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MEDIA ECOLOGY IN GLIWICE. ABOUT TWO PROJECTS REALIZED BY DEPARTMENT OF APPLIED SOCIAL SCIENCE (SILESIAN UNIVERSITY OF TECHNOLOGY) AND MUSEUM IN GLIWICE

Abstract. In the January 2016 Department of Applied Social Science and Museum in Gliwice launched project entitled "Around the Technopoly". The project was addressing to the citizens of Gliwice. The aim of the project was to conduct the discussion about the influence of technology on self and society beyond the walls of academia. The continuation of this project was second project entitled "On the Digital Paths" addressing to the youth. The aim of this project was to endow young people with awareness of threats and chances of digital technology. At the same times projects were promoting the intellectual tradition of *media ecology*. Theoretical basis of those projects was belief of social relevance of humanities (especially philosophy) and attempt to create a space for 'open humanities'.

Keywords: *media ecology*, open humanities, technopoly, Museum in Gliwice, Department of Applied Social Science, Silesian University of Technology

MEDIA ECOLOGY W GLIWICACH. O DWÓCH PROJEKTACH ZREALIZOWANYCH PRZEZ KATEDRĘ SPOŁECZNYCH NAUK STOSOWANYCH I PRZEZ MUZEUM W GLIWICACH

Streszczenie. W styczniu 2016 roku Katedra Stosowanych Nauk Społecznych oraz Muzeum w Gliwicach rozpoczęły projekt "Wokół technopolu". Projekt był skierowany do mieszkańców Gliwic i miał na celu rozszerzenie dyskusji na temat wpływu technologii na psychikę i organizację społeczną poza mury akademii. Kontynuacją tego projektu był drugi projekt skierowany do młodzieży i zatytułowany "Na cyfrowych ścieżkach". Celem tego projektu było uświadomienie młodym ludziom szans i zagrożeń związanych z mediami cyfrowymi. Jednocześnie oba projekty promowały tradycję intelektualną znaną jako *media ecology*. Teoretyczną podstawą obu projektów było przekonanie

o społecznym znaczeniu humanistyki (zwłaszcza filozofii) oraz próba stworzenia przestrzeni dla "otwartej humanistyki".

Słowa kluczowe: *media ecology*, otwarta humanistyka, technopol, Muzeum w Gliwicach, Katedra Stosowanych Nauk Społecznych, Politechnika Śląska

Introduction

In the January 2016 Department of Applied Social Science and Museum in Gliwice launched project entitled "Around the Technopoly". The aim of the project was to conduct the discussion about the influence of technology on self and society beyond the walls of academia. In that sense project "Around the Technopoly" places itself in the domain of "open humanities". According to Adam Briggle and Robert Frodeman humanities need fresh approach, which could help to bring philosophy out of the study and into community. One of the main reason for such claim is growing awareness that science does not consist of uniquely objective knowledge that can put an end to political controversies. It implies the need to make something like philosophical deliberation more central to decision making.¹ Nowadays the most acute social issues are connected with providing new technologies and with setting direction of future development of science and technology. The question is who should make certain decisions concerning the development of science and technology? Governments, big corporations, military complex or citizens? Choosing citizens as the decision makers we must be aware that democratization of science and technology demands new attitude towards education. First of all, education is no longer relegate to schools or universities - social laboratories, fablabs, makerspaces and obviously Internet are new educational tools. Secondly, division between so-called two cultures – humanities and natural science – are losing its topicality. The most interesting and important social and cultural phenomena presently are occurring in the borderland of humanities, science and technology. The two projects created by Museum in Gliwice and Department of Applied Social Science were designed to rise to the challenges of the modern world, in which polycentric governance of science and technology becoming important trend in thinking about future.

¹ A. Briggle, R. Frodeman, Why Policy Needs a Philosophers as Much as it Needs Science, https://www.theguardian.com/science/political-science/2016/oct/13/why-policy-needs-philosophers-as-much-as-it-needs-science?CMP=share btn fb

1. What is *Media Ecology*?

Media Ecology is an intellectual tradition, which is based on the idea "that technology and techniques, modes of information and codes of communication play a leading role in human affairs"². The idea of *media ecology* can be derived from Marshall McLuhan thought, who regards media as environments. According to McLuhan in western culture exists two general models of communications. The first one is characteristic for philosophical and scientific inquires. This model founds its full expression in Shannon-Weaver model of communication. The Shanon-Weaver model is linear, logical, and sequential. This model is also in accordance with the pattern of efficient causality³. Shannon - Weaver model of communication characterizes communication as systematic process, the main components of which include: sender, message, transmission, noise, channel, reception, and receiver⁴. The second model understands communication not like linear process, which is based on transmitting dates, but it understands communication as environment. This second model is basis for media ecology. Marshall McLuhan writes in the introduction to the second edition of *Understanding Media*: "The medium is the message" means, in terms of the electronic age, that a totally new environment has been created. The "content" of this new environment is the old mechanized environment of the industrial age. The new environment reprocesses the old one as radically as TV is reprocessing the film. For the "content" of TV is the movie. TV is environmental and imperceptible, like all environments. We are aware only of the "content" or the old environment. When machine production was new, it gradually created an environment whose content was the old environment of agrarian life and the arts and crafts. This older environment was elevated to an art form by the new mechanical environment. The machine turned Nature into an art form⁵.

According to Lance Strate the first person who formally introduced the term *media ecology* was Neil Postman in 1968. In an address delivered at the annual meeting of the National Council of Teachers of English Postman said: "Media ecology looks into the matter of how media of communication affect human perception, understanding, feeling, and value; and how our interaction with media facilitates or impedes our chances of survival. The word ecology implies the study of environments: their structure, content, and impact on people"⁶. Strate comments Postman thought in that way: "These environments consist of techniques as well as technologies, symbols as well as tools, information systems as well as machines. They

² http://www.media-ecology.org/about-us/

³ M. E. McLuhans, Laws of Media. The New Science, p. 90.

⁴ C. E. Shannon, W. Weaver: The Mathematical Theory of Communication. University of Illinois Press 1963, p. 5.

⁵ M. McLuhan: Understanding media: The extensions of man (Critical Ed., W. T. Gordon, Ed.). (Original work published in 1964), p. 3.

⁶ N. Postman: The Reformed English Curriculum in A.C. Eurich, ed., High School 1980: The Shape of the Future in American Secondary Education (1970), p. 161.

are made up of modes of communication as well as what is commonly thought of as media (although the term "media" is used to encompass all of these things). Thus, Postman also describes media ecology as «the study of transactions among people, their messages, and their message systems»". It is worth of noticing that *media ecology* can be perceived as the field of inquiry and as *praxis*. In the second sense *media ecology* according to McLuhan "means arranging various media to help each other so they won't cancel each other out, to buttress one medium with another. You might say, for example, that radio is a bigger help to literacy than television, but television might be a very wonderful aid to teaching languages. And so you can do some things on some media that you cannot do on others. And, therefore, if you watch the whole field, you can prevent this waste that comes by one canceling the other out."8

According to Strate first major survey in *media ecology* was done by Williams Kuhn in his book *Post-Industrial Prophets* from 1971. Strate signalizes that although Kuhn do not use the term *media ecology*, he makes frequent use of environmental, ecological, and systems terminology as he discusses the work of technology scholars Lewis Mumford, Siegfried Giedion, and Jacques Ellul; media theorists Harold Innis and Marshall McLuhan; and systems pioneers Buckminster Fuller and Norbert Wiener. It is worth of noticing that other terms were introduced to refer to the same type of perspective and intellectual tradition, such as "Toronto School", "medium theory", "American cultural studies", and "mediology". Also, due to its strong association with Ong, "orality-literacy studies" has sometimes been used as a synonym for *media ecology*⁹. According to Camille Paglia *media ecology* is an North American intellectual tradition, which means "that the evolution of the field has been influenced by North American pragmatism and openness". According to Ong one of main feature of this tradition is an "open-system awareness". An open system enhances creativity, freedom, and the process of exploration and discovery.

In 1998 was established Media Ecology Association. The main figures of *media ecology* are: Marshall McLuhan, Neil Postman, Walter J. Ong, Lewis Mumford, Eric Havelock, Elizabeth Eisenstein, Jacques Ellul, Susanne Langer, Harold Innis and Edmund Carpenter.

⁷ L. Strate: A Media Ecology Review, Communication Research Trends. Centre for the Study of Communication and Culture, Vol. 23 (2004) No. 2, p. 4.

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⁸ M. McLuhan: Understanding me: Lectures and Interviews (S. McLuhan & D. Staines, Eds.). Cambridge 2003, MA: MIT Press.

⁹ L. Strate: Ibidem, p. 5.

¹⁰ Ibidem.

2. Media Ecology in Poland

The term *media ecology* is not well known in Poland, though most of important scholars from media ecology were internalized by polish culture. The best known media ecology author in Poland is Marshall McLuhan. Kalina Kukiełko-Rogozińska remarks that first Polish publications concerning McLuhan's theory has been started to emerge in late sixties, however the largest amount of them appeared in the second part of seventies¹¹. Articles about McLuhan was written by K. T. Toeplitz, K. Jakubowicz, J. Lalewicz, H. Rotkiewicz. The first book devoted to McLuhan's thought appeared in 1974 (Marshall McLuhan by Jonathan Miller). First collection of McLuhan's texts was translated into polish in 1976. First polish monography was written by H. Rotkiewicz and published in 1983. After the period of decline of interest of McLuhan thought in eighties and nineties renewed interested begins from the beginning of second millennium. In the opposition to the interpretations from sixties and seventies the new ones done by Krzysztof Loska, Kalina Kukiełko-Rogozińska and Bartłomiej Knosala appreciated the philosophical dimensions in McLuhan's works¹². Much more modest interests was generated by works of Walter J. Ong. His major work Orality and literacy. The technologizing of the world was translated into polish in 1992 by Józef Japola, who is also the author of monography concerning Ong's thought¹³. Large popularity gained Neil Postman whose best known book Technopoly: The Surrender of Culture to Technology had two editions in Poland – first in 1995, second in 2004. Two other important Postman's books - Amusing Ourselves to Death: Public Discourse in the Age of Show Business and Building a Bridge to the 18th Century: How the Past Can Improve Our Future were also translated into polish¹⁴. After 44 years of waiting the famous *Preface to Plato* written by Eric Havelock in 1963 was translated into polish by Paweł Majewski. Polish reception of that book was preceded by Alfred Gawroński's book entitled Dlaczego Platon wykluczył poetów z Państwa, in which we can find discussion on main Havelock's thesis. In 2006 was translated Havelock's The Muse Learns to Write. Reflections on Orality and Literacy from Antiquity to

¹¹ K. Kukiełko-Rogozińska: Naukowiec czy artysta. Polskie interpretacje poglądów Marshalla McLuhana w: Kultura Popularna 2013, no. 3 (37), ed. Ł. Biskupski, p. 163.

¹² See K. Loska: Dziedzictwo McLuhana. Między nowoczesnością a ponowoczesnością. Rebis. Kraków 2002, K. Kukiełko-Rogozińska: Między nauką a sztuką. Teoria i praktyka artystyczna w ujęciu Marshalla McLuhana. Narodowe Centrum Kultury, 2014.

B. Knosala: Projekt nauki nowej Marshalla McLuhana. Filozoficzne konsekwencje zmian form komunikacji, Universitas, Kraków 2017.

¹³ See W. J. Ong: Oralność i piśmienność. Słowo poddane technologii, trans. J. Japola, RW KUL, Lublin 1992.

J. Japola: Tekst czy głos? Waltera J. Onga antropologia literatury, Redakcja Wydawnictwa Katolickiego Uniwersytetu Lubelskiego, Lublin 1998.

¹⁴ See N. Postman: Technopol. Triumf techniki nad kulturą, przeł. A. Tanalska-Dulęba, Warszawa: PIW 1995, Wyd 2 - Wyd. Muza, Warszawa 2004.

N. Postman: W stronę XVIII wieku: Jak przeszłość może doskonalić naszą przyszłość, przeł. R Frąc, Państwowy Instytut Wydawniczy, Warszawa 2001.

N. Postman: Zabawić się na śmierć: Dyskurs publiczny w epoce show-businessu, przeł. L. Niedzielski, Warszawskie Wydawnictwo Literackie Muza SA, Warszawa 2006.

the Present – kind of recapitulation of whole Havelock's inquiry into complex aspects of orality and literacy in western culture. Two others *media ecology* scholars are present at the polish humanistic discourse: Lewis Mumford and Elisabeth Eisenstein. Famous Mumford book *Technics and Civilization* was published in Poland in 1966. Two volumes of *Myth of the Machine* were published in 2012 – first volume, and in 2014 – second volume. The well-known Eisenstein book *The printing revolution in early modern Europe* was translated into polish in 2004¹⁵. In turn none of the books of Harold Innis - the Canadian pioneer of communication – has been translated into polish, but only excerpts from his famous book *Bias of the communication* Similar is with polish reception of Jacques Ellul, although he is quiet often quoted by polish scholars dealing with technological influences on society, none of his major works was translated into polish¹⁷. Edmund Carpenter and Susanne Langer are still waiting for polish translation.

3. Media Ecology in Gliwice

3.1. "Around the Technopoly"

In 2016 Museum in Gliwice opened an historical exhibition "Age of steam. Machines which changed the world", which was devoted to the history of rapid industrialization of Silesia region in 19th and 20th centuries. Museum in Gliwice - as an extension of exhibition - proposed a cycle of lectures devoted to the relation between humans and technology. Ewa Chudyba (Museum in Gliwice) invited scholars from the Department of Applied Social Science (Silesian University of Technology) to create cycle of lectures, which would conduct humanistic perspective toward technology. The title of the project – "Around the Technopoly" - harks back to the famous book "Technopoly" written by Neil Postman in 1992. In this book Postman describes new condition of culture, which is saturated by technological values – acknowledging only quantitative aspects of all phenomena, worship of efficiency, specialization and standardization are – according to Postman - indicators of today culture. Within the limits of cycle were delivered eight lectures. The cycle started in the January 2016 and from that moment in every month was delivered one lecture (except months of holiday

¹⁵ E.L. Eisenstein: Rewolucja Gutenberga, przeł. H. Hollender, Prószyński i S-ka, Warszawa 2004.

¹⁶ Harold A. Innis: Nachylenie komunikacyjne, [w:] Communicare. Almanach antropologiczny. Oralność/Piśmienność, praca zbiorowa, Wydawnictwo Uniwersytetu Warszawskiego, Warszawa 2007

¹⁷ See J. Ellul: Technika – umiejscowienie zjawiska. In Andrzej Siciński (ed.) Technika a społeczeństwo. Antologia, trans. W. Adamiecki, PIW, Warszawa.

J. Elull: Cechy charakterystyczne techniki. In Andrzej Siciński (ed.) Technika a społeczeństwo. Antologia, trans. W. Adamiecki, PIW, Warszawa.

See also J. Falborska: Determinizm technologiczny Jacques Ellula. In Lech W. Zacher (ed.) Filozofowie o technice. Interpretacje dawne i współczesne, Krajowa Agencja Wydawnicza RSW "Prasa-Książka-Ruch", Warszawa 1986. Also polish scholars are developing media ecology tradition. See for example G. Osika.: Tożsamość osobowa w epoce cyfrowych technologii, Universitas, Kraków 2016.

brake). Introductory lecture was entitled "Technopoly. The surrender culture to technology?" and was delivered by Ewa Chudyba. In the next ones scholars from Department of Applied Social Science were analyzing relationships between worlds of technology and worlds of human values. The second lecture was delivered by dr Bartlomiej Knosala and was devoted to Marshall McLuhan's ideas of technological progress. The third lecture entitled "Hyper-text mentality" was delivered by dr hab. Grażyna Osika, who was addressing the question about praxis of intellect in the culture saturated by hyper-text. She was also asking how humans immersed in digital culture understand wisdom and knowledge. The fourth lecture was dedicated to transformations of the cities in the age of digital culture. The author of that lecture was dr Barbara Rożałowska. Based on the cycle "Around Technopoly" Polish Radio Katowice realized series of radio broadcasts, which was recorded by Anna Musialik for her "Late Night School". All of above mentioned radio broadcasts are accessible in podcasts.

In the academic year 2016/2017 cycle started from the lecture entitled "Axiological aspects of sustainable development" and was delivered by prof. Aleksandra Kuzior. Prof. Aleksandra Kuzior was talking not only about threats connected with uncontrolled technological development, but also about chances and opportunities connected with the process of implementation of eco-innovations. She was also indicates the necessary of introduction of technology assessment (TA) into modern society. The next lecture was devoted to American architect and philosopher - Richard Buckminster Fuller - and was delivered by dr Bartłomiej Knosala. Buckminster Fuller as one of the most original thinker in 20th century was trying to build model of technological civilization, in which technology and spirituality create unity. The seventh lecture was entitled "Hikikomori. Imprison in the web" and its content dealed with the phenomenon of withdrawal from real life and escaping to virtual reality. The lecture was delivered by dr Anna Huk Waligóra from College of Social Science and Foreign Philology (Silesian University of Technology). The last lecture concerned relation between wisdom and technology. Dr hab. Krzysztof Jan Pawłowski – who was delivering that lecture - remarked that in spite of scientific and technological progress humans did not develop their humanity. Developing humanity for dr hab. Pawłowski means to unify cognition, will and emotions, task which in modern western culture driven by unlimited consumption is particularly difficult.

3.2. "On the Digital Paths"

As an expansion of the project "Around the Technopoly" Museum in Gliwice and Department of Applied Social Science with collaboration with College of Social Science and Foreign Philology (Silesian University of Technology) created educational project aimed at students of secondary schools and high schools entitled "On the Digital Paths". Four schools from Gliwice was invited to the project: secondary school no. 10 name of Ignacy J. Paderewski, high school no. 2 name of W. Wróblewski, Górnośląskie Centrum Edukacyjne, Catholics schools name of E. Stein. To the project was also invited seniors from Seniors Clup

"Meteors". They role in the project was helping young people to understand their "digital lives" from Keynote of this project was the belief that development of digital technology has an ambivalent character. From one hand, new chances connected with immediate communication has occurred – access to knowledge and information, collecting, analyzing and downloading of data give new possibilities in education, business and entertainment. From the second hand, we are aware of the costs we have to pay: losses of interpersonal skills, forfeiture of ability to deepen reflection, mind chaos, superficiality of our thinking are just few aspects of so-called "digital mind". These negative phenomena are characteristic for young people - "digital natives", who have no life experience needed to find balance between real and virtual worlds. The project "On the digital paths" was designed, to help these young people to find appropriate proportions between digital world and analog world.

Authors of the project – Ewa Chudyba from Museum in Gliwice and scholars from Department of Applied Social Science – was trying to create a space for meeting in which young people form schools from Gliwice, scholars from Silesian University of Technology and members of Senior Clup "Meteors" could rethink and discuss basics problems connected with redesigning our lives through the digital media.

In the limits of projects participants went in for classes, which combined forms of lecture and workshops:

- 1. Natives and immigrants on the digital paths lecture combined with discussion. Delivered by Ewa Chudyba.
- 2. How we can evaluate technology? lecture combined with discussion. Delivered by dr Bartłomiej Knosala.
- 3. Communication deficits of being on-line digital rehab lecture combined with workshops. Delivered by dr Grażyna Osika.
- 4. Hikikomori Imprisoned in the web Lecture combined with workshops. Delivered by dr Anna Waligóra-Huk.
- 5. Digital City lecture and interactive workshops with Mentimer. Delivered by dr Barbara Rożałowska.

Summary

The projects conduct by Department of Applied Social Science and Museum in Gliwice base on the belief of social relevance of humanities and philosophy. This social relevance of humanities and philosophy is growing along with technologizing of culture and society. The questions such as:

- has the essence of humanity changed because of rapid development of digital technology?
- what is an impact of technology on self and society?

- are we getting better as humans thanks to technology (or contrary)?
- how technology is transforming our ways of lives in the cities?
- can we evaluate technology?

are part of humanities domain and the relevance of such question increases. One of the main aim of projects was to endow citizens of Gliwice with the awareness of threats and chances connected with digital technology.

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