

AI and the Mysteries of Visual Experience

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Machine learning, aka AI, is famously making remarkable advances in a wide range of applications. This has led to ubiquitous discussions on the social implications of current AI and on the prospects for AGI (General AI) in our lifetime. However, there has been no concomitant progress on scientific understanding of human intelligence. This paper will focus on some remaining unsolved questions of visual experience. These include the fact that every time we open our eyes we see a rich scene that has no plausible neural substrate. We will also discuss the famous binding problem – how the brain can combine activity in many disparate circuits to produce consolidated behavior and experience. The current AI practice of ignoring human intelligence is scientifically irresponsible. It is also potentially dangerous because being human involves much more than AI's ability to solve problems.