

Artificial Intelligence and Transformation of Communication

The notion of the “technological singularity” commonly defined as the idea that intelligent machines will one day be more intelligent than their human creators and will be at a capacity to create more intelligent machines, is one of the disruptive argumentations of 21st century. The concept arising from engineering and technology sciences has received a lot of attention from scholars of different sciences in recent years. The first use of the term “singularity” in this context was made by Stanislaw Ulam in 1958, and was popularized by mathematician, computer scientist and science fiction author Vernor Vinge who argued artificial intelligence for the first time to be the possible cause of the singularity (Patapov, 2018), and finally futurist Ray Kurzweil (2005) has detailly argued on the principles, and future scenario of the singularity arising from artificial general intelligence.

Artificial Intelligence (AI) refers to the simulation of human intelligence processes by machines, especially computers. The AI technology, discovered by a research and development, can be argued to as a technological determinism powerful enough to set new standards for the social life. Raymond Williams (1990) has argued the idea that every new technology creates a new world, a new society, a new phase of history, criticizing television as a new technology for mass communication was said to altered the world during the 70’s. According to technological determinists, particular technical developments, communications technologies or media, or, most broadly, technology in general are the sole or prime antecedent causes of changes in society, and technology is seen as the fundamental condition underlying the pattern of social organization. (Chandler, 2013)

Marshall McLuhan (1997) is one of the theorists adopting the stance of technological determinism through media and he refers to different technological devices and tools in the context of media and communication tools and defines them as extensions of man. In his article “Wheel, Bicycle, and Airplane” he defines technology in a different context; “The transformations of technology have the character of organic evolution because all technologies are extensions of our physical being” (Understanding Media, 1997, p.179) According to his definition, media extends human features beyond their original capacity and ability. At this point intelligent machines of the AI technology can be argued to be the extensions of “human brain” although there is a considerable debate in the AI community whether the successful simulation of human-level communicative ability necessarily implies the presence of intelligence or not. Nonetheless what is not debated is according to Gunkel (2012) “machines are in fact capable of communicating successfully with human users in a variety of contexts and in a way that is often indistinguishable from another person.” After thousands of years spent trying to understand how the intelligent human think, today the field of AI research goes beyond this question and builds intelligent entities that can think.

As discussed within this essay, new technologies have a transformation effect on society and everyday life, however this determinism is limited to how it is used. According to McLuhan’s technology and media theory, intelligent machines of the AI technology can be conceptualized as the extension of human brain and the future scenario of Kurzweil within the technological singularity concept, there needs to be paradigm shift to use this intelligent technology in the beneficial and ethical context.

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References

Chandler, D. (2013) *Technological or Media Determinism*.

Gunkel, D. (2012) *Communication and Artificial Intelligence: Opportunities and Challenges for the 21st Century*.

Kurzweil, R. *The Singularity is Near*. Viking Penguin. USA. (2005)

McLuhan, M. *Understanding Media. The Extensions of Man*. The MIT Press, England. (5th edition, 1997)

Papatov, A. (2018) *Technological Singularity: What Do We Really Know?*
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