



Live&Learn Paul Chan

The dark side of AI

Technology enlightens, but it also gives rise to critical questions about the relationship between humans and humanoids

WE are now experiencing a new era. The 4.0 Industrial Revolution has created the momentum for fundamental changes in all aspects of our socio-economic and personal lives.

The pandemic accelerates many of these changes. One theme that has emerged is the role of artificial intelligence (AI) in society and, in particular, its impact on education.

In simple language, AI refers to any device with varying levels of human intelligence. At an elementary level, the device may just automate routine tasks. It can be improved with assisted intelligence to make decisions and perform tasks.

It can also be further improved with augmented intelligence to become a human decision making automation.

One notch up is autonomous intelligence which is capable of adapting and acting without human assistance. Humans can use AI, machine learning (ML) and deep learning (DL) to improve all aspects of our lives. In sum, ML is an approach to achieve AI, and DL is a technique for implementing ML.

So, how does AI facilitate the education process? AI helps by facilitating accessing, scaffolding, scaling, and accelerating education development. It provides the functional efficiency in managing learning systems.

AI can help to design intelligent tutoring systems with smart con-

tent to achieve smart outcomes. At the same time, it facilitates the development of individualised and personalised learning that is supported by learning analytics. Learning can be cumulative as it can be done in bytes. This creates scalable globalised learning.

However, introducing AI into the classroom is more than a technology issue. There are challenges revolving around the integration and immersion of AI into the classroom culture.

Using AI means interfacing the learning and teaching pedagogy into a new context that teachers must learn to be adept at. It is a sociological issue concerning a community of teachers, designers and learners.

As the student-teacher relationship is a sensitive one, whether or not the use of AI technology is successful depends on the ability of teachers to create a suitable environment for it to take off.

Teachers must thus learn to interpret technology as a social construct in the classroom culture. As AI is just a platform, teachers must engage students to use reflexive conversations in subject-specific and learner-specific contexts. In such situations they must anticipate the positive outcomes and other unintended effects.

Without a doubt, AI would facilitate management and functional efficiencies and help to reduce the cost of delivering quality education on a larger scale. This way,

teachers are released from doing routine chores and can thus spend their precious time on other meaningful tasks.

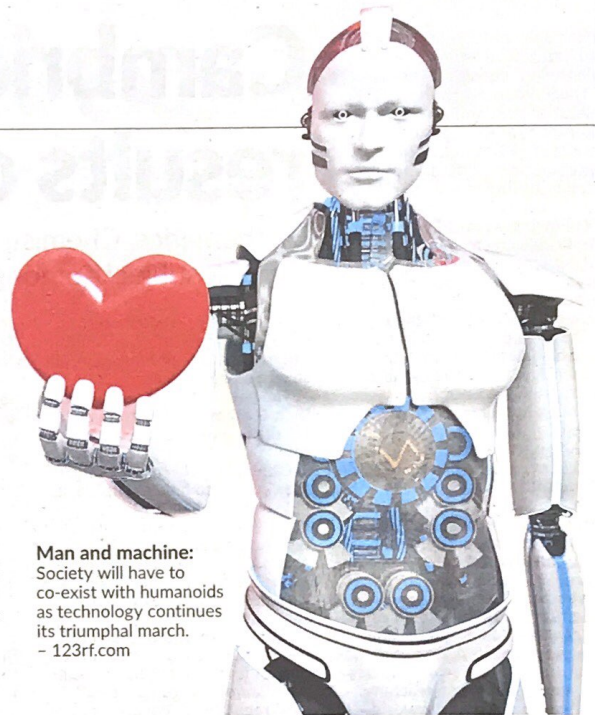
We teach AI as a competency to solve problems. In China, they start teaching AI to five-year old children. These children grow to be AI-driven students and later, adults.

But the bigger question is how does AI impact such individuals and society at large? This concerns the critical interrogation of the ethical and sociological impact on individuals and mankind.

AI will continue its technological evolution in an inexorable growth. Society will have to co-exist with humanoids as technology continues its triumphal march. But as much as AI enlightens, it also creates dark uncertainties.

Some critical classroom questions concern the relationship between humans and humanoids. As education is an emancipatory process and experience, what and how can it enlighten students and society about many unasked questions? Is the use of AI optional or obligatory? Should it be forbidden in some cases and for some areas? If education is to liberate us from ignorance and prejudices, then the teaching of AI should not be all about its functionality.

How does AI help us to emote and empathise, decide right from wrong, nurture creativity and compassion? How do we ensure it does not deform the natural



Man and machine: Society will have to co-exist with humanoids as technology continues its triumphal march.
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development of a child's learning experience? For example, will AI destroy the experience of a child in learning a language since it can accelerate the learning of languages, or replace the need and necessity to learn languages? Learning languages is a core evolutionary function in the development experience of human beings. Will this evolutionary function be destroyed?

While AI can enhance the logical component of education, can it help to develop a human being to love and feel without being structured by algorithm guidelines? Can AI enable a person to have higher appreciation of Shakespeare's love sonnets?

AI can most likely help to understand and may resolve the

pandemic challenges, but can it explain the philosophical co-existence of nature and man and the virus? Can it help us to grasp the meaning of life and death? Can it answer why we live? Is there a spiritual content in AI?

As AI invades our socio-economic and personal life, how do we humans answer our own yearning to understand our purpose in life, or the purpose of life? Will it all end in absurdity — having humanoids co-exist with us without knowing the meaning of what to live for?

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