

Moravec's paradox

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Moravec's paradox is a observation given by Hans Moravec, Rodney Brooks, Marvin Minsky and others that it is easy to teach or program a computer to show adult level reasoning when it comes to computation, but it is likely very difficult to give computer sensorimotor skills like perception and mobility. To which Minsky remarked that unconscious processes are the most difficult to reverse engineer, and yet we do flawlessly complicated tasks that we are ignorant of.

To contribute to this, Moravec gave the argument that our motor and sensory skills have evolved so much through billions of years of evolution and natural selection that things now happen so unconsciously that we have reached the level of prodigious olympians in perceptual and motor areas, making a complex process appear simple. But, the abstract which we have stated to develop in last 100 thousand year looks very difficult as we haven't mastered it. The skills that we have acquired this far are largely unconscious seemes to be effortless and are difficult to reverse engineer but, the skills that require effort may not be difficult to reverse engineer.

Moravec's paradox break the traditional belief of AI research, that they can easily create a thinking machine easily as the machine they have programmed to solve logic and algebra which is hard for human. This lead Rodney Brooks to explore the field, and he made an AI with no cognition but just sensorimotor skills, which he termed as "Nouvelle AI".

Steven Pinker concluded this in his book following the similar theory that sensorimotor skills are not easy as they were considered by the traditional AI researchers and that the new generation machine can take the job of analyst but the job of gardener, cooks are still safe for dacades.