ART OF MEDICINE
Technological Transformation
Elisabeth Miller

Abstract
Technology has enabled bionics and artificial intelligence, each of which can have important applications in health care. As we continue to substitute body parts with machinery, however, we might wonder, “What makes us human?” This drawing interrogates the relationship between humanity and embodiment, specifically in neck and facial musculature and brain structures.

Figure. Technological Transformation
Media

Water color pencils and black pen on paper.

This image represents humankind’s union with technology. It shows the brain turning into a collection of integrated computer circuits and the neck muscles evolving into mechanization-ready cables, pumps, and wires. In artificial intelligence (AI), boundaries distinguishing life and technology are challenged. We wonder, “Is it possible for machines to think? Are our own brains just complex organizations of biological microchips?” Medical students are well positioned to appreciate how intimately technology is becoming part of human life. From wheelchairs and artificial limbs to new antibiotics and imaging, innovations are constantly growing in number and playing larger roles in our existence. If science unlocks the origins of thought, therapies for patients with neurocognitive or psychiatric problems could be enabled. Progress in AI will generate the need in medicine to explore ontological and ethical relationships among brains, minds, selves, and healing.

Elisabeth Miller is a third-year medical student at the University of Washington in Seattle. She earned an undergraduate degree in biology from Carroll College in Helena, Montana.

Citation

DOI

Conflict of Interest Disclosure
The author(s) had no conflicts of interest to disclose.

The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.