Becoming Our Machines: Understanding and Responding to “Machine-Mindedness”

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ABSTRACT
Donald MacKay wrote in his 1974 book, A Clockwork Image, "In our age, when people look for explanations, the tendency more and more is to conceive of any and every situation that we are trying to understand by analogy with a machine" (11). He called this condition, "machine-mindedness". What are the sources of this perspective and what concerns, if any, does it raise? This paper argues that the “machine-minded” perspective is more prevalent and more dangerous than one would expect. The history of “machine-mindedness” is traced back to Descartes into the Cybernetics era of the ‘40s and ‘50s to present day cognitive psychology and futuroism. Though many perpetuate this perspective, this paper provides insight into the challenges associated with “machine-mindedness”, particularly its impact on our view of what it means to be human.

DESCARTES
In Descartes’ Discourse on Methods, he searched for an explanation for existence. Starting with a blank slate, Descartes doubted everything. Through this method, he found one thing that escaped doubt: his thoughts. Thus Descartes concluded, “I think, therefore I am”. Descartes equated his thinking (and in effect, his mind) with existence. This laid pieces of the foundation for modern thought on human identity.

THE MACY CONFERENCES
The Macy Foundation, an organization focused on medical research, funded the Macy Conferences. These ten conferences took place over seven years from 1946-1953. The conferences engaged many different disciplines and laid the foundation for cybernetics and the philosophical convictions that led the field. At these conferences, humans as information processors became emphasized while materiality was disregarded. Information gained priority over physical matter. Throughout the ten years, the overarching idea that information is not bound by context and thus "can be transported into any medium and maintain a stable quantitative value" became standard (Hayles, 56).

TRANSHUMANISM
In a futurist movement known as transhumanism, “machine-mindedness” is a key assumption about humanity that contributes to the ideology. Ray Kurzweil, a leading transhumanist, writes, “We should not associate our fundamental identity with specific sets of particles, but the pattern of matter and energy we represent” (55). An ultimate goal of transhumanism is the transfer of humanity from biological creatures to technological or virtual creatures. But this change is only possible with a “machine-minded” conviction. When humans are described strictly as machines, personality, identity and the like can be maintained when moved from flesh to a technological body.

COGNITIVE PSYCHOLOGY
Since its rise to popularity in the early 1960s, the field of cognitive psychology has been guided by the concept of information processing. Information processing asserts that “information is handled by a sequence of stages; each stage performs a specified function, and then the information proceeds to the next stage...” (Matlin, 4). This approach to understanding the human brain is based off of an analogy with a computer. Many psychologists work off the assumption that “the task of...trying to understand human cognition is analogous to...trying to discover how a computer has been programmed” (Neisser, 6). This computational metaphor is dominant in the field today.

IMPACT OF A “MACHINE-MINDED” ATTITUDE
“Machine-mindedness” is an inaccurate but inadequate way of describing ourselves. When the metaphor becomes the only way to view reality, concern arises. We should not reduce ourselves to the “pattern of matter and energy that we represent” (Kurzweil, 55). This leads to a degradation of humanity. As new technologies take root in the twenty-first century, our tendency to self-deprecate may continue to develop and demand more of our self-respect. Sometimes machines become elevated and frustration about human's inability to accomplish similar tasks occurs. In these moments, humanity's value as something other than a machine needs to be recognized.

Many seek out the answer to humanity’s uniqueness by studying physiology, psychology, neuroscience, etc. These are worthwhile but leave one wanting a more complete explanation. MacKay raises a good point when he said, “Many of the most important questions that concern us as persons cannot even be asked in scientific language, let alone be answered scientifically” (36). Humanity's identity and value need to be thought of in a broader context.

In a society obsessed with objectivity and verifiability, we often remove ourselves from the human experience. This is only accentuated when one views his/her self as an image of a machine. We are prone to become what we believe about ourselves. Looking into the future of our society with a “machine-minded” perspective, the possibility of a self-fulfilling prophecy is unsettling. As detectable patterns of information, we lose the magic and mystery of what it means to be human. Humans have dignity, are unique, and worthy to be valued. We are not simply machines.

REFERENCES

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