Foresight for Things in Future Digital Society – Artificial Intelligence, Autonomous Vehicle, and IoT-World

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Abstract

The accelerated development of digital and ICT technologies is bringing about rapid changes in society. Autonomous vehicles, artificial intelligence, and the IoT, which have been developing at a rapid pace in recent years, will greatly affect future society. We will examine the impact of various digital objects on society and examine what problems are facing them. The development of artificial intelligence greatly improves the intelligence, autonomy, and humanization of things. The development of object intelligence also predicts the emergence of various autonomous machines. We discuss three paradoxes (Moravec's paradox, Polanis' paradox, Lee's paradox). Why is artificial intelligence difficult to evolve into super artificial intelligence. Autonomous vehicles are autonomous machines that are the closest to practical use. I present the changes in future society and the ethical and philosophical problems that autonomous vehicles will bring. With the development of the Internet of Things, we examine the possibility of the appearance of Things Sapiens in the future and the impact of the Internet of things on future society. Technology accelerating phenomena make things more difficult to predict in the future. Can we predict the unknown things that will emerge in the future? We will discuss how to cope with changes in future society, change of future jobs, and attitude of future society.

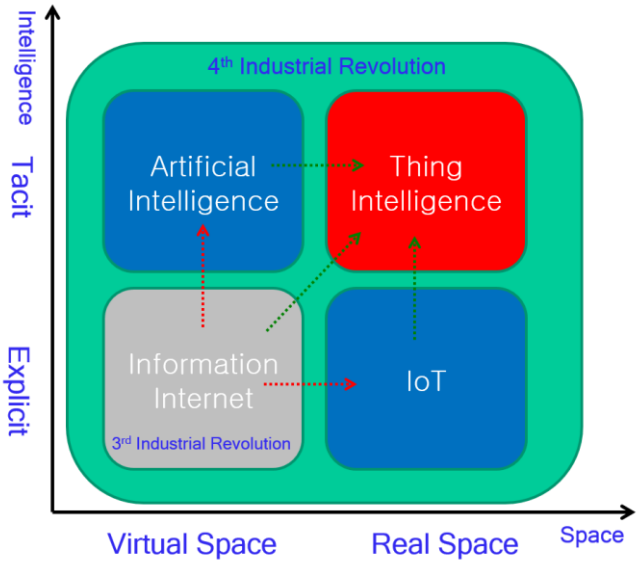


Fig. 1 Intelligence vs Space. In the era of 4th industrial revolution things intelligence is represented to the social space.

Recent Publications

1. Nobi A, Lee JW (2018) State and Network Structures of Stock Markets Around the Global Financial Crisis. Computational Economics 51:195-210.
2. Lee JW, Kim DH, Cho DH (2017) Reducing Suicide of the Elderly and Futures of Aged Society. Future Studies 2:99-123.
3. Nobi A, Lee JW (2017) Systemic risk and hierarchical transitions of financial. Chaos 27: 063107.
4. Maeng SE, Lee JW, Lee DS (2013) Impact of compatibility on the organization of mutualistic networks. Physical Review E 88: 022804.
5. Maeng SE, Lee JW, Lee DS (2012) Interspecific Competition Underlying Mutualistic Networks. Physical Review Letters, 108: 108701.



Biography (150 word limit)

Jae Woo Lee (Professor, Department of Physics, Inha University, South Korea) is actively engaged in statistical physics and complex science. His field of study is theoretical statistical physics and computer simulations of self - organizing critical phenomena and complex phenomena in various complex systems. Recent researches are social physics, econophysics, network science, self-organized criticality of neural network, and futures studies. Complex science is applied to explore the structure and principles of emergence in socio-economic systems. When a neural network has a structure of complex network, we investigate the self-organized criticality of neural avalanches by computer simulation. We are studying the structure of change of future society in technology-accelerating society by using complex science.

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Notes/Comments: