or on behalf of a group. This form of communication often frees the user from all outside control (for example, social networks or forums).

3. One-to-many model. The means of communication of this model on the Internet are news sites, blogs, portals, pages on social networks, and e-mail newsletters. A feature of Internet communications, unlike classical mass media, is that they provide users with the opportunity to leave their comments.

4. Model "many to one". Typical representatives of this model are Internet search engines, in which information is provided at the user's request.

There are other ways to classify Internet communications.

Communications can be standardized (institutions, organizations, or subdivisions, whose functions include the production and/or dissemination of information) and informal.
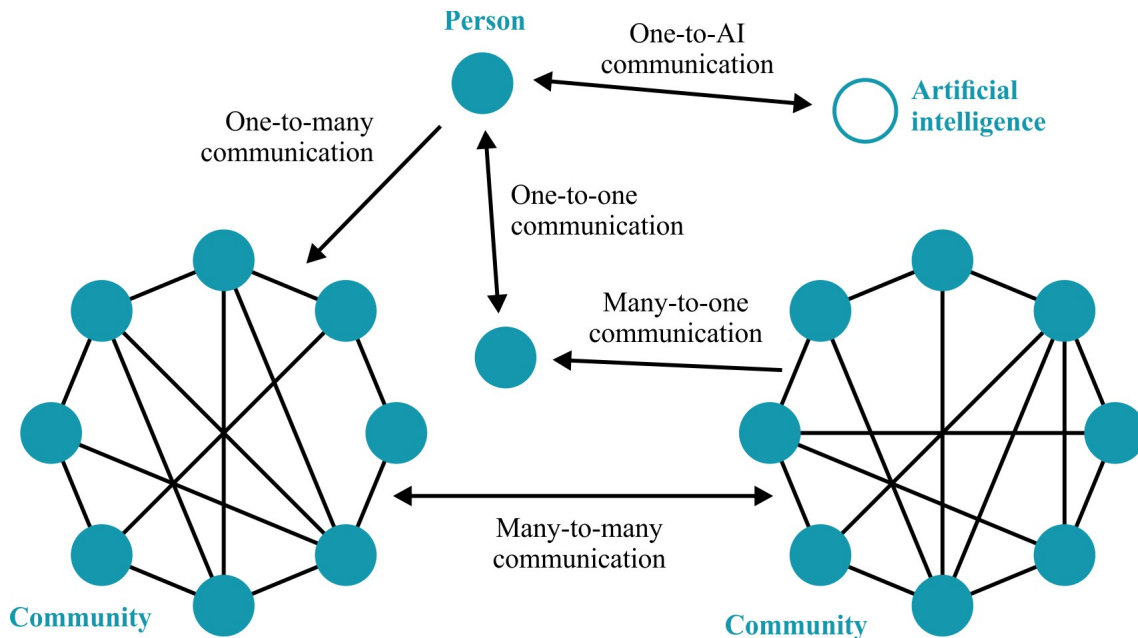
Figure 1: Internet communication models (authors' development)

By the sign means and forms used, the subsequent communications can be distinguished: voice, text, graphic; carried out in natural or artificial languages, etc.

However, modern Internet communications carry certain risks, which are growing every day [16]. First of all, negative issues of children were noted [17; 18] and young people [19; 20] regarding communication safety in the Internet space, as well as the threat to IC security [21-23].

4. ANALYTICS. THE MODERN TRANSFORMATION OF INTERNET COMMUNICATIONS

The so-called versions of the Internet have evolved gradually. There was no clear historical transition from Web 1.0 to Web 2.0, and, likely that humanity will not be able to switch to Web 3.0 immediately.

Internet paradigms were conditionally divided into Web 1.0 – dispensary, Web 2.0 –interactive, and Web 3.0 – mutual [24-26].

The web has evolved, new features have begun to appear on websites, new ones have been born, and new methods and tools of Internet communication have been improved. The Internet has come to new concepts, and users have noticed that they already use a completely different infrastructure.

The phase of the first iteration of the Network lasted from 1991 to 2004. Web 1.0 can be described

in one phrase – Read-Only). This also explains the basic concepts. Users were only able to view pages and interact with content. The Internet has not yet developed opportunities for users to participate in content creation; they only consume what appears on web resources. No authorizations, trackers and registrations. Communication looked exclusively as a one-to-one model (Fig. 2.)
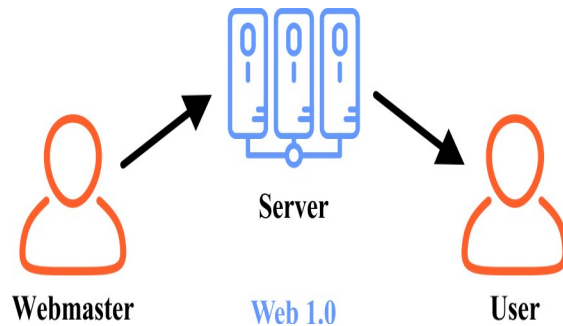

Figure 2: Web 1.0 communication model (authors' development)

Key Features of Web 1.0 Internet Communications:

– years of activity 1991-2004;

– read-only sites;

– lack of interactivity and automation;

– minimum user involvement;

– one-to-one communication.

It is believed that the era of Web 2.0 began in 2004 and continues to this day. Now big corporations and users are getting involved. The former took control of the Web and began to build online empires, while the latter were allowed to participate in creating content.

Social features have appeared in Web 2.0: more and more resources allow users to communicate with each other, exchange messages and make calls (Fig. 3). Internet communications have penetrated all spheres of human life; the simple one-to-one scheme has increased, including video interactive, one-to-many, many-to-one, and many-to-many communication schemes.
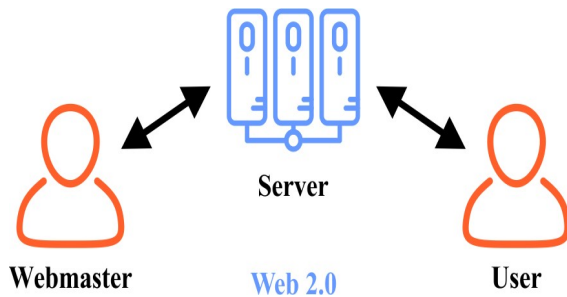

*Figure 3: Web 2.0 communication model
(authors' development)*

Given the growing popularity of social networks and the abundance of content, companies have become more attentive to published information. Strict rules and moderation appear on the platforms, users do not control the published content, and companies have the right to remove data that violates the rules.

Internet communications Web 2.0 differs from Web 1.0 in the following ways:

– users can themselves participate in the life of the Internet, fill it with content and set up many-to-one communications;

– large corporations have become trendsetters and change initiators;

– the social functions of the Web have developed and become part of the lives of users;

– users have no control over their data, and corporations may remove inappropriate content;

– information is still stored on single servers and issued on demand.

Internet communications have two features - interactivity and digital data transmission [27; 28].

Netscape CEO Jason Calacanis outlined the main concepts of Web 3.0, but Web 3.0 is at an early stage, so only initial ideas about the technology are available so far.

Cookies, algorithms and artificial intelligence personalize what users experience when browsing the web.

Decentralized Internet communications, support for artificial intelligence and the Metaverse are the main proposed features of the network (Fig. 4).

Talk about the development of Web 3.0 gained new momentum after the rebranding of Facebook into Meta. However, the ideology of the New Internet implies the absence of power in such large companies.

The key difference between Web 3.0 Internet communication will not be the principle of human interaction with the Internet but vice versa - the principle that "the Internet communicates with a person".
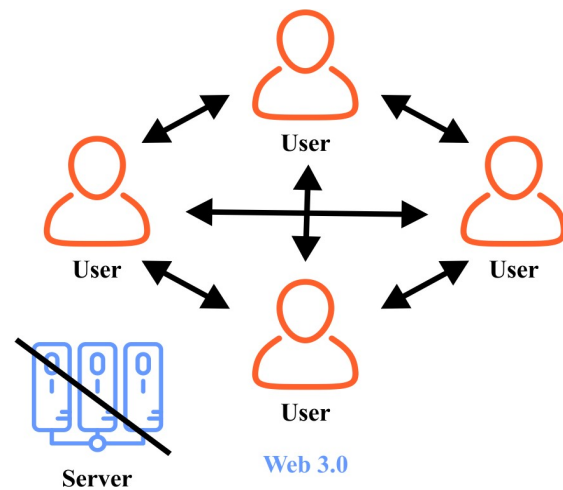

*Figure 4: Web 3.0 communication model
(authors' development)*

The current state of the media space can be fully considered the era of the so-called "new media" or "new media". This type of mass media is based on the technical capabilities of the Web 2.0 system and

has two attributes: interactivity and digital data transmission. Having received the opportunity to post their content in various formats, the user acts as a full participant in the process of mass communication. This expansion of opportunities entails new socio-psychological problems (Table 1).

Table 1. Socio-Psychological Problems Arising From The Development Of Internet Communications (Compiled By The Authors According To The Data [27-29]).

Problem	Description	Regulation
Erasing the "author-destination" boundaries	Previously, the communicator was perceived as a more competent, authoritative figure. The participants' relationship in the communicative process becomes not bilateral and unidirectional but multilateral.	Each user is a source and a destination; the number of possible mutual connections increases to infinity. You just have to be ready for it.
Social media addiction	In fact, a new sphere of existence of the individual is emerging - "public subjectivity", which is embodied in numerous variants of "virtual identity", which becomes both an addition and a way of developing the individual.	Whether an active virtual life impoverishes, real-life remains open. On the one hand, the more time and effort a person devotes to communicating on the Web; the less time is left for genuine relationships. On the other hand, communications via the Internet continue live communication; the Network provides only new opportunities.
The dominance of the virtual avatar	A person lives more enjoyable, fuller and brighter in the form of his cyber image, performs more actions, and experiences stronger emotions.	It is necessary to distinguish between the "split" of the personality into virtual and fundamental components and the opposition of these images.
Regulation of mass communication processes	By influencing the opinions and moods within their group, the user receives, until recently, unprecedented opportunities to influence the general public. As a result of the spontaneous creativity of all participants within the Web 2.0 system, processes become more chaotic, and the entire system is difficult to access for external influence.	Limitation of whipping up hysteria, blackmail, protests, open agitation. It must be remembered that the new interactive system puts the tools in the hands not only of adequate socially active individuals but also of users obsessed with the dissemination of sometimes dubious ideas or simply intoxicated by the power of new virtual possibilities.
Erosion of the value system, erasure of ethical standards	In cyberspace, people allow themselves to say and do things that, as a rule, they do not say or do in real life. They ignore the norms and regulations that govern outside the Web.	People on the Web are not becoming kinder; the Internet only offers simple, convenient ways to perform an action that brings moral satisfaction and requires only a few seconds. Often disinhibition takes on adverse consequences when rudeness, anger, hatred and even threats are manifested. It is necessary to limit and control the "dark side" of the Internet.
Information overload	Instant access to an unlimited amount of information from a massive number of sources of dubious reliability undermines the credibility of the information flow.	It is chaos, the lack of structure of incoming information that causes user overwork: Internet regulation and addiction.
The problem of the language of Internet communications	The user begins to deliberately demonstrate the ability to use the Internet language within network communication and personal communication. When a language is mastered, the pleasure of using it and the feeling of belonging to the community "does not let go" of the user from the Web.	The desire to join a new environment and master its language motivates the user to be more and more active in communication. It is necessary to switch from virtual communication to cultural and social communication.

The solution to these problems may lie not so much within the framework of psychology and sociology but in media pedagogy, which orients the user to the competent and conscious use of the advantages of "new media".

5. RESULTS AND DISCUSSION. OPPORTUNITIES AND LIMITATIONS CREATED BY INTERNET COMMUNICATIONS

Over the past few years, there has been an increasing opinion that the current Internet model is obsolete and needs to be revised: corporations greedily collect user data, censor and know more about users than their next of kin. Today, information and communication technologies make it possible to create such an interactive interaction in the Internet environment, during which a complete illusion of contact with a live interlocutor is created.

Internet communications have become a manifestation of the fifth information revolution, which, according to researchers, integrates the results of all previous ones.

Gutenberg's printing press ensured the mass dissemination and preservation of publicly available information, the telephone became the first means of personal communication, the radio led to the emergence of the concepts of "information space" and "communication network", and the personal computer allowed the release of human creative powers by transferring routine intellectual actions to a technical device. The fifth information revolution, unfolding before our eyes since the late 80s. The 20th century, unlike the previous ones, is characterized by a multiplier effect: it led to the emergence of network communication technologies, destroyed spatial and temporal restrictions, and thereby changed the entire social life of a person. If earlier it was about new ways of transmitting information, with the advent of a computer - about a new way of organizing and operating knowledge, then the revolution in telecommunications led to the formation of virtual social structures and actually "doubled" social reality. Real and virtual interactions of individuals and their groups complement and replace each other

and create fundamentally different systems of roles, statuses and communities. In fact, before our eyes, the formation of the second virtual society - the metauniverse (Fig. 5), is taking place. It is as accurate as of the one in which the life activity of humanity initially unfolds. It creates fundamentally new opportunities, changes the traditional and gives rise to new problems for society, radically expands the scope of human freedom and introduces its further, significant limitations.

Studies of virtual reality in a broad sense - the world of human mental actions that exist and the world of subject-practical actions- have over one thousand years. The mental life of a person and intellectual activity as its most important component are deployed in intelligible forms: cognitive modelling and transformation of reality.

With the advent of the computer, a fundamentally new form of virtual reality arises - cyberspace as an environment generated or mediated by computer technologies. Researchers have been studying cyberspace for more than a quarter of a century. But if, until the 90s of the last century, information processes were studied mainly in technical and technological manifestations, then subsequently, interest in the socio-cultural aspects of cyberspace sharply increased. Scientific analysis of Internet communications has been carried out for about fifteen years.

At the same time, interest in the genesis of technical systems that provide network communications ceases to be dominant. The focus is on the problems of social interactions, primarily on the Internet, and the processes of changing the ways of organizing human activity through computer technology. The hedonistic perception of the opportunities provided to a person by Internet communications is also past. Evident from the very beginning of the formation of the Internet, the problems of escapism - escape from reality into the virtual space - are complemented by new issues and risks of mass network interaction. Most of them have a social character, and their manifestations are diverse: legal, political, cultural, interethnic, semiotic, etc.
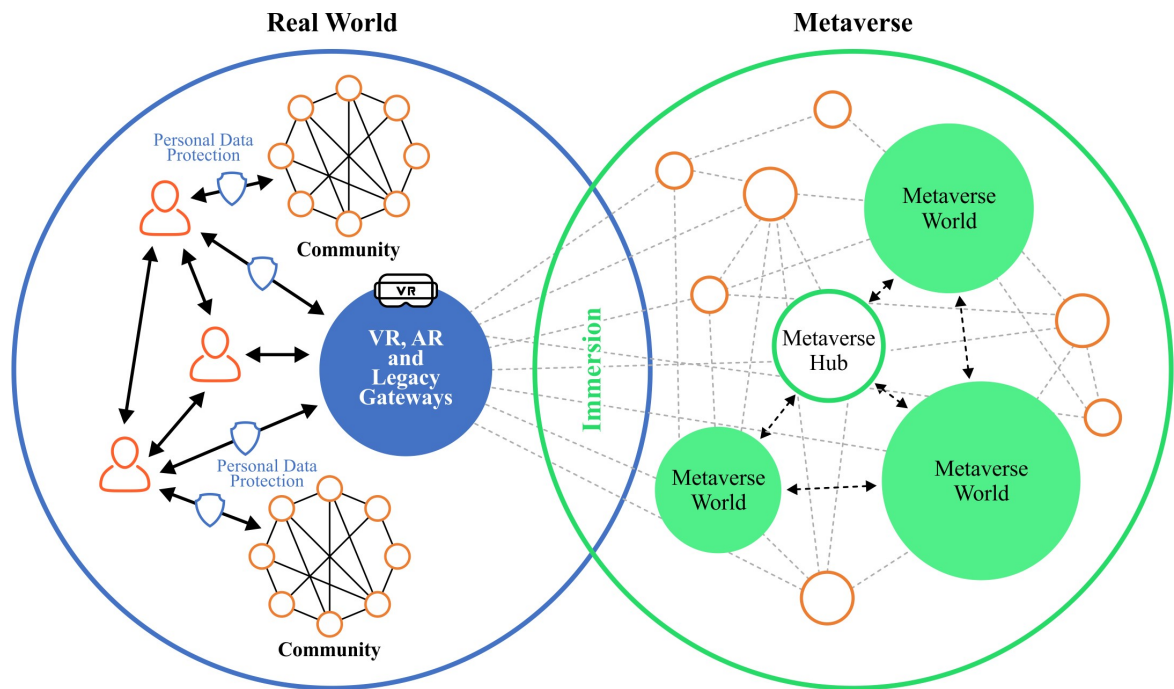
Figure 5: Internet Communications In Virtual Metaverse (Authors' Development)

Our task is to systematize qualitatively new opportunities and limitations of human life activity generated by network communication technologies. The Internet can be considered a fuzzy structured global hypertext and specific social relations that develop between people and their groups in virtual communication. The Internet as a hypertext has the form of a semiotic space that takes the form of a rhizome. In this space, people operate with signs using modern computer technologies.

The meanings of what is designated, on the one hand, are determined by social forms and structures of interactions; on the other hand, the same form of network communications, given by the technological foundations of exchange, is capable of generating both new meanings and new social structures. Such mutual influence and mutual generation of the social and technical sets a new perspective for analyzing the problems of Internet communications. We would call it not the standard term "interdisciplinary" but designate it as multidisciplinary, i.e. requiring the involvement of knowledge and research methods of an extensive range of scientific disciplines and areas. Even the very use of the biological term "rhizome" concerning the Internet as a fuzzy semantic set and a social structure that reproduces according to the principle of a pulsar indicates the polydisciplinarity

of its problems. Technical, natural science, logical-mathematical, sociological and linguistic discourses complement and mutually enhance each other's analytical and descriptive capabilities.

This complex interplay of system-specific scientific languages and research tools is centred on semantic aspects. If virtual reality in a broad sense is the space of existence of any symbolic constructs, then communications on the Internet unfold in the area of socio-cultural symbols and systems. Thus, the global volume of information that forms the Internet space is formed by electronic systems, and in this sense, the Internet is a technology. Still, its essence is not technological but social, and it is set by human semantic constructs that are generated and transformed in social interaction.

Internet communications in the modern world create both opportunities and limitations for human life.

The possibilities of Internet communications are not something that has arisen from non-existent, from "nothing" they fix the objective trends in the change of human life, generated by the technical and semiotic features of the cyberspace of the World Wide Web. At the same time, existing based on technological reality, they act precisely as opportunities in the philosophical sense: some of

them exist only as potentials either for the whole of humanity or for individual countries, regions, social groups and individuals; potential opportunities under certain conditions (social, technological, psychological, etc.) can become real; The Internet itself as hypertext, virtual society and technology is the possibility of constructing an n-dimensional semantic, social and technological space.

Restrictions are those requirements for a person and his activity created by new risks generated by Internet communications in technological and socio-cultural manifestations.

As a result, the opportunities and limitations created by modern Internet communications directly affect their transformation in the future. Let's highlight the main ones:

1. The available array of information becomes practically limitless, which significantly expands the boundaries of human self-realization. Infinity characterizes the volume and the structure of information: from scientific knowledge to recreational details of the most diverse content and forms.

Of particular importance is the accessibility of professional information: professional knowledge, which was previously predominantly the property of specialists, is being shared by the broadest strata of the population. Scientific data for most residents of economically developed countries becomes personally significant knowledge. On the one hand, this leads to qualitatively new possibilities for using professional information and, on the other hand, to practically unlimited opportunities for distance learning and self-education.

In the sphere of institutionalized education, not only the content and forms are changing, but the very meaning and goals of the educational process. Instead of specialized training for a narrow field of activity through the traditional transmission of knowledge, higher education begins to solve the problem of forming the universal professional ability of an employee to be in demand on the labour market, regardless of its structural changes.

Restrictions:

- the need for special training in the search, processing and rational storage of information;

- technological ability and socio-cultural readiness for the value-semantic ranking of information, including the distinction between information as a goal and information as a means. Humanitarian knowledge in this regard acquires a

new status, and begins to be organically included in the technological search and technical design;

- readiness not only for the rational search and storage of information but for its practical use, which implies new requirements for the analytical and creative abilities of a person;

- psychological readiness to adapt to the growing information flows;

- the need for public and state control over the use of certain types of professional information (for example, today, almost anyone can get information about how to make explosive devices from improvised means or about technologically effective ways to break locks of any complexity).

In general, the listed limitations give rise to the need to form information competence. And this means the ability and readiness of an individual, organization, industry, and national economy to rational search, processing, storage, analysis and effective use of information for a humanitarian oriented solution to the problems of man and society.

2. The technological capabilities of Internet communications significantly change the economic basis of society: the traditional three-sector economy (mining and manufacturing sectors, as well as the service sector) is being replaced by a four-sector one. The added industry of production, exchange, distribution and consumption of information becomes the leading one: it determines the pace and direction of development of the other three sectors. The speed and relatively low cost of obtaining information significantly increase the economic efficiency of human activity at the individual and corporate levels. Growing labour productivity leads to a redistribution of labour: wage labour is intensively moving from the extractive and manufacturing sectors to the information and service sectors. Information "breaks away" from material carriers and becomes an independent commodity in the information market. Technical information significantly increases the pace of economic and social dynamics.

Restrictions:

- even minor information changes begin to determine the state of other markets, including financial ones. Structural crises of the economy are supplemented and intensified by organized and spontaneous information impacts;

- the speed of technological changes leads to an avalanche-like release of more and more new products to the markets, which sharply increases the level of market competition and constantly changes the requirements for the competitiveness of an employee, enterprise, industry, national economic system;

- the reduction of costs for the production process itself is accompanied by a significant increase in investment in the information that ensures both the production and sale of goods. This primarily applies to investment in innovation and transaction costs;

- new forms of virtual economic activity create not only new opportunities for the exchange, production, distribution and consumption of all types of goods but also give rise to new forms of economic crimes, and the costs of ensuring information security of economic activity increase accordingly;

- scientific and technological leaders-countries and leaders-corporations seek to monopolize world and regional markets, thereby creating unfavourable conditions for a significant part of sellers. In general, rising labour productivity and falling production costs for both employees and entrepreneurs are accompanied by increasing risks and associated investments and therefore also reproduce growing market and societal volatility.

3. Internet communications generate particular network forms of social interaction and new forms of social life. These include a variety of Internet communities (e-community): websites, web forums, chat channels, the blogosphere that has existed since about 1998 (web magazines or individual blogs, blog communities), IM programs (Instant messaging) or instant messaging services, as well as mailing list services.

Internet communities do not just expand the social opportunities of a person; they eliminate geographic, state and temporal barriers to social life and create a new society in terms of structure and capabilities. Virtual interactions can also play a compensatory role in filling a person's limited communication needs due to various reasons. But the compensatory and "expansive" possibilities of virtual communications are accompanied by significant limitations.

Restrictions:

- the compensatory function of social network interaction often turns into the "Pygmalion effect" - the dependence of the creator on his creation. This effect replaces the possibilities of expanding social freedom with its direct opposite - lack of freedom.

Lack of control of many virtual actions significantly reduces the individual's social security level. Personal data can be used in an unauthorized way both by individuals and by corporations, intelligence agencies and other organizations;

- an individual involved in Internet communications runs the risk of being the object of targeted manipulative influence, including in the form of highly effective social technologies. Such effects can be harmful and even personal-destructive, which requires special training in social Internet security techniques;

- identifying, limiting or stopping deviant behaviour, including direct violation of the law, in-network interactions is much more complicated than in the subject-practical world. At the same time, its scale, due to technological capabilities, is constantly growing, and forms are becoming more diverse. They range from the illegal reproduction of intellectual property to hooligan and outright terrorist acts.

- the very possibilities of Internet communications, or rather the lack of access to them, give rise to new forms of inequality between individuals, regions, and countries. Possession of modern technologies opens not only access to the possibilities of cyberspace but becomes the primary condition for success in the world of natural, subject-mediated interaction.

It should also be taken into account that in recent years the specifics of technologies have changed significantly: from the synthesis of operations that allow, due to the observance of process parameters, to obtain the specified result parameters, they have turned into complex systems that combine research, engineering and design activities.

The development of new technologies has long ceased to be the work of brilliant inventors and lone scientists. It has become a collective, capital-intensive production process in its essence. Therefore, countries and corporations with significant financial and intellectual resources can monopolize the production of new technologies, turning the rest into eternal satellites, outsiders.

And this not only creates new forms of inequality but makes the gap between the poor and the rich more and more challenging to overcome. The problem of poverty within the country gives way to the problem of inequality between countries and regions.

The listed possibilities and limitations are not exhaustive and allow us to single out only the main socio-cultural parameters of Internet communications due to electronic technologies. But they also make it possible to see that we live in an era of the formation of new approaches to education, the protection of human health and safety, and the organization of all human activity. Without considering the risks and limitations created by Internet communications, it is impossible to use the personal and social development opportunities they generate effectively.

Thus, this article is a source of additional information about the various stages of the formation of the Internet and the prospects for development from Web 1.0 to Web 3.0. The considered socio-psychological problems that arise with the development of Internet communications, as well as the opportunities and limitations created by Internet communications in the future, play an essential role in the transformation of current Internet communications, which in the future will become utterly decentralized with the transition to virtual reality and can become the basis for research in this area.

6. CONCLUSION

The irreversible impact of digital technologies on social structures, institutions and everyday practices makes us return to the issue of social control, its forms and methods of implementation. The development of new information and communication technologies makes it possible to collect a massive array of data on all aspects of the life of a modern person, including his routine daily practices. Aggregating all this information, digital platforms (such as Google) have become essential players in this field. The state authorities, interacting with IT companies, owners of digital media, investing in the development of information infrastructure, count on cooperation and loyalty in providing data to control various aspects of the social and economic activities of the population, as well as their private sphere.

A severe problem in the development of digital media and digital platforms is the very possibility of searching for information and, in fact, the "dictatorship" of search engines. Search is the techno-cultural code that governs modern life. We no longer memorize - we seek. With a dramatic increase in the amount of information available, our lives are becoming more and more dependent on search tools.

It is increasingly difficult for us to build a hierarchy of the information we need in information overload. Increasingly, there are fears that Google is becoming too powerful an actor in the modern platform economy, owning an incredible array of data. This platform knows "everything about everyone", and we actively help it, leaving a lot of digital footprints. Recently, more and more often, they begin to talk about the approach of the data peak when the data extraction reaches its maximum. "Data peak is when the giants of the Internet industry already know everything about you, and any additional details will upset the delicate balance and lead to the collapse of the entire political economy regime based on data." Under such conditions, platforms are forced to offer various options to reduce the activity of using operating systems (disabling notifications, switching to "sleep mode", refusing to show useless ads).

If some time ago, discussions around the development of social media were reduced to various consequences of an individual's active immersion in the Internet, gadgets, etc. (negative implications for human health, the problem of loneliness), today, the topic of "distraction", the possibility of switching off from the "world of technology" is increasingly being heard. "(not to be online all the time), the problem of placing emphasis (what is important, what is not important, so as not to waste your life on "likes", "reposts") and managing your own life in the face of an increasing amount of information. The problem of immersion in social media is extremely ambivalent: on the one hand, we are increasingly required to develop digital skills, and the education system is geared toward the maximum use of ICT; on the other hand, as a result of the increasing use of ICT and social media, young people's concentration decreases, they lose the ability to read long texts, erudition is replaced by "googling". Organizations benefit from having employees use less social media, as by depriving them of access to social media, productivity increases substantially. But at the same time, organizations are no less interested in blurring the boundaries of work and personal life so that the employee is online all the time. Thus, several structural tensions and contradictions are inscribed in the development of digital technologies and their expansion, making their future fundamentally open and unpredictable.

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