# The Coevolution of AI and AAAI

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■ AI and AAAI are coevolving. As AI matures, its focus is shifting from inward-looking to outward-looking. Some of the new concerns of the field are social awareness, networking, cross-disciplinarity, globalization, and open access. AAAI must reflect and support those concerns.

This is an opportune time to consider some broad themes of the coevolutionary development of AI and AAAI, themes such as maturity, ideology, openness, responsibility, resources, image, communication, networks, and globalization.

AI is now a mature discipline. We are reminded of that by the twin milestones of the 25th anniversary of AAAI in 2005 and the 50th anniversary of the Dartmouth Conference in 2006. We should not forget, however, that there are older AI societies and "artificial intelligence," the field, if not the phrase, predates 1956 in the work of scientists such as Kenneth Craik, Alan Turing, and I. J. Good.

In humans, the fiftieth birthday marks the transition to the third age: the age of maturity. The insecurities and ego-building brashness of youth drop away. In AI's youth, we worked hard to establish our paradigm by vigorously attacking and excluding apparent pretenders to the throne of intelligence, pretenders such as pattern recognition, behaviorism, neural networks, and even probability theory. Now that we are established, such ideological purity is no longer a concern. We are more catholic, focusing on problems, not on hammers. Given that we do have a comprehensive toolbox, issues of architecture and integration emerge as central.
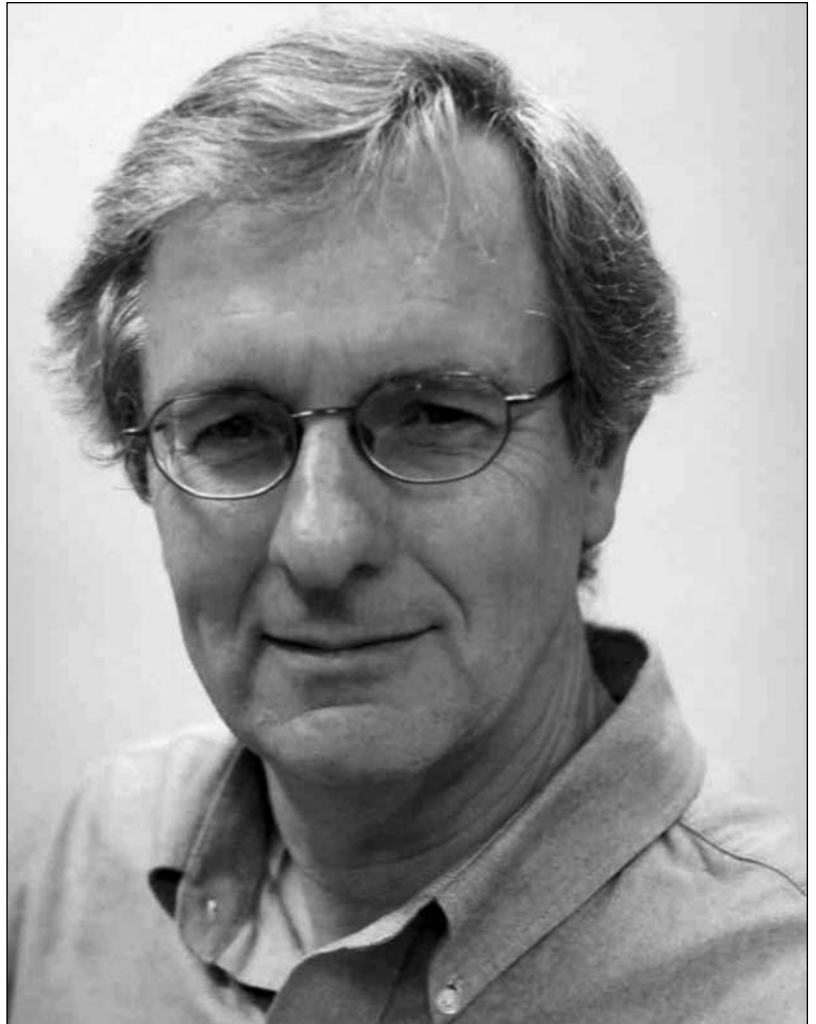
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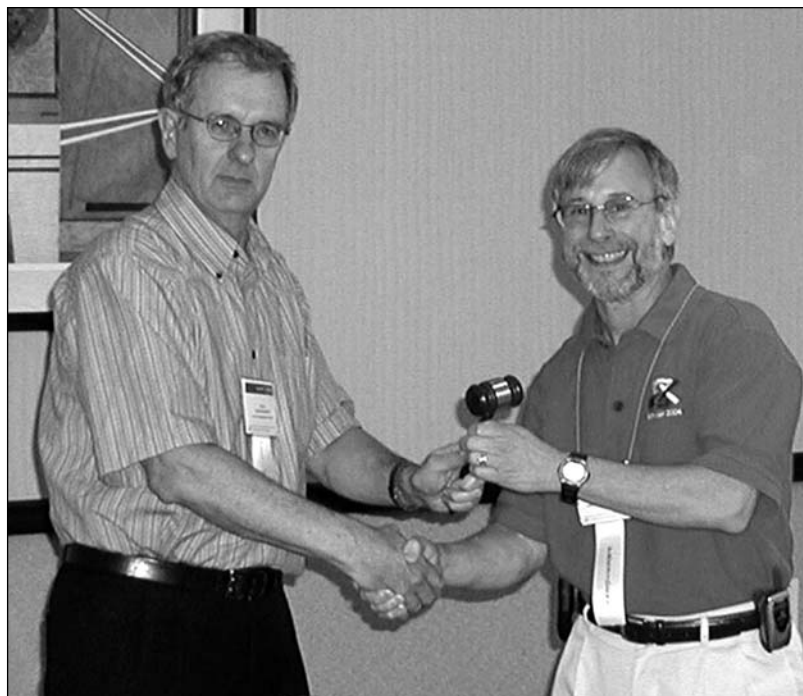
Outgoing President Ron Brachman (Right) Passes the Gavel to Incoming President Alan Mackworth in July, 2005.

This relaxed maturity also allows greater openness to contributions from, and to, related areas, with cross-fertilization of techniques and applications. Theory for theory's sake is less interesting. We have shifted focus to making a real difference in the real world, which may, of course, require significant new theories. But these theories are situated, embedded, and even embodied in perceptual, cognitive robots—not isolated in the closed worlds of puzzles or games with perfect information. Cognitive systems, studying cognition both in the wild and in artificial systems, is a new focal point at the convergence of AI, cognitive science, neuroscience, and HCI.

So our work is more social, in many dimensions. We scavenge for theories and results from many related disciplines, a social activity. We now consider multiagent systems, natural and artificial, and group intelligence. And we are socially engaged with critical societal issues such as technological support for an aging population and new applications in search, bioinformatics, and e-commerce, creating and exploiting happy unions with those related disciplines.

Social awareness brings issues of ethics and the responsible use of our technology into sharp focus. We have been rightly chastised for ignoring these concerns, which go beyond narrow ethical issues to concerns such as privacy and human dignity and autonomy. Mary Shelley's creation, Dr. Frankenstein, the modern Prometheus, is as compelling as ever. AI is seen as fueling the revenge of technology. We have two major issues to confront: the image of AI research and the funding of AI research. And those two issues are intertwined.

As the global village shrinks, we, in common with the rest of the villagers, realize that our small world is in danger. What can we offer to help? How can we shape our organizations and institutions to be supportive?

All of these themes have implications for each of us and for AAAI. Can we align our organization with these maturing trends in the field? What can we do about the image and funding issues, beyond what we already do, on our own and with the Computing Research Association (CRA)? What, for example, can AAAI do to help the global AI community? Although AI has traditionally been strong in North America, other regions are thriving and growing stronger. What role can we play in strengthening the evolving international network of national and regional AI societies and IJCAI? As the global community grows, what is the best way for us to work together? What communication and publication structures work well now? What do we need to change? For example, how do we address the issue of global open access to publications while maintaining the strengths of a member-based organization? Given that our resources are limited, and our deficit substantial, which activities should we deemphasize?

AAAI is a successful organization of AI practitioners; it is simultaneously a national, a regional, and an international society. If it is to continue to flourish, we must take seriously these themes and concerns. The future coevolution of AI and AAAI promises to be as exciting as the past.

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