

Since the inaugural issue appeared in 1991, *Minds and Machines* has established itself as a leading forum for critical discussion and debate of the philosophical aspects of computer science, artificial intelligence, and cognitive science. Much has changed in these special sciences in the last twenty years and, not surprisingly, the interaction between philosophy and the computational and cognitive sciences has changed as well.

For example, whereas once the philosophy of artificial intelligence was occupied by considering the very idea of an artificial intelligence, the tenability of the metaphysical commitments thought to underpin the field, and the ethical ramifications of possible future technologies, now it is commonplace for philosophers to be full members of the AI research community, and increasingly one sees AI researchers making fundamental contributions to philosophy. Formal epistemology is a field which demonstrates the spirit of this interdisciplinary effort, spanning computational logic (multi-agent systems, knowledge representation and reasoning), machine learning (learning, reasoning under uncertainty, probabilistic causal models), social networks and signaling, decision theory and game theory, philosophical logic, and theoretical philosophy of science.

Similarly, during the last twenty years the ties between philosophy and cognitive psychology have grown deeper and more numerous. Causal reasoning, moral psychology, heuristics, and rational decision-making are prominent topics where collaboration between philosophy and the cognitive sciences has yielded significant payoffs. Here too one can see a collaborative interest in model building and model selection, ranging from philosophical debate over methods and how those methods are used by the cognitive sciences, to the ways in which our current knowledge of the brain and cognitive processes can and should guide philosophical investigations.

A striking feature we see in recent work at the intersection of philosophy, artificial intelligence, and cognitive science is a commitment to what may be called *scientific philosophy*. Part philosophical inquiry—deeply informed by the empirical, formal, and computational sciences—and part philosophically attuned science—aimed at leveraging what is known about brains and cognitive processes to sharpen our questions about the nature of mind, rationality, and morality—the scientific philosophy of human and machine cognition engages in discussion and debate of the philosophical aspects of computer science, artificial intelligence, and cognitive science but is thoroughly informed by those special sciences. It is philosophical work whose purpose is not detached commentary, but rather is philosophical work squarely aimed at advancing those sciences.

This, the first issue of volume twenty-one, marks a transition from James Moore's editorship of *Mind and Machines* to my own, and it is an occasion I welcome with

great humility and enthusiasm. I am humbled by respect for the journal and the research communities it has served for two decades, yet I am excited by the opportunity to help write the next chapter for this storied institution. As a sign for where *Minds and Machines* is heading, the journal, guided by a very distinguished editorial board, will continue its tradition of critical discussion but it will do so with an aim toward advancing our scientific understanding of human and machine cognition.

Minds and Machines shall continue to welcome contributions that cross disciplines within the journal's editorial focus, but we shall do so with an eye toward advancing the state of knowledge at issue, in whichever field that may be: philosophy, computer science, or cognitive science.

G.R.W.
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