

Humanities of the Future

Abraham Loeb

The future of the humanities is intertwined with advanced technologies.

By Abraham Loeb on March 4, 2019

Humanities are often occupied with thinkers of the past, such as the ancient Greek philosophers: Socrates, Plato and Aristotle. But most humans will exist in the future and their lives will be intertwined with advanced technologies.

Currently, the number of college students in the humanities is dwindling and academic advisors often belittle the relevance of liberal arts for the job market relative to more practical disciplines, such as science and technology.

But the [“heart of the matter”](#) is that science and technology aim to assist humans. And the interface between humans and advanced technologies is a frontier where the humanistic perspective is indispensable.

Three-decades ago, I was a fledgling postdoc advised by his experienced mentor that in order to develop a successful career in science I need to specialize in a narrow field and be regarded as the world expert in a particular specialty. Back then, developing a narrow expertise was key to being professional. A maker of “leather shoes with rubber soles” was supposed to know everything there is to know about crafting leather and rubber into the shape of shoes, with no time left for any peripheral learning. Fortunately, I did not listen to that old advice - as interdisciplinary perspectives are the carriers of innovation today. And by extension, the future belongs to the incorporation of liberal arts into science and technology. Academic research on the interface between humans and machines will rejuvenate disciplines that had become dormant and link the humanities to our future rather than our past.

A few contexts immediately come to mind. First and foremost, the study of ethics. There are major ethical questions regarding genetic engineering: Which revisions to the genetic making of humans should be engineered? Should we design the qualities of people that we wish society to have?

Another area involves the implications of Big Data sets: How can we employ the vast information that is collected daily on people, and analyze it for the benefit of psychology and social science? Can we use this data to construct computer-based models that would forecast human behavior to guide policies or political decisions?

Recent developments in robotics, artificial intelligence (AI) and machine learning touch upon fundamental questions in philosophy, such as: What is the [meaning of consciousness](#)? Is there [free will](#)?

There are also existential questions about the purpose of human life: Will robots and AI replace human labor across the board from [construction sites](#) to scientific research? How will future [economies adjust](#) to a new reality in which humans have less to do? Will humans take a permanent “vacation”, and if so – what will the meaning of their life be if their dignity will not be associated with mandatory labor?

And there are fundamental questions about whether human creativity in the arts or sciences is unique or could be reproduced by machines: Will there be a world in which AI is used to [create art](#) or make unexpected scientific discoveries? AI is already being programmed to replace medical Doctors in assigning prescriptions to patients with well-known symptoms, but should computers also be allowed to decide on medical treatments? And if AI software makes mistakes that harm people’s health, should the software developers be held legally responsible or should “self-learning” algorithms be considered independent from their human creators?

Social networks already bring to the forefront of public debate questions about the [privacy of data sets](#): How should we protect our private lives given the future of information technology? Who should be allowed to access data and how would we mitigate the impact of the loss of data in the wake of unexpected catastrophes?

It is not difficult to imagine how the ancient Greeks would have taken delight in modern science and technology. There is no doubt that Aristotle would have been fascinated by Big Bang cosmology. Aristarchus of Samos would have been mesmerized with the latest discoveries of exoplanets. Zeno of Elea would have been intrigued to realize that he can turn on his car with an App using the Apple Watch on his wrist. And Socrates would have been critical of the herd mentality exhibited in social media.

Philosophers, sociologists, psychologists and artists should participate in the future development of technology, so that it will better match human needs and values. Like canaries in a coal mine, humanists have the moral compass to warn us of impending dangers to our future society. They also possess the skill to imagine realities that we should aspire to have before scientists develop them. There is no doubt that the future will be interdisciplinary and that humanists should play a major role in shaping it.

ABOUT THE AUTHOR



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