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Artificial intelligence is coming

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Some of the brightest people in the world today – like TESLA head Elon Musk and Stephen Hawking, the genius in theoretical physics – are warning that human beings may find themselves obsolete as they will be replaced by Artificial Intelligence (AI). In the realm of geopolitics there is already the beginning of an AI arms race.

When the global stock markets fell last week, there were reports that this phenomenon was actually caused by buying and selling based on algorithms rather than human decision making. Should we be afraid of AI? A Stratfor analyst, recently wrote:

“As AI-driven robots replace more and more workers, from truck drivers to insurance adjusters, loan officers and any number of white collar occupations, unemployment will rise. How will economies adjust? Should we imagine a utopia filled with gratifying leisure activities or a feudal dystopia in which a wealthy elite hold the few precious jobs unsuitable for computers.

As far back as 1965, AI was already a serious topic in the academe. The British mathematician Irving Good already wrote: “Let an ultraintelligent machine be defined as a machine that can far surpass all the intellectual activities of any man, however clever. Since the design of machines is one of these intellectual activities, there would then be unquestionably be an intelligence explosion and the intelligence of many would be left far behind. Thus the first ultraintelligent machine is the last invention that man need ever make, provided that the machine is docile enough to tell us how to keep it under control.”

In his book *Life 3.0: Being Human in the Age of Artificial Intelligence*, Max Tegmark distinguishes five different stances toward Artificial Intelligence:

- Those who believe that AI will exceed human intelligence in a few years.
- The so-called digital utopians who hold that AI will pass human intelligence in 50-100 years and that the development will be a boon for humanity.
- People who think, on the contrary, the achievement of superior intelligence by machines will be a bad thing,

whenever it happens. Tegmark calls adherents to this idea “luddites.”

- A group between the luddites and the utopians, the “beneficial AI movement which contends that AI is likely to arrive sometime in the next hundred years and that we better get to work on making sure that its effects are benign and not malignant.

- Finally, there are the techno-skeptics who believe AI will never rival human cognition.

The Luddites were a group of English workers in the 19th century who destroyed weaving machinery as a form of protest. They feared that the time spent learning the skills of their craft would go to waste as machines would replace their role in the industry. The Luddite movement was eventually suppressed with military

force. The term has now come to mean one opposed to industrialization, automation, computerisation or new technologies in general.

There are, however, companies that are already using AI in some of their business processes. Harvard Business Review surveyed some 250 executives and three fourths believe that AI will transform their companies in the next three years. The HBR also studied 152 projects utilizing AI. Their finding was that AI can support three important business needs.

The first is process automation including transferring data from e-mail and call center systems into systems of record. The second is cognitive insight which is the use of algorithms to detect patterns in vast volumes of data and interpret their meanings. Examples are predicting what a particular customer is likely to buy and providing insurers with more accurate and detailed actuarial modelling. The third is cognitive engagement that engages employees and customers using natural language chatbots.

Artificial Intelligence is coming sooner or later.

* ROBOTICS