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The Internet – (cyber)space of interpersonal communication[1]

The contemporary media study deals mainly with the analysis of the Internet[2] as constantly evolving form of transmission and exchange of information. Scientific selection usually includes the analysis of specific realizations, e.g. the structures, the language or pragmatics. The aim of the following work is the study which should specify the determinants of the global network and show the stages of the interpersonal communication – starting from the primary ones, through the new ones to the contemporary form of communication – significantly influencing the shape of the modern Internet. The reference category is constituted by the spatial category, that is the concept of *secondary orality in opposition to the term of primary orality* described by Walter J. Ong. The following analysis of (cyber)space was created as part of the pragmalinguistic analysis of the web portals.[3]

The Internet and its functions

The Internet that so far has been recognized as the channel of communication is commonly known among the researchers from the number of branches of science as well as the users communicating in the global web. In the current release of *The Encyclopedia of Sociology* from 2005 the term of Internet:

> from a technical point of view [...] is a network of networks, that is a global computer network – a group of computers, their resources and peripheral devices being connect-ed by the lines of data transmission – connecting the computers around the world and enabling fast communication. The Internet can bring any number of computers integrat-ed through modems, satellite connections, optical fibres, radio lines and other transmis-

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[1] This article is a modified English version of the first chapter of my doctoral dissertation *The Internet as a medium*.

[2] In this article, the lexeme, understood as a medium, is written in 'lowercase, because the reality has shown that in Poland, global network users are Internet users, just like television users are TV viewers' (Kita, Loewe 2016: 7–8). Cf. http://www.rjp.pan.pl/index.php?option=com_content&view=article&id=1032:internet-&catid=44 (accessed: 14.01.2017).

[3] See: Analiza pragmalingwistyczna portali internetowych (in print).

sion lines. It is based on the common addressing system (each computer in the network has its own unique identification number) and common communications protocol (the language which is used by the computers) called TCP/IP (*Transmission Control Protocol/Internet Protocol*) (Olechnicki 2005: 92).

The Internet is a great network which technically joins all computer networks across the globe. This network of networks (Bienias 1998: 13; Olechnicki 2005: 92) is a group of computers, their contents and peripheral devices being connected by the data transmission lines. Thousands of kilometres of optical fibres, satellite connections and a vast number of devices is being owned not only by the governments but also ordinary citizens who cooperate, store and facilitate in the distribution of the information (Olechnicki 2005: 92; Bienias 1998: 13).

Nonetheless, the variety of information about the Internet does not allow to formulate its clear definition. Monika Górska-Olesińska notices that:

> A global web combines a mass reach with the individual mode of communication, enabling people to exchange information and consume a variety of content […], at the same time becoming a platform for individual expansion on an unprecedented scale. The interface frame of the web graphic browser indispensably accompanies people at work, during studying, shopping, entertainment, various forms of social contact and expression of feelings and emotions. For some, it is a gate to a virtual world which is completely separate from the reality, for others it is a very important attribute of the hybrid space (Górska-Olesińska 2008: 67, as cited in: Żydek-Bednarczuk 2013: 367).

Thereby, Glee Harrah Cady and Pat McGregor duly claim that *Internet* can be differently understood by every individual user, among others as:
1) a community of computers which can communicate by the use of fibre, telephone, satellite lines or other means of communication (Cady, McGregor 1996: 30);
2) a device that is always ready to work, excluding unpredictable malfunctions (Augustynek 2008: 172);
3) a way of communicating with the family or friends living in distant regions of the world or constant contact with new people (frequently only in the virtual world)[4] (Cady, McGregor 1996: 30);
4) an interactivity of contacts (Bajka 2008: 206);
5) a possibility of maintaining full anonymity (Taras 2004: 44) and expressing radical views which in real world would involve a greater courage and cause real consequences;
6) a fountain of knowledge waiting for exploration (cf. Cady, McGregor 1996: 30) with the possibility of multiple returns to localized data (Augustynek 2008: 172);
7) an option for effective learning and apparent impression of omnipotence (Augustynek 2008: 172);
8) conditions for learning about new technologies with the option to use them to create modern achievements (e.g. creating a home version of 3D printer, ozonizer or drone) (author's note);

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[4] http://internet.arct.pl/internet_a_nasze_zycie.html (accessed: 14.01.2016).

9) a place for conducting research confirming a given thesis with the possibility to present a commercial presentation (Cady, McGregor 1996: 30);

10) a gold mine for specialists in a given field who have the option of rapid knowledge sharing (Cady, McGregor 1996: 30);

11) a great number of libraries and archives with access to them at any time (Cady, McGregor 1996: 30);

12) a technology of the future enabling the improvement of the present and future life (Cady, McGregor 1996: 30);

13) a source of games available in demo versions (Cady, McGregor 1996: 30) and online entertainment;

14) a possibility of active express of emotions of the monitored risk (Augustynek 2008: 172);

15) satisfying the various kind of needs and instincts with varying degrees of difficulty with the possibility of realizing them in reality (Augustynek 2008: 172);

16) a way of communication with previously unknown possibilities, different from 'pre-Internet' (Grzenia 2003: 81);

17) a form of dialogue which purpose is to exchange thoughts (Grzenia 2003: 82).

The aforementioned functions of the Internet are not exhaustive resource of definition as it would be impossible to formulate one term unifying the multifaceted nature of the virtual world.

A network of networks has also its negative features, among which the most important is the user's goal in using the Internet. For Glee Harrah Cady and Pat McGregor it is a concept of hacking which can unexpectedly and easily cause damage (Cady, McGregor 1996: 30) or the phenomenon of numerous crimes related to computer hacking in order to steal money or data (Robak 2001: 50). Sending spam out, the so-called junk mail is considered as more burdensome than hacking (Briggs, Burke 2010: 382). Marek Robak adds that it is also wrong to disrupt the lives of other Internet users due to a lack of knowledge or intentional inappropriate behaviour of the sender of the message. Additionally, the researcher states that easily available pornography causes its rapid spread and hiding it from children is difficult[5] (Robak 2001: 50; Briggs, Burke 2010: 382).

The Internet as a technical media, one of the task of which it is to overcome time and space, facilitates mediated contacts. The *face to face*(Filip 2003: 135) contact is replaced by *interface to interface* relation, in which the main component is the interface through which interpersonal communication occurs (with the use of a computer and network) (Goban-Klas 2005: 41). The user, searching for information, can be anywhere in the world. The computers connected to the network are independent. Nowhere in the world there is a place which controls this whole system of communication. The possibility of sending information out is feasible even without connecting all computers at once or sudden disconnection of some of them.[6]

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[5] Despite the available software that allows you to protect yourself from unwanted content, cf. https://www.pcworld.pl/porada/Bezpieczenstwo-dziecka-w-sieci-kontrola-rodzicielska-VPN-filtry,409028.html (accessed: 11.11.2017).

[6] Tomasz Bienias argues that even an atomic bomb will not cause a global network shutdown (Bienias 1998: 14).

Communication area in global network

The Internet[7] has been developing very dynamically since its creation (in the world since 1957 and in Poland since 1986). Initially, websites were presented in a static form, on the basis of HTML + CSS. There was no way to interact with other users. Structurally, the website consisted mainly of the tables, cells and rows arranged in various manners as well as frames. Such site gained the name of Web 1.0 and its duration is determined for the years 1933–2001. The one-colour background, the top banners and a few keys presented the websites of that time in poor quality and functionality (Jeziorski 2011). Despite the then low website parameters the percentage of Internet users increased very quickly and the existing possibilities ceased to be sufficient as in the new millennium a new way of using Internet resources called Web 2.0 was created. That trend occurred as the determination of an increasing number of Internet users as well as reactions to emerging portals being used to exchange information (articles, opinions and files). A new opportunity concerned the process of creating the substantive form of the given websites by the users themselves. The conditions to create blogs appeared. The consumers could share RSS feeds, audio and video files, web services and Internet applications (Żytniewski 2007).

Mariusz Żytniewski notices that Web 2.0 is characterized more by the services rather than applications, which means that applications existing in desktop computers are based on the network services with the use of a web browser. Additionally, it is a data storage on the Internet, including portals through publishing graphics, films and programmes with users' own opinions. In addition, it is a composition of RIA applications. The last, third feature of Web 2.0 is building social webs thanks to which the users have the opportunity to share their views and contents on thematic portals with the possibility of editing their content. From the beginning of the Internet, the data appearing on the web is the property of the person publishing it. The owner of the website is responsible for managing and updating it. The possibilities of the web allow also to create virtual communities, realizing various initiatives, in which every member has its own place and tasks to do (Żytniewski 2007). In general, Web 2.0 is characterized by asynchronous transmission, personalization, focus on interaction with the user, the use of network services, the ability to store content as well as visual clearity (Jeziorski 2011).

Web 3.0 is another form of using the Internet potential that will revolutionize the possibility to search for the information on the web. This method is based on intentional and consistent with users' expectations methods of finding information that have never been seen before. Currently, Internet users need to browse many seemingly targeted sites. Frequently, however, finding the right content ends with hours of searching the sites and helplessness in finding the particular information. Web 3.0 is the answer to the social demand, that is the desire to search for the information faster, the ease of formulating queries and the greater likelihood of finding the verified sources as well as better understanding of the queries entered by the

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[7] A detailed description of the history of the creation of the Internet is not the subject of this analysis.

users into the system (Lubina 2008). A crucial element of Web 3.0 is a semantic web, which is a development of the Internet, and the form it takes can be called the opposite of the modern websites. As part of the activity of the semantic web, agents can be distinguished, which means special programmes that communicate with each other (one on the sender's side, the other on the receiver's side) in order to immediately find the thread. The main task of the agents is a greater effectiveness in finding the necessary information. This can be even said that it means the higher logic of the web browsers.[8]

The next step – as part of the Web 4.0 version – is to adapt the existing Internet opportunities with the use of mobile devices. The authors of this idea have chosen to connect all devices in the real and virtual world at the same time.[9] This form gained the name of augmented reality (Ilnicki 2011).

The last version is Web 5.0, called an open and connected network. The originator Tim Berners-Lee, at the TED[10] meeting in 2009 presented the concept of the open page in which the data would be connected. Web 5.0 as a symbiotic network is to become from an emotionally neutral network an emotionally interactive way of communication between people and computers. An important element in this case will be neurotechnology, thanks to which (with the use of the earphones) a person will interact with the content. The content will then start to act according to the recognized emotions. As of today, this version is on the programming phase.[11]

The Internet as communication channel and the earlier forms of remote communication

The Internet and primary forms of communication are inseparable, because the network, which is now an inseparable element of almost every person, has not appeared out of nowhere. It was and still is the result of changes/revolution in the communication of the society which not always reacted in plus to such events. Tomasz Goban-Klas captures all the events that took place over centuries or even millennia in several stages. The researcher, referring to these components as 'epochs', presents them as:

  1) the era of signals and signs;
  2) the era of writing;
  3) the era of printing;

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[8] Semantic network. http://www.inzynieriawiedzy.pl/siec-semantyczna (accessed: 15.02.2018).

[9] Web 1.0 vs Web 2.0 vs Web 3.0 vs Web 4.0 vs Web 5.0 – A bird's eye on the evolution and definition. https://flatworldbusiness.wordpress.com/flat-education/previously/web-1--0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/ (accessed: 15.02.2018).

[10] The abbreviation's extension is: Technology, Entertainment and Design. TED is a brand of scientific conferences organized by the non-profit Sapling Foundation. The main purpose of annual meetings is to disseminate what is worth promoting. Cf. https://pl.wikipedia.org/wiki/TED_(konferencja) (accessed: 15.02.2018).

[11] Web 1.0 vs Web 2.0 vs Web 3.0... (accessed: 15.02.2018).

    4) the era of telecommunication;

    5) the era of the computer and telecomputer (Goban-Klas 2005: 42–44).

The beginning of the existence of the world, and therefore of human communication concerns the human instinct and genetically acquired reactions to signals (an image, a sound and a smell), which existence was based on intuition and inherited behaviours. With the passage of time and as a result of the routine, they became ways of communication. A language (between the 90th and 40th millennium BC) became an indisputable competitor in communication. That period can be considered as the time of oral culture, after which the prehistoric era ended about 5 millennia ago as a result of the invention of writing. That period is called the beginning of human history. The invention of movable types and printing also revolutionized the following centuries (Goban-Klas 2005: 42–44). The invention of printing is the Chinese idea. However, the realization of this idea with the alphabet consisting about 20 thousands ideograms was pointless and in reality, sending short greetings or announcements was the most common printed form of that time. No such problem was encountered in the West, due to the alphabet consisting of only 26 letters. Such a small number of characters within various letter combinations allowed the creation of a potentially infinitely large number of words. The Phoenicians contributed to the mass production of the text. Gutenberg, together with other printers, noticed the potential of this design, in which the interchangeable parts of the machine turned out to be particularly interesting. This German craftsman combined a wine press with a Chinese printing press, thus constructing the first mass communication machine. The first 'wine' that came out of the Gutenberg press – as Paul Levinson writes – was the Bible, today called the Gutenberg Bible (Levinson 1999: 47–48).

19th century is perceived as the era of telecommunication (Goban-Klas 2005: 44), even though the first telegraphs were created earlier. *Telecommunication* is the term which relates to 'the transmission of sound and image over distance via electronic signals, optical signals or electromagnetic waves' (Bańko 2003: 1242; Drabik, Sobol et al. [ed.] 1996: 1034). Already in the 18th century a telegraph was invented and that was the first device used to transmit information remotely with the use of conventional signs. Initially an optical, then a needle and in 19th century an electric telegraph. The first, optical telegraph was invented in 1791 by Claude Chappe. Although its history dates back to the ancient times, it was in the 18th century that the so-called semaphore was constructed. The following work on improving the device contributed to the creation of an electric telegraph. The built-in mechanism of an electromagnet was sending electrical impulses. It was characterized by the transmission of information in a very short time but over a long distance. Sir Charles Wheatston is considered the creator of the first such device and a year of 1837 is a breakthrough in this field. The receiver constructed by Charles Wheatston consists of five magnetic wires placed on the board, on which the letters arranged in the specific way were written. The electromagnetic pulse inflected two of the four needles and pointed to a specific letter. At that time, also Samuel Finley Breese Morse began his work on an electric telegraph. The result of his activities was the electromagnetic device with the use of which the sender could transmit information in form of short graphic characters, consisting of dots and dashes, being the equivalents of the

individual letters of the alphabet. A lever, so-called key, was used to send the information out over a distance with the use of electric pulse. The short signal is a dot and a long one refers to a dash (cf. Bargh, McKenna 2009: 28–29; Bajka 2008: 56–67) (cf. Niedziński 2013).

The telephone turned out to be another breakthrough in telecommunications. The term originates from the combination of the Greek word *tēle* meaning 'a distance' with *phōnē* 'sound, voice' (Bauer 2006: 214). Alexander Graham Bell in 1876 invented the device which he called 'a talking can'. Originally, that mechanism consisted of the electromagnet and induction currents, with the use of which the sounds were transformed into electromagnetic waves and vice versa. The telephone was refined by Thomas Alva Edison. By connecting the carbon microphone and the telecoil to the telephone transmitter, it was possible to separate the telephone receiver and a voice box (microphone) (cf. Bargh, McKenna 2009: 29; Bajka 2008: 125). Bell's invention through the use of cable connections initiated interactive media (Bauer 2006: 214). Nowadays, there is a landline telephone permanently located in one place. This type includes wired telephones (where a telephone and a handset are connected) and wireless ones (a handset is not connected with a cable which enables its moving without the need to hold the entire device). Another type is a mobile phone, called personal, based on radio communication in the 900, 1800, 1900 MHz bands. The device of the originators of the American company Motorola allowed outgoing and incoming calls in the area divided into hexagonal parts on which transceiver stations were placed (Bauer 2006: 215). Mobile phones allow voice calls, sending text messages, e-mails and provide the access to the Internet. Newer versions also function as portable computers, music players, voice recorders, radio receivers, car navigation devices, notepads, calendars, cameras and digital cameras (Augustynek 2011: 92). A satellite phone is another example which uses artificial terrestrial satellites to make calls.[12] The last one, an Internet telephone is a device connected to the Internet and the information is sent as part of this connection. VoIP (*Voice over Internet Protocol*) is precisely the transmission of speech sounds via the IP protocol (Paczuski 2010).

Another medium that is developing almost subsequently is the radio invented by Alexander Stepanovich Popov and Guglielmo Marconi, who patented his invention in England in 1896. The device was invented accidentally during the creation of a wireless telegraph, that is a wireless telephone, so as to transform into a radiotelegraph. The purpose of the radio was to enable people to communicate while staying at home and to minimize technical infrastructure. The use of the device eliminated the perception of the differences in education, because it did not require reading skills which made it convenient for the society (Jędrzejewski 2006: 172–173; Bargh, McKenna 2009: 29; Jędrzejewski 2004: 60).

The last mass information medium preceding the Internet is the television. The name of the device is a combination of the Greek word *tēle* 'far' and the Latin *visio* meaning 'seeing'. The creators of the television, John Logie Baird and Vladimir Kosmich Zworykin, demonstrated their inventions in the early 20th century. This

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[12] Cf. www.navsim.pl (accessed: 15.07.2016).

part of telecommunications used to send light images remotely thanks to an electrical signal allowing the transmission and reception of moving images with sound. The device had the greatest real impact on the society. Since then, both individuals and families could enjoy the evening entertainment without leaving home. Cinemas, bars and clubs stopped to be attractive and this in turn contributed to a significant decline in community involvement in cultural life (Bargh, McKenna 2009: 30).

As a result of all the inventions mentioned above, 19th century is an important period in the history of humanity. Phenomena which appeared at that time also strongly affected the subsequent devices. And so began the era of computer (subsequently, together with the appearance of the Internet – telecomputer) (Goban-Klas 2005: 44). Therefore, the Internet is the latest form of information transfer, the magnitude of which cannot be summarized as a whole. All attempts are limited to fragmentary descriptions depending on the specifics of the field and the branch of knowledge they deal with.

Secondary orality of the 21st century

All previous forms of interpersonal communication did not play such a significant role in human life as the communication with the use of computer connected to the network. According to Eugeniusz Wilk, dealing with 'the word in the new media iconosphere' (Wilk 2000: 10), it is significant to note the similarity of human memory to the concept of 'computer memory' (Bolter 1990: 243), proposed by Jay David Bolter. The analogy concerns the non-linear reading of memory resources (both human and computer). This concept indicates a transformation of the existing linear way of studying information in favour of non-linearity. In part, Eugeniusz Wilk notes, this is the beginning of 'creating the foundations for a forward-looking culture model' (Wilk 2000: 9).

The title *secondary orality*, proposed by Walter J. Ong, consists of 'transforming verbal expressions with the help of electronics' (Ong: 1992: 182). Eugeniusz Wilk gives this term a breakthrough meaning for contemporary culture, on the one hand by defining the category of space, i.e. electronic communication, and on the other by the possibility of confrontation with the achievements of earlier eras (Wilk 2000: 11).

It is therefore inseparable to compare secondary orality with primary orality. The classification proposed by Walter J. Ong is a suggestion for researchers of primary orality. The nine features set out on this author's *Orality and literateness* concern in turn:
1) additivity;
2) accumulation;
3) redundancy;
4) conservatism, traditionalism;
5) experience;
6) agonist coloring;
7) empathy, commitment;
8) homeostasis – balance;
9) situationality – context (Ong 1992: 64–76).

In practice, this means that the transmitted text should be embedded in a specific communication space, known to the recipient. In addition to the context, the vocabulary used is relevant, current for interlocutors who have a communicative competence and are able to determine the meaning of the lexicon used, the meaning of which may be expanded, narrowed or transferred.[13] The topic should be known and the content should be specific without unnecessary self-analyses or generalizations. Conversation participants should empathize, be connected by an emotional bond, and strengthening oral memory is possible as part of repeating and consolidating messages (Ong 1992: 64–76, cf. Wilk 2000: 15–16). Over time, the orality was replaced by literacy. This, as Eugeniusz Wilk claims,

> [...] builds distance and, at the same time, objectifies the relationship and the process of reflection and formulation of judgements about reality to some extent. These judgments are usually arranged in certain limited wholes, i.e. texts based on the rules of cause and effect linearity and release from contextual dependencies (Wilk 2000: 16).

Walter J. Ong compares writing to technology and ascertains the spoken word in the living present and the written word outside it. Therefore, the text has a certain fixed structure (Ong 1992: 117, 167; Wilk 2000: 16–17), characterized by greater systematicity, specification and categorization (Wilk 2000: 17). 'Writing changed the original spoken word into visible space' (Ong 1992: 167) and the dissemination of printing led, according to Walter J. Ong and Eugeniusz Wilk, to the creation of a 'super-visual noetic world' (cf. Ong 1992: 172; Wilk 2000: 17). Increasing the range of receiving texts under printing technology strengthens the sense of isolation of recipients from the message, and the previously described forms: language, speech, writing and printing determine the development of culture (Wilk 2000: 18–19). Walter J. Ong rightly noticed the use of communication media in interpreting the development of culture and successively designated cultures: oral, cyrographic, typographic and electronic (Ong 1992: 110).

The electronic culture, as well as the others from the mentioned typology, is accepted without reservations by the researchers who make orality the subject of their work. This type is based on the electronic writing. Walter J. Ong gives the concept the name of *secondary orality* and as the originator is aware of the partial similarity of this term to *primary orality*.

Wojciech Burszta, after Herbert H. Clark and Susan E. Brennan, describes secondary systems, including messages through the medium, in relation to a direct conversation in which the interlocutors are present in a physical environment, eye contact, hear each other, immediately receive a message and so they can react to it. The media is not stable, there is also no evidence of the conversation itself after it has ended (no artifacts) – the words are locked in human memory. The interlocutors alternately occupy the role of the sender and the recipient, they themselves determine and perform planned (sometimes in a very short time) actions in real time. The difference between the secondary and the primary orality (but also earlier

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[13]   Danuta Buttler presents a detailed classificaton of lexical changes in meaning (Buttler 1978: 49–92).

literacy) is characterized by a lack of record. Communication with the use of a computer leaves material traces that create a virtual reality (cf.: Burszta 2004: 135–136, Górska-Olesińska 2009: 34–35). It is 'the materiality of the linguistic notation that the possibility of communication in the hyperreal world is based [...] (and – the author's note) – according to Wojciech Burszta – a virtual language is a substitute not only for natural language, but also an expression of hope that the meeting with another man is always possible (Burszta 2004: 145). Eugeniusz Wilk, citing Kathleen E. Welch, emphasizes that the secondary orality must be treated as an extension of literacy (Wilk 2000: 27).

Conclusion

The key to understanding the concept of the Internet is to take into account the beginnings of its occurrence, mainly as a reference to the primary means of communication. Both the word, writing and printing as well as the contemporary known methods of communication which development took place at a fairly rapid pace (here: a telegraph, a telephone, a radio and a television) can be considered modern technologies which draw from commonly known methods of communication. The improvement of the individual devices led to the notion of the potential of historical inventions, including a computer.

The Internet is a diverse concept. It concerns a variety of areas of social life. No extensive definition will present all its features. In an attempt to define the term, it is advisable to refer to the general issues related to technology, software and diverse equipment, forms of transmission, and above all to the people using its services.

This global network is a place which connects interlocutors located in remote places around the world. It enables remote conversations, creates forms thanks to which an active user of social life does not have to leave the house to gain specific information. The attractiveness of this medium is a significant element of the life of both organizations, companies or the state, but also the professionally active (e.g. in the communication function) and inactive ones (e.g. in the entertainment function). People who use a global network are not restricted in any way. They can treat the Internet as a mean of providing information, communication, a form of access to the entertainment and the acquisition of knowledge or sharing it with others. The users can share their skills in various ways so as to gain an interest of audience (often narrow). The interested readers of the network search for interesting topics that are a mean to express their opinions.

The Internet, or rather its potential, is an important element these days. Referring to already known forms (press, radio and television), as this is where every primary form of communication is placed, this medium can be considered as constantly evolving mean of communication. Verbal expressions (*primary orality*), thanks to civilization progress, adopt the new framework, becoming visual signs (*literacy*), and with technological progress return to their initial functions (*secondary orality*).

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Abstract

The article focuses on the problem of Internet as a space for interpersonal communication. Among the determinants of the global network, mainly in functional terms, close links with existing forms of communication that occur and co-occur inside the Internet, and in the last phase they return to their original characters, are important. This observation is based on the opposition of the concepts of *primary orality* and *secondary orality*, which are defined by, among others electronics – the main factor of (cyber)space modification.

Internet – (cyber)przestrzeń komunikacji interpersonalnej

Streszczenie

Artykuł dotyczy problematyki internetu jako przestrzeni porozumiewania międzyludzkiego. Wśród determinant globalnej sieci, głównie w ujęciu funkcjonalnym, istotne są ścisłe powiązania z dotychczasowymi formami komunikacji, które występują i współwystępują wewnątrz internetu, a w ostatniej fazie powracają do początkowych postaci. Temu spostrzeżeniu służy oparcie na opozycji pojęć *pierwotnej oralności* i *wtórnej oralności*, które są definiowane między innymi przez elektronikę – główny czynnik modyfikacji (cyber)przestrzeni.

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