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ARTIFICIAL INTELLIGENCE AND THE FUTURE OF HUMANS

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

The ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have the best chance of achieving a specific goal. A subset of artificial intelligence is machine learning, which refers to the concept that computer programs can automatically learn from and adapt to new data without being assisted by humans. Deep learning techniques enable this automatic learning through the absorption of huge amounts of unstructured data such as text, images, or video. Experts say the rise of artificial intelligence will make most people better off over the next decade, but many have concerns about how advances in AI will affect, what it means to be human, to be productive and to exercise free will.

Digital life is augmenting human capacities and disrupting old human activities. Code-driven systems have spread to more than half of the world's inhabitants in ambient information and connectivity, offering previously unimagined opportunities and unprecedented threats. As emerging algorithm-driven artificial intelligence continues to spread, will people be better off than they are today? Some 979 technology pioneers, innovators, developers, business and policy leaders, researchers and activists answered this question in a canvassing that experts conducted in the summer of 2018.

The experts predicted networked artificial intelligence will amplify human effectiveness but also threaten human autonomy, agency and capabilities. They spoke of the wide-ranging possibilities, that computers might match or even exceed human intelligence and capabilities on tasks such as complex decision-making, reasoning and learning, sophisticated analytics and pattern recognition, visual acuity, speech recognition and language translation. They said, "smart" systems in communities, in vehicles, in buildings and utilities, on farms and in business processes will save time, money and lives and offer opportunities for individuals to enjoy a more-customized future [1].

Many focused their optimistic remarks on health care and many possible applications of AI in diagnosing and treating patients or helping sen-

ior citizens live fuller and healthier lives. They were also enthusiastic about AI's role in contributing to broad public-health programs built around massive amounts of data that may be captured in the coming years about everything from personal genomes to nutrition. Additionally, a number of these experts predicted that AI would abet long-anticipated changes in formal and informal education systems.

Most experts, regardless of whether they are optimistic or not, expressed concerns about the long-term impact of these new tools on the essential elements of being human. All respondents in this non-scientific canvassing were asked to elaborate on why they felt AI would leave people better off or not. Many shared deep worries, and many also suggested pathways toward solutions. The main themes they sounded about threats and remedies are outlined in the accompanying table.

Digital Psychology: What it will be like? The full-fledged empathy needed to model human intelligence is unlikely to arise from the simple evolution of modern machine learning methods, even with the support of scientific psychology. It is not yet clear what concepts and theories will be included in such a model, but sooner or later it will be created: the social order is too significant, but this will not happen soon. And the very unjustified hope of quick success can be dangerous.

Most likely, the efforts of psychologists to create a model of natural intelligence alone will not be enough. You will also need the help of mathematicians, neurophysiologists, and representatives of other sciences that already exist or are still unknown [2].

Over time, a completely new system of analyzing and understanding a person's personality, based on big data, will develop. Its concepts and models will be better adapted to the realities of the modern world and at the same time retain the possibility of interpretation in a language that people understand. Then we can hope to create an adequate model of natural intelligence as a complex dynamic system.

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