

Patrycja Bałdys

Polish Naval Academy in Gdynia

e-mail: p.baldys@amw.gdynia.pl

Katarzyna Piątek

University of Bielsko-Biala

e-mail: kpiatek@ath.bielsko.pl

Does the Internet change everything? Transformations in social life and media in the 21st Century

ABSTRAKT

Czy Internet zmienia wszystko? Transformacje w życiu społecznym i mediach w XXI wieku

Celem artykułu jest prezentacja zmian jakie zachodzą w społeczeństwach pod wpływem Internetu i nowych mediów, przede wszystkim tych związanych z relacjami społecznymi, komunikacją interpersonalną, dyskursem publicznym i sposobami postrzegania przez jednostki otaczającej je rzeczywistości. Tekst oparty został na analizie artykułów prasowych, danych statystycznych i reinterpretacji wyników badań socjologicznych. Stanowi on krótki szkic pokazujący pewne trendy i transformacje jakie zaszły pod wpływem nowych mediów (przede wszystkim mediów społecznościowych) we współczesnych społeczeństwach.

SŁOWA KLUCZOWE: media, społeczeństwo, społeczeństwo informacyjne, Internet, media społecznościowe, rzeczywistość on-line, rzeczywistość off-line

Introduction

We live in times, when changes are taking place with an increasing speed and are all-pervasive. They are occurring in connection with new technologies, which on one hand make life easier but on the other alter surrounding reality as well as ourselves. It might be said that technologies have always influenced societies and in consequence individuals, but in the past their impact was neither so extensive nor changes were taking place so intensively. We live ever faster. It applies to both, our professional as well as private lives. Superficial contacts, online relationships and countless amount of information, reaching us every day at the

blistering speed are the part and parcel of our modern lives. Martin Kundera notices that:

„Speed is the form of ecstasy the technical evolution has bestowed on man. As opposed to a motorcyclist, the runner is always present in his body, forever required to think about his blisters, his exhaustion; when he runs he feels his weight, his age, more conscious than ever of himself and of his time of life. This all changes when man delegates the faculty of speed to a machine: from then on, his own body is outside the process, and he give so over to a speed that is non-corporeal, nonmaterial, pure speed, speed itself, ecstasy speed”¹.

The beginnings of this process of acceleration could be observed in the 20th century, which was dominated by the phenomena of scientific and technological revolutions. Machines, devices and technological solutions, connected with producing, storing, processing and transmitting information, were allowing not only technological progress but in the same time were changing societies, leading them ever closer to a societal entity, called by some academics the information society. In 2001, describing changes, which were taking place at the end of the 20th century, Manuel Castells wrote:

„In the last quarter of the twentieth century, three independent processes came together, ushering in a new social structure predominantly based on networks: the needs of the economy for management flexibility and for the globalization of capital, production and trade; the demands of society in which the values of individual freedom and open communication became paramount; and the extraordinary advances in computing and telecommunications made possible by the micro-electronics revolution. Under these conditions, the Internet, an obscure technology without much application beyond the secluded worlds of computer scientists, hackers, and countercultural communities, became the lever for the transition to a new form of society - the network society - and with it to a new economy”².

The Internet has influenced transformations, which are taking place practically in all dimensions of social life. It has also led to changes (which are at this point virtually unnoticeable by most of us) in ways we communicate with one another and conduct social interactions. The Internet has changed our perception of time and space, annulling barriers, which come from their existence. These days, we are able to send and receive messages, documents or pictures from any place on the Earth, around the clock. Moreover, it is no longer important for us, where a sender currently is and from what time zone he sends his message. These changes affect everyone. Thomas Hylland Eriksen notices:

„Information technology will for the foreseeable future have a dominant place in our kind of society, and it will affect all - with the possible exception of a small fringe of fundamentalists

¹ Kundera M., *Slowness*, Harper Collins Publishers, New York 1997, p. 2.

² Castells M., *The Internet Galaxy. Reflections on the Internet, Business, and Society*, Oxford University Press, New York, 2001, p. 2.

(that is, people whose identity hinges entirely on what they are against)”³.

Something, what seemed to be a distant future a couple of decades ago, has become reality faster than we could presume. What is more, it affects us to a greater degree than it was assumed in the 1960s. Back then, Daniel Bell indicated that the next phase of social development would be a postindustrial society, which would be mainly based on information technologies. However, the changes have gone beyond his expectations as well. In the new introduction to the jubilee edition of his book entitled ‘*The Coming of Post-Industrial Society*’, he wrote:

„As we come to the end of the twentieth century, we may be entering the *information age*. Now completely. Human beings have always communicated with one another, from the first primitive smoke signals to tom-tom beats to semaphore flags to the electrical codes of telegraph and telephone that began a hundred years ago. Each of these innovations precipitated new conceptions of space and time, binding together nations and peoples in new cooperative and, often perhaps, conflict always. What is different now is that the new information age is founded not on a mechanical technology but on an intellectual technology and that the new conceptions of time and space transcend the boundaries of geography (is there really portion of the world that is now exempt from some searching voice or image?) and take place in *real time*, making the phrase *virtual reality* seem like a truism rather than a trendy slogan”⁴.

The aim of this paper is to provide a short review of changes, which have taken place in societies under the influence of the Internet and other new media. First and foremost, it will refer to those which are connected with interpersonal relations and communication, public discourse and with the ways, in which an individual perceives reality around him. The paper does not aspire to be a comprehensive and exhaustive study of the problem, it is rather a short draft, presenting some trends in modern societies and changes, which have occurred under the influence of new media. It is based on the analyses of press articles, statistical data and a reinterpretation of sociological research.

The brave new world of social media and the Internet

Information technologies are changing reality around us. They influence our lives in their every aspect and change our perception of the world and our ways of thinking. In the old days, the borders between online and offline worlds were clearly marked. Currently, we have more and more problems to separate them

³ Eriksen T. H., *Tyranny of the Moment. Fast and Slow Time in the Information Age*, Pluto Press, London 2001, p. 164.

⁴ Bell D., *The Coming of Post-Industrial Society. A venture in Social Forecasting*”, Basic Books, New York 1999, p. lii-liiii.

and what is more, we do not give too much thought to this issue. The hybrid world of media is becoming our everyday experience, mostly due to the increasing importance of digital devices and communication platforms in our lives⁵. Thanks to them, we are more and more often becoming not only receivers of information but also its creators and propagators. We have transformed into a society which is constantly interested in the reality, presented on the screens of smartphones, tablets and laptops. Moreover, we frequently perceive that reality as more engaging than the one in front of our eyes. According to Jean Baudrillard, we also sometimes see this virtual world as more real than the physical reality itself.

One of consequences of the phenomena mentioned above is an unprecedented progress in the field of new information technologies, which leads to the domination of new media in the modern world. The pace of changes is great, which is well illustrated by the results of a research published by a portal called 'We are social'⁶. This service has been circulating reports about mobile internet market and social media for a few years. Thanks to their work, it is possible to observe certain developments in progress as well as to forecast new trends. Those reports contain detailed statistics and trends for 239 countries from all over the world, including the stage of digitalization for 30 most important economies in the world, Polish economy included.

Analyzing the most important global trends during the years 2014-2017, an enormous increase in number of internet users can be noticed. The Internet penetration rate has grown by 15% since 2014 and what is crucial, it is constantly upward tendency. The number of social media users is also increasing⁷.

⁵ Compare with Lindgre S. (ed.), *Hybrid media culture. Sensing place in a world of flows*, Routledge, New York 2014.

⁶ <https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014> [access: 01.03.2017]; <https://www.slideshare.net/wearesocialsg/digital-social-mobile-in-2015> [access: 13.02.2017]; <https://www.slideshare.net/wearesocialsg/2016-digital-yearbook> [access: 01.03.2017]; <https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

⁷ <https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014> [access: 01.03.2017].

Table no. 1. Global Digital Snapshot for the years 2014-2017

	TOTAL POPULATION (BILLION)	ACTIVE INTERNET USERS (BILLION)	ACTIVE SOCIAL MEDIA USERS (BILLION)	UNIQUE MOBILE USERS (BILLION)	ACTIVE MOBILE SOCIAL USERS (BILLION)
2014 Penetration	7.095	2.485 35%	1.857 26%	6.573 93%	-
2015 Penetration	7.210	3.010 42%	2.078 29%	3.649 51%	1.685 23%
2016 Penetration	7.395	3.419 46%	2.307 31%	3.790 51%	1.968 27%
2017 Penetration	7.476	3.773 50%	2.789 37%	8.047 108%	2.549 34%

Source: Compiled on the bases of Digital Yearbook for the years 2014-2017:

<https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014> (access: 01.03.2017)

<https://www.slideshare.net/wearesocialsg/digital-social-mobile-in-2015> (access: 13.02.2017)

<https://www.slideshare.net/wearesocialsg/2016-digital-yearbook> (access: 01.03.2017)

<https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> (access: 01.03.2017)

Comparing only the researches from 2016⁸ and 2017⁹, the progress in virtually every parameter, connected with the number of internet users (including social media users) can be noticed. Globally, the number of internet users in 2016 increased by around 10% (332 million) in comparison with 2015 and the number of social media users grew also by 10% (219 million). The number of mobile social media users increased by 17% (283 million new users)¹⁰. The report for 2017 also shows a progress. Globally, the number of internet users has grown so far by around 10% (482 million), social media users by 21% (482 million) and mobile social media users by as much as 30% (581 million) in comparison with 2016¹¹.

⁸ *2016 Digital Yearbook*: An additional document, which contains the most important data, connected with mobile and social media for 232 countries all over the world, including Poland, <https://mobirank.pl/2016/01/27/mobile-digital-w-polsce-na-swiecie-2016> [access: 05.11.2016].

⁹ *Digital in 2017 Global Overview*, <https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

¹⁰ <https://mobirank.pl/2016/01/27/mobile-digital-w-polsce-na-swiecie-2016> [access: 05.11.2016].

¹¹ <https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

Table no. 2. Annual growth. Year-on-year change in key statistical indicators

	INTERNET USERS	ACTIVE SOCIAL MEDIA USERS	UNIQUE MOBILE USERS	ACTIVE MOBILE SOCIAL USERS
2014	-	-	-	-
2015 Since 2014	+21%	+12%	+5%	+23%
2016 Since 2015	+10%	+10%	+4%	+17%
2017 Since 2016	+10%	+21%	+5%	+30%

Source: Compiled on the bases of Digital Yearbook for the years 2014-2017:

<https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014>;

<https://www.slideshare.net/wearesocialsg/digital-social-mobile-in-2015> (access: 13.02.2017)

<https://www.slideshare.net/wearesocialsg/2016-digital-yearbook> (access: 01.03.2017)

<https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> (access: 01.03.2017)

The global average for 2017, when it comes to the usage of the internet, is 50% (5% increase in comparison with 2016). The biggest number of users was observed in North America and Western Europe, the smallest in South Asia and Africa.

Table no. 3. Internet penetration

	North America	Central America	South America	West Europe	Central and East Europe	Middle East	Central Asia	South Asia	East Asia	Southeast Asia	Africa	Oceania
2014 Penetration	81%	34%	47%	78%	54%	37%	29%	12%	48%	25%	18%	63%
2015 Penetration	88%	43%	56%	81%	58%	36%	38%	19%	51%	33%	26%	69%
2016 Penetration	88%	44%	60%	83%	64%	53%	40%	27%	54%	41%	29%	68%
2017 Penetration	88%	53%	66%	84%	67%	60%	48%	33%	57%	53%	29%	68%

Source: <https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> (access: 01.03.2017)

Among TOP 30 countries the highest positions, when it comes to Internet penetration, were taken by the United Arab Emirates (99%, the same, first place in 2016), then Japan (93%, the fourth place in 2016) and finally Great Britain (92%, the same, third place in 2016). The lowest Internet penetration was observed in India (25%) and Egypt (37%), which has replaced Indonesia on the second last place. These countries are only two among TOP 30, which have the level of

Internet penetration lower than global average.

When it comes to the time spent on the Internet, the situation is slightly different. The first place was taken by Philippines, where in average a person spends 5.23 hours a day online. The lowest rate was observed in Japan. In terms of the time spent on the mobile Internet, the highest rate was noticed in Brazil and Thailand, where the average amounts to 3.9 hours a day¹². As it was noticed, there are still differences between different parts of the world, when it comes to the availability of the Internet.

After the analysis of the Internet, social media and mobile internet in Poland, it can be noticed that the general trend is not significantly different from the global one. In comparison to the January 2015, in January 2016, there was an increase of Internet users by 6%, active users of social media by 8%, active mobile phone numbers by 3% and active users of social media on mobile devices by 9%. A further increase was noticed in the following year. According to the data published in January 2017, there were 27.92 million active Internet users (72%), 15 million active social media users (39%), 54.54 million active mobile phones (141%) and 12 million active mobile users of social media (31%)¹³. In all these areas, an increase of users and activities was observed, in comparison to 2016.

The time Poles spend using different media, presents itself as follows:

- 5 hours and 43 minutes in 2017 in comparison to 4 hours and 25 minutes in 2016 - the average time, which a person spends online daily, using a computer or a tablet. As many as 82% of Poles use the Internet every day.
- 1 hour and 33 minutes in 2017 in comparison to 1 hour and 17 minutes in 2016 -The average time, which a person spends online on the mobile Internet, using mobile phones and smartphones.
- 1 hour and 45 minutes in 2017 in comparison to 1 hour and 17 minutes in 2016 - the average time, which a person spends on social networking sites, using different devices.
- 2 hours and 26 minutes in 2017 in comparison to 2 hours and 28 minutes in 2016 - The average time, which a person spends watching Television daily¹⁴.

Data, presented above, illustrates the domination of mobile Internet over Television and, as it can be assumed, over other traditional media. The time we spend on various online activities increases every year, what has its influence on interpersonal relations and the quality of social bonds.

¹² <https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

¹³ <https://mobirank.pl/2017/01/24/mobile-digital-social-media-na-swiecie-2017/> [access: 01.03.2017].

¹⁴ *Ibid.*

Global village or loneliness in the connected world - relations in the age of social media

The Internet has influenced changes not only in the fields of economy, politics, culture or in social structures, but first and foremost it has paved the way for the development of new types of communication and social interaction. Time and space have become irrelevant. We are able to communicate with others at any time of day or night, regardless of our location. The language of communication has changed as well. Currently, people prefer short utterances, written without the regard for punctuation or even orthography. Typical features of modern communication are acronyms (mainly English), emoticons (which allow to express emotions in an easy and succinct way) as well as constantly growing importance of pictures, replacing text.

Stephan Bertman, analyzing contemporary societies, uses the term *nowist society*. It is characterized by the animosity towards the past, history and tradition. What is relevant is happening here and now. What counts is speed and variety of sensations. Such approach

„is not helpful if one wants to think long-term, that is if one wishes to have children or a serious romantic relationship. By the way, all non-materialistic values have gone out fashion these days. The Internet plays an important role in the degradation of deep, satisfying interpersonal relations. It is the Internet, where a modern human being looks for intimacy, journeying across cyberspace in search of love and friendship”¹⁵.

Online contacts have become a substitute for face-to-face relations¹⁶. Moreover, surrounded by other people, we often choose online contacts because they seem to be swifter and less bothersome. In the same time, we do not give too much thought whether they are as valuable as face-to-face contacts. We do not reflect on the question, whether online contacts are as enduring and if they satisfy our need for belonging to a group. We are not interested in the fact that intimacy, the sense of belonging, friendship or love can be illusionary or they can be merely a part of not always sincere online reality. We do not even pay attention to such basic issues as the possibility of maintaining satisfying relations with a larger group of people. After all there is no shortage of friends` collectors on Facebook, who take the pride from having well over a thousand of acquaintances on their profiles.

¹⁵ Kuligowski W., *Siedem szkiców do antropologii miłości*, Wydawnictwo Poznańskie, Poznań 2002, p. 108.

¹⁶ Compare with among others Turkle S., *Alone Together. Why We Expect More From Technology and Less from Each Other*, Basic Books, New York 2011, p. 13.

Oversharing is becoming a characteristic feature of new media's world. According to Ben Agger *oversharing*

“means to divulge more of their inner feeling, opinion, and sexuality than would in person, or even over the phone. Text messaging, Face booking, tweeting, camming, blogging, online dating, and internet pornarevehicles of this oversharing, which blurs the boundary between public and private life”¹⁷.

Oversharing is nothing else but selling off information, concerning us and our private lives. We do not have any problems in doing so, precisely because of new media and this astonishing need for reminding others about ourselves all the time and another human need to be liked and admired. Wiesław Godzic notices that

„we love to reveal our secrets in front of thousands of anonymous onlookers - it is proved by the popularity of various reality shows. On the other hand, we have problems with face-to-face communication, perhaps we have untaught ourselves to do it.”¹⁸

It is a consequence of changes taking place in our societies, the lack of time and living in a constant rush mode. Thus, we are losing most of values, which were previously so important. We do not have a time to nurse relationships with other people in the real world. Instead, we look for intimacy and for bonds, connecting us to others in the Web.

We neither reflect on who are those people, whose attention and approval we seek nor on who watch our profile and to what ends information and pictures, uploaded by us can be used. We feel safe online, threatened by no one so that we go from post to post, from picture to picture, counting on another ‘like’ and more positive comments. We use every trick to draw as much attention as possible and because of that we lose any scruples about selling off true or fictional events from our lives. Due to these facts, private sphere is shrinking dangerously. We let strangers to participate in our lives, in events, which were previously reserved for our circle of close friends and family or sometimes only for ourselves¹⁹.

Another characteristic trait of online communication is an increase in verbal aggression. The sense of anonymity and impunity makes people more careless, aggressive and antisocial when it comes to language they choose to apply.

One of the consequences of the development of the Internet is a deepening phenomenon of information overload. It is not an entirely new thing. As early as in 1569, Martin Luther was complaining about an excess of books:

¹⁷ Agger B., *Oversharing. Presentations of Self in the Internet Age*, Routledge, New York 2012, p. xi.

¹⁸ Godzic W., *Kuba i inni. Twarze i maski popkultur*, Wydawnictwo Akademickie Sedno, Warszawa 2013, pp.20-21.

¹⁹ Marek Kamiński in his book *Kultury kultury popularnej* calls this trend a *transparency culture*. Thanks to it, ever growing number of areas of social and individual life is becoming accessible to others as a subject of their experience.

„The multitude of books is a great evil. There is no measure of limit to this fever for writing; everyone must be an author; some out of vanity, to acquire celebrity and rise up a name; others for the sake of me regain”²⁰.

In 1775, Denis Diderot was writing:

„As long as the centuries continue to unfold, the number of books will grow continually, and one can predict that a time will come when it will be almost as difficult to learn anything from books as from the direct study of the whole universe. It will be almost as convenient to search for some bit of truth concealed in nature as it will be to find it hidden way in an immense multitude of bound volumes”²¹.

Henry Miller in his essay *The Wisdom of the Heart* wrote: „...in expending the field of knowledge, we but increase the horizon of ignorance”²². Thanks to the Internet, the access to information (those more and less important as well as those true and fake) has grown undoubtedly. During a book fair in Milan, Umberto Eco made an observation:

„Social media gives legions of idiots the right to speak when they once only spoke at a bar after a glass of wine, without harming the community. Then they were quickly silenced, but now they have the same right to speak as a Nobel Prizewinner. It’s the invasion of the idiots”²³.

The skill of searching for relevant information is becoming a problem. Information overload and increased pace of its proliferation (thanks to social media) is conducive to the growth of something, which has been called post-truth. In 2016, the creators of Oxford Dictionaries agreed that it was the word of that year. The term post-truth has been defined the following way: „relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief”²⁴.

The term itself occurred earlier, in the beginning of the 1990s. It was used for the first time by Steve Tesich in his article *The government lies*, published by the Nation. According to the author, the term referred to „the Watergate syndrome, where by all the sordid facts revealed by the presidency of Richard Nixon rendered Americans disdainful of uncomfortable truths”²⁵.

²⁰ Shirky C., *Cognitive Surplus. How Technology Makes Consumers into Collaborators*, Penguin Books, London 2011, p. 47.

²¹ Rosenberg D., *Early Modern Information Overload*, [in:] *Journal of the History of Ideas*, vol. 64, No. 1, January 2003, p. 1.

²² Miller H., *The Wisdom of the Heart*, [in:] *The Henry Miller Reader*, New Direction Publishing, New York 1969, p. 262.

²³ <https://zwingliusredivivus.wordpress.com/2015/06/10/the-invasion-of-the-idiots/> [access: 1.08.2017].

²⁴ Levitin D.J., *Weaponized Lies. How to Think Critically in the Post-Truth Era*, Dutton, New York 2017, p. 23.

²⁵ <https://www.thenation.com/article/post-truth-and-its-consequences-what-a-25-year-old-essay-tells-us-about-the-current-moment/> [access: 1.08.2017].

According to Tesich, Watergate scandal influenced American society more than it can be presumed. He wrote:

„The revelations that President Nixon and members of his Cabinet were a bunch of cheap crooks rightly sickened and disgusted the nation. But truth prevailed and a once-again proud nation proudly patted itself on the back; despite the crimes committed in the highest office in our land, our system of government worked. Democracy triumphed. But in the wake of that triumph something totally unforeseen occurred. Either because the Watergate revelations were so wrenching and followed on the heels of the war in Vietnam, which was replete with crimes and revelations of its own, or because Nixon was so quickly pardoned, we began to shy away from the truth. We came to equate truth with bad news and we didn't want bad news anymore, no matter how true or vital to our health as a nation. We looked to our government to protect us from the truth“²⁶.

Referring to the Iran-Contra affair and the First Gulf War, Tesich wrote that Regan was aware that American society did not want to know the truth and precisely for that reason he could afford to lie. This lie transformed a serious affair, which had involved illegal sales of weapons to Iran and in which the most important officials of the state were complicit, into a farce. Similar pattern could be observed in case of the First Gulf War. Americans knew precisely what their government wanted them to know. As Tesich wrote, censorship turned to be a necessary evil. It was necessary because it meant protecting American interests and security. Americans accepted that it was the way the government looked after them and the interest of the state. Thus, the lie became justifiable. More than that, it ceased to be morally unacceptable. Summarizing, Tesich wrote:

„We are rapidly becoming prototypes of a people that totalitarian monsters could only drool about in their dreams. All the dictators up to now have had to work hard at suppressing the truth. We, by our actions, are saying that this is no longer necessary, that we have acquired a spiritual mechanism that can denude truth of any significance. In a very fundamental way we, as a free people, have free I decided that we want to live in some post-truth world“²⁷.

In the age of the Internet the post-truth phenomenon is gathering momentum. Ralph Keyes claims that

„we are able to cheat what give us an advantage over animals or enemies. We are constrained not only by morality but first and foremost by close interpersonal relations with people, who can see through our lies. But currently, we live in so large communities, where we are surrounded by strangers, who cannot recognize a fraud. On the Internet, we are isolated from one another so much that we do not even use our real names but pseudonyms. All these factors aid natural

²⁶ Ibid.

²⁷ Ibid.

human tendency to cheat and simultaneously take away traditional inhibitions”²⁸.

The Internet is full of unverified and untrue information. Even if we wished to, we would not be able to verify them or get rid of them, when we found out that they were fake. Once online, a piece of information assumes life of its own, it is proliferated by internet users, forwarded fast and often reappears somewhere, after some time.

Welcome to a world of Internet of Things and human cyborgs

From a very early age, media become a companion of our everyday life. It turns out that ever younger people use mobile devices. A research²⁹, conducted by Millward Brown S.A. among parents with children ages from 6 months to 6.5 years old, showed that as much as 84% of five and six years old kids, 62% of three and four years old and 43% of one or two years old use various mobile devices, available at their homes. 39% of five and six years old kids, 25% of three or four years old and 12% of one or two years old had their own mobile devices. In average, around 25% of those children use a mobile device every day³⁰.

In 2013, Natalia Hatalska wrote in her annual report ‘Trend Book’ about the third wave of the Internet - the Internet of Things. She defined it in the following way:

„it is a network of physical objects (things) which, thanks to their embedded sensors and Internet access, can communicate both with a human being and among themselves. In practice, it means nothing else but the fact that virtually anything today can be connected to the Internet, making it really intelligent (it has access to information and databases, which it can analyze in real time). What is also important in the case of the Internet of Things is that internet access makes it possible for devices to communicate with themselves independently, without human intervention”³¹.

²⁸ *Kłamstwo, prawda, post-prawda. Ralph Keyes w rozmowie z Łukaszem Pawłowskim*, [in:] *Kultura liberalna*, no. 412 from November 29, 2016, <http://kulturaliberalna.pl/2016/11/29/keyes-post-prawda-wywiad/> [access: 1.08.2017].

²⁹ The research was conducted by means of CAWI method by a research agency called Millward Brown S.A. The research was commissioned by ‘Dzieci Niczyje’ Foundation. 1011 people above the age of 18 participated in the research. They all had children at the ages from 6 months to 6.5 years old.

³⁰ Bąk A., *Korzystanie z urządzeń mobilnych przez małe dzieci w Polsce*, Fundacja Dzieci Niczyje 2015. The research was conducted within the framework of ‘Polish safer Internet Centre’ project, which was co-financed by the European Commission.

³¹ Hatalska N., *Trend Book 2013*, [in:] <http://hatalska.com/raporty/trendbook-2013-w-wersji-angielskiej/> [access: 1.08.2017].

Jeremy Rifkin notices that

„the Internet of Things will connect everything with everyone in an integrated global network. People, machines, natural resources, production lines, logistic networks, consumption habits, recycling flows, and virtually every other aspect of economic and social life will be linked via sensors and software to the IoT platform, continually feeding Big Data to every node - businesses, homes, vehicles - moment to moment, in real time. Big Data, in turn, will be processed with advanced analytics, transformed into predictive algorithms, and programmed in to automated systems to improve thermodynamic efficiency, dramatically increase productivity, and reduce the marginal cost of producing and delivering a full range of goods and services to near zero across the entire economy”³².

The world of the Internet of Things is becoming increasingly real, what is illustrated by numerous examples of solutions, occurring in different spheres of our life. In July 2017, a piece of news appeared in the media - an American company called Three Square Market had decided to offer their employees the implantation of a micro-chip in their palms. The aim of the plan was to facilitate the opening of doors, computer logging processes or even purchasing a meal in the company canteen. 50 out of 85 employees accepted the offer. Naturally, one can wonder what was the incentive. Was it really a sincere will to have a chip and ‘facilitate’ one’s life? Or maybe the consent came from conformism and the wish to get on the right side of the boss.

In the website FutureTimeline.net, it be can read that the 22nd century

„has been transformed by this fusion of people and machines. The vastly greater power of AI means that it has become, at the same time, both master and servant to the human race. The benefits of this human-AI merger require the extensive use of implants, however - something which a significant minority of the populations till refuses to accept. Compared to trans humans, these non-upgraded humans are becoming like cavemen - thousands of years behind in intellectual development. Unable to comprehend the latest technology, the world around the map ears "fast" and "strange" from their increasingly limited perspective. This is creating a major division in society”³³.

In some sense, the world of cyber-humans has already become reality. The best prove of this fact are people such Fereidoun M. Esfandiary (the first trans-human, who changed his name to FM-2030 in 1966), Neil Harbisson (the first cyborg acknowledged by authorities, an artist ill with achromatopsia, who uses an eyeborg, permanently attached to his head, which allows him to recognize colors), Kevin Warwick (an IT faculty dean at the University of Reading, who has implanted himself a micro-chip, which allows laboratory computers to recognize him), Jesse Sullivan (The first man with a fully-automatized arm, equipped with micro-chips,

³² Rifkin J., *The Zero Marginal Cost Society. The Internet of Things, the Collaborative Commons, and the Eclips of Capitalism*, Palgrave Macmillan, New York 2014, p. 11.

³³ <http://www.futuretimeline.net/22ndcentury/2100-2149.htm#.WdvDYGi0PIU> [access: 1.06.2017].

which allow him to perform complex movements) or Jerry Javala (a programmer, who has replaced his missing finger with an USB port). It can be presumed that there will be more people like this. New technologies will allow people to overcome their weaknesses and imperfections, which are the result of illnesses and accidents. They will facilitate our lives, giving us ever greater opportunities to take advantage of this new hybrid world. Yet, they are bringing certain threats and dilemmas as well. Many people, like Martin Ford, is beginning to ask a question - will we be replaced by robots? Martin Ford's book, entitled *Rise of the robots: technology and the threat of a jobless future*, was a bestselling position on the market in 2015. The author claims that in the coming years we will experience crucial changes, which

„will burden both our economy and society to a significant degree. It may turn out that the changes will go so far that little can be done about them. Good education, impressive qualifications, even experience - all will be useless. Regardless to our best efforts, we will be replaceable and as a consequence there will be massive problems with finding a job”³⁴.

The subject is not new, Jeremy Rifkin has written about it before. He forecasted that along with progressing automatization and robotization of our societies, work would become a scarce commodity, available to a handful of privileged³⁵. Manuel Castells wrote about this problem in a way more optimistic fashion, claiming that the issue is not that serious. In his opinion, robots will replace us first and foremost in jobs, requiring great precision and in monotonous ones³⁶. The book by Martin Ford shatters this optimistic approach to the problem of robotization. We have a problem and the major one for that.

Robotization is now influencing sectors of job market, which require creativity and narrow specialization. More and more often intelligent machines replace people in those sectors of economy, which were considered immune to technological changes even not long time ago. Ford mentions about a sport press article, which was published in one of American daily papers in October 2009. This piece of sport commentary would not have drawn much attention if not for the fact that it had been all written by a computer program.

Ford writes:

„Technology, developed by a company called Narrative Science, is currently used by the giants of media such the *Forbs* Magazine. The program writes articles on variety of topics, among others on sport, politics and business. A new text is produced every 30 seconds and many of them end up on popular internet portals. Obviously, no publisher wants to admit using such tools.

³⁴ Ford M., *Świt robotów. Czy sztuczna inteligencja pozbawi nas pracy?*, Wydawnictwo cdp.pl, Warszawa 2016, p. 14.

³⁵ Rifkin J., *The End of Work*, G. P. Putnam's Sons, New York 1996.

³⁶ Castells M., *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, Willey-Blackwell, Oxford 2010, pp. 217-302.

On a conference in 2011, Steven Levy from *Wire* asked a co-founder of Narrative Sciences Kristian Hammond about his predictions about the rate of articles, which will be written by means of algorithms within next 15 years. His answer was 90%³⁷.

Taking into account changes, taking place on the press market in recent years, it can be agreed that Hammond's opinion is not an exaggeration. Diminishing circulation, readers more and more often choosing a laptop, a smartphone or a tablet than a paper, all of these make editors cut cost. In that case, one of the simplest solutions is to use a tool such the one offered by Narrative Science. Will journalism be completely dominated by robots? Pessimists will claim that it will surely come to that. Optimists will say that a good journalism will always prevail. Bregtje van der Haak, Michael Parks and Manuel Castells all think along these lines:

„And there is still a major need for professional story telling. Thus, the practice of professional journalism can rise to a higher level of quality and autonomy. The information - almost any information - is in the open. Subjective opinions populate the blogosphere. And professional journalism may make sense of the multiple sources for the public at large. Of course, many other professionals (scientists, for example) also function as society's sense-makers. However, if the journalism profession emphasizes his function and integrates it at the core of journalism education and professional management of the news, it will provide the organizational and institutional platform to adequately perform this role”³⁸.

Future will be...

Earlier in history, the future was easy to predict. People die in the same towns and villages, they were born, often never leaving them for the whole life. Their existence was organized by changing seasons, time was passing slowly and the future was predictable. Currently, the future is becoming vague and unfathomable. We do not know what will happen tomorrow, next month, let alone longer time perspective. The only thing we can be quite certain about is that the world, where we will live, will be a place saturated with modern technologies and which will be increasingly dominated by the Internet and new media.

Techno optimists will claim that a brave new world is awaiting us and life is going to be easier. Thanks to new technologies we will manage to solve problems, which are insurmountable now. We will live longer and better (new sources of energy will be found and we will be able to solve economic and ecological issues), we will find cures for terminal diseases, about which we are helpless at the

³⁷ Ibid., pp. 94-95.

³⁸ B. van der Haak, Parks M., Castells M., *The Future of Journalism: Networked Journalism*, [in:] *International Journal of Communication*, 6/2012 <http://ijoc.org/index.php/ijoc/article/viewFile/1750/832> (Access: 1.06.2017).

moment³⁹. Yet, not all are so optimistic about the future. The world dominated by computer technologies and new media can be a little bit daunting, especially if one will take into account all negative phenomena, connected with it. However, we are not the first generation, which have to face fears, linked with new technologies and their influence on a reality and society that surrounds us.

In his book *The Craftsman* Richard Sennett described fears, referring to our auto-destructive behaviors, connected with a wrong understanding and application of some technological developments. Our innovations are not always controlled and used in a right way. For example, we experienced this problem in case of nuclear power. According to Sennett, this fear has been imbedded in the Western culture for centuries. Its roots can be traced back to the myth of Pandora's box, which for Greeks symbolized human nature. Sennett wrote:

„its peoples came increasingly to believe that Pandora stood for an element of their own natures; culture founded on man-made things risks continual self-harm. Something nearly Innocent in human beings can produce his risk: men and women are seduced by sheer Wonder, excitement, curiosity, and so create the fiction that opening the casket is a neutral act“⁴⁰.

It is a similar situation when it comes to the Internet and the new media. We cannot take advantage of their full potential and often do not understand the way they operate. In many cases, we are infatuated with its flashy possibilities, forgetting how dangerous tool they can become in the hands of a careless and irresponsible user.

The internet and social media have contributed to the development of our narcissistic personalities. They are more and more often used by us as a tool for an auto-presentation. Perhaps, it would not be such a problem, if not for the fact that online we can be whatever we want to, not necessarily who we really are. By commenting on the posts of others or uploading pictures and information about us, we create our new virtual identity. After all, on social media, we want to present ourselves as best as we can. The need to be liked and admired is so strong that it makes us to sell our own privacy. Online, we let ourselves go, brake commonly respected norms and values, because we feel anonymous, safe and un-punishable. We do things, which we would never do in the real world. It can be said that the Internet changes everything.

It does not mean that in the world of the Internet, there are no positives things to be found. It solely depends on how we are going to use opportunities given to us by the new technologies. In a book entitled *Technology. The Surrender of Culture to Technology* Neil Postman, referring to the king Thamus, wrote:

³⁹ It is worth reading a report, written by Natalia Hatałska in 2014, entitled *Future makers. Nasz świat w 2039*. The report consists of interviews with futurists, philosophers, start-up entrepreneurs and designers, conducted by the author. <http://hatałska.com/raporty/futuremakers-today>.

⁴⁰ Sennett R., *The Craftsman*, Penguin Books, New York 2009, p. 2.

'I begin my book with this legend in Thamus' response there are several sound principles from which we may begin to learn how to think with wise circumspection about a technological society. In fact, there is even one error in the judgment of Thamus, from which we may also learn something of importance. The error is not in his claim that writing will damage memory and create false wisdom. It is demonstrable that writing has had such an effect. Thamus' error is in his believing that writing will be a burden to society and *nothing but a burden*. For all his wisdom, he fails to imagine what writing's benefits might be, which, as we know, have been considerable. We may learn from this that it is a mistake to suppose that any technological innovation has a one-sided effect. Every technology is both a burden and a blessing; not either-or, but this-and-that'⁴¹.

Changes are unavoidable, but if we only approach new technologies with a bit of wisdom and use them in a sensible way, our lives will become easier and better. In that case, as Michio Kaku thinks, the future will be wonderful'⁴².

Bibliography

- Agger B., *Oversharing. Presentations of Self in the Internet Age*, Routledge, New York 2012.
- Bell D., *The Coming of Post-Industrial Society. A venture in Social Forecasting*", Basic Books, New York 1999.
- Castells M., *The Internet Galaxy. Reflections on the Internet, Business, and Society*, Oxford University Press, New York, 2001.
- Castells M., *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, Willey-Blackwell, Oxford 2010.
- Eriksen T. H., *Tyranny of the Moment. Fast and Slow Time in the Information Age*, Pluto Press, London 2001.
- Ford M., *Świt robotów. Czy sztuczna inteligencja pozbawi nas pracy?*, Wydawnictwo cdp.pl, Warszawa 2016.
- Godzic W., *Kuba i inni. Twarze i maski popkultur*, Wydawnictwo Akademickie Sedno, Warszawa 2013.
- Krajewski M., *Kultury kultury popularnej*, Wydawnictwo Naukowe UAM, Poznań 2003.
- Kuligowski W., *Siedem szkiców do antropologii miłości*, Wydawnictwo Poznańskie, Poznań 2002.
- Kundera M., *Slowness*, Harper Collins Publishers, New York 1997.
- Levitin D. J., *Weaponized Lies. How to Think Critically in the Post-Truth Era*, Dutton, New York 2017.
- Lindgre S. (ed.), *Hybrid media culture. Sensing place in a world of flows*, Routledge, New York 2014.
- Miller H., *The Wisdom of the Heart*, [in:] *The Henry Miller Reader*, New Direction Publishing, New York 1969.
- Postman N., *Technology. The Surrender of Culture to Technology*, Vintage Books, New York 1993.
- Rifkin J., *The Zero Marginal Cost Society. The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*, Palgrave Macmillian, New York 2014.
- Rifkin J., *The End of Work*, G. P. Putnam's Sons, New York 1996.

⁴¹ Postman N., *Technology. The Surrender of Culture to Technology*, Vintage Books, New York 1993, p. 4-5.

⁴² <https://www.youtube.com/watch?v=T0bPd64dhvQ> [access: 1.06.2017].

Rosenberg D., *Early Modern Information Overload*, [in:] *Journal of the History of Ideas*, vol. 64, No. 1, 2003.

Sennett R., *The Craftsman*, Penguin Books, New York 2009.

Shirky C., *Cognitive Surplus. How Technology Makes Consumer sin to Collaborators*, Penguin Books, London 2011.

Turkle S., *Alone Together. Why We Expect More from Technology and Less from Each Other*, Basic Books, New York 2011.

Online references

Bąk A., *Korzystanie z urządzeń mobilnych przez małe dzieci w Polsce*, Fundacja Dzieci Niczyje 2015.

Hatałska N., *Trend Book 2013*, [in:] <http://hatalaska.com/raporty/trendbook-2013-w-wersji-angielskiej> [access: 1.08.2017].

<https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014> [access: 01.03.2017].

<https://www.slideshare.net/wearesocialsg/digital-social-mobile-in-2015> [access: 13.02.2017].

<https://www.slideshare.net/wearesocialsg/2016-digital-yearbook> [access: 01.03.2017].

<https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

<https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014> [access: 01.03.2017].

2016 Digital Yearbook, <https://mobirank.pl/2016/01/27/mobile-digital-w-polsce-na-swiecie-2016> [access: 05.11.2016].

Digital in 2017 Global Overview, <https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

<https://mobirank.pl/2016/01/27/mobile-digital-w-polsce-na-swiecie-2016> [access: 05.11.2016].

<https://mobirank.pl/2017/01/24/mobile-digital-social-media-na-swiecie-2017> [access: 01.03.2017].

<https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

<https://www.slideshare.net/wearesocialsg/digital-in-2017-global-overview> [access: 01.03.2017].

<https://zwingliusredivivus.wordpress.com/2015/06/10/the-invasion-of-the-idiot/> [access: 1.08.2017].

<https://www.thenation.com/article/post-truth-and-its-consequences-what-a-25-year-old-essay-tells-us-about-the-current-moment/> [access: 1.08.2017].

<http://hatalaska.com/raporty/futuremakers-today/> [access: 1.06.2017].

<http://www.futuretimeline.net/22ndcentury/2100-2149.htm#.WdvDYGioPIU> [access: 1.06.2017].

Kłamstwo, prawda, post-prawda. Ralph Keyes w rozmowie z Łukaszem Pawłowskim, [in:] *Kultura liberalna*, no. 412 from November 29, 2016, <http://kulturaliberalna.pl/2016/11/29/keyes-post-prawda-wywiad> [access: 1.08.2017].

van der Haak B., M. Parks, M. Castells, *The Future of Journalism: Networked Journalism*, [in:] *International Journal of Communication*, 6/2012 <http://ijoc.org/index.php/ijoc/article/viewFile/1750/832> [access: 1.06.2017].

<https://www.youtube.com/watch?v=T0bPd64dhvQ> [access: 1.06.2017].

Does the Internet change everything? Transformations in social life and media in the 21st Century

Summary

The aim of this paper is the presentation of changes, which are occurring in societies, under the influence of the Internet and new media. It concentrates on those alternations, which are connected

with social relations, interpersonal communication, public discourse and with the ways, in which an individual perceives reality around him. The paper is based on the analyses of press articles, statistical data and reinterpretation of sociological research. It is a short draft, showing some trends and transformations, which have taken place under the influence of new media (first and foremost social media) in modern societies.

Key words: media, society, information society, the Internet, social media, online reality, offline reality.