

Editorial Comment

Revisiting AI

A recent article in 'Forbes' cast a dark shadow over the commercial viability of AI technology. The gist of the story was that expectations for expert systems are overblown. Expert systems tend to be brittle and lacking in common sense.

At the beginning of this year an article in AI Expert said that AI bashing is an inevitable part of journalism's love-hate relationship with high tech, the recurrent flip side of techno adoration which the magazines follow with a kind of seasonal regularity. But this doesn't mean AI technology is fading. It is just that the incubation period is longer than many people anticipated.

Not everybody agrees. Daedalus, the journal of the American Academy of Arts and Sciences, dedicated a special issue to AI at the beginning of 1988. The preface was very clear. Had the term never been created, with its implication that a machine might be able to replicate the intelligence of a human brain, there would have been less incentive to create a research enterprise of truly mythic proportions. Had the name not existed, certain consequences might have been averted.

The main idea is that AI has been wrestling from the beginning with what has been called the common-sense knowledge problem. By coping with all sorts of situations, a manager may simply learn to discriminate prototypical cases and learn typical skilled responses to their typical behavior in typical circumstances.

The problem of finding a theory of the world seems to be insoluble because the domain seems to have no theoretical structure. If background understanding is a skill and if skills are based on patterns and not on rules, we would expect symbolic manipulations to fail to capture our common-sense understanding.

More than that, information seem to be better thought of as evoked than found. Much more, we behave intelligently in the world without having a theory of that world. This is what philosophers say, and they are very close to some computer scientists who say that cognition is not based on systematic manipulation of representations. For both sides the main argument is coming from Heidegger, who was supposed to say that practice understanding is more fundamental than detached theoretical understanding.

I remember our discussions in HSM a long time ago, almost ten years ago, and I wonder why nobody listened to us. I remember trying to show that there is a way to embrace both Heidegger and Husserl, borrowing the concept of pullback. I remember how many papers in HSM focused some kind of criticism on unchecked expectations.

Who knows, maybe this time, our voice will be considered more fashionable. It is high time to revisit many fields. AI is only one.

Constantin NEGOITA
Hunter College CUNY
695 Park Avenue
New York, NY 10021
 USA