

summary of Moravec's paradox

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1 Moravec's paradox

it is phenomenon surrounding the abilities of AI-powered tools. In the 1980s, Hans Moravec, Rodney Brooks, Marvin Minsky and others articulated and discussed this AI paradox. they found that it is easy to train computers to do the things that seem hard to humans—playing chess, advanced statistics, algebra, etc., but it is difficult or impossible to give them the skills of a one-year-old.”

for example, artificial intelligence can complete tricky logical problems and advanced mathematics. But the ‘simple’ skills and abilities we learn as babies and toddlers — perception, speech, movement, etc. — require far more computation for an AI to replicate. **We can say, for AI the complex is easy, and the easy is complex.**

2 evolution of human skills

the explanation behind Moravec's Paradox revolves around evolution, understanding, and perception. For a start , the skills that we define as simple -those we learn, instinctively- are product of year and years of evolution . So, while they may appear simple , its only because of billions of year worth of tuning.

In short , the skills that humans have acquired recently in their history are easier to teach computers, but our skills get harder to teach as they go further back in the evolutionary history of human and animals. Argument would be:

1. Reverse engineering of a human skills is proportional to the amount of time after its revolution.
2. The older the skills is , the more unconscious it become and hence lesser the effort required to perform it.
3. The more effortless a skill appear , the more difficult it is to reverse engineer.

3 Moravec's Paradox and the AI of the past

The history of AI has seen an impact from Moravec's paradox. In fact , its arguably a factor that held back development and contributed to the AI effect.

The AI effect is a phenomenon that has seen AI powered tools lose their AI label overtime, due to not being true intelligence. Moravec's paradox could have contributed to this . that is the reason these tools lost their intelligent status is that the task it does are simple , once you break them down. No matter how good AI tools and programs got at games and logic thanks to Moravec's paradox , they couldn't complete basic human task. How could anything that can't replicate the behaviour of a toddler be intelligent. Their optimism stemmed in part from the fact that they had been successful at writing programs that used logic, solved algebra and geometry problems and played games like checker and chess.