Towards an Age of Unreason?

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"We are writing something that we can no longer read". This is Kevin Slavin, MIT researcher and author, speaking about the advances made by AI and Machine Learning spoke of how machines were designing solutions to human problems in ways that the human mind could not comprehend. He gave an example of the Chinese game Go, commonly regarded as the world's most complicated game, one that makes chess look like Ludo. Apparently, AlphaZero, Google DeepMind's Go playing AI could not only beat the world's best players, but do so by playing the game in a way it had never been played before. Similarly, he spoke of examples from the world of construction, where some structures designed by machine learning, not only delivered far better outcomes in terms of costs and effectiveness but did so using a logic that was beyond human grasp.

These solutions did not come from a better understanding of the principle involved in finding answers. They were the results of an outcome-backwards hunt that relentlessly generated successive refinements till the machine found something that delivered better. It took into account thousands of variables, something that human beings are incapable of doing, and tried out all manner of possibilities, without any knowledge of any fundamental scientific principles, or anything else for that matter. As James Somer in an article in New Yorker magazine explained about how the computer mastery over the game Go, "at its core was an algorithm so powerful that you could give it the rules of humanity's richest and most studied games and, later that day, it would become the best player there has ever been".

At one level, this tells us that human knowledge has a long way to go. It is exciting in that there lie unimagined vistas beyond the pale of current human knowledge. The trouble is that there is no conceivable way in which human thinking will ever be able to match what machines are capable of. For many years now, we have come to terms with the fact that machines outperform human minds when it comes to both the volume of data that they can process as well as the speed with which they can do so. But when they start using methods that neither utilise existing precepts nor begin with principles that science has worked so hard to arrive at, then some basic building blocks of the very idea of knowledge start getting dismantled.

In an everyday sense, our experience of science begins when a child takes apart a gadget trying to find out what causes it to make it do things that seem quite magical. A child is able to acknowledge the wonder of it all- little boxes that throw out sound, a toy clown that claps its hands, a dog wags its furry tail. The desire to know why things are the way they are is the reason why human beings are such builders of knowledge. Already, in an era dominated by digital technology, unlike in the mechanical world, there is little insight to be gained by simply taking things apart. We are already accepting the fruits of science unquestioningly, without needing to resort to any.

Are we heading towards a world where we use things made for us by superior intelligences, that have no understanding of how they do what they do, but because they do what they do so well and so quickly, they have no need for knowledge, merely of recursive learning from scratch? "Algorithms that learn from raw perceptual data," as philosopher Nick Bostrom puts it. With time, and ever advancing data analytics, we may not even need to ask, for with time, what we call the self might get revealed as nothing but a decodable set of algorithms that we use without being aware of it.

Even without stretching this scenario far into the eventual future, it is possible to see where this could potentially lead us. The unquestioned acceptance of the world as received is a likely consequence. If progress, as we understand it, can be achieved by letting machines learn on their own without any real input from the knowledge gathered by humankind, what is the incentive to pursue questions, gather evidence, prove hypotheses anymore? If we cannot understand fully the answers that superior intelligence provide us with, why tax our brains at all? Will machine intelligence be 'the last invention that humanity will need to make', as Nick Bostrom asks?

As it is, thanks to social and the universal access that it grants us, the currency of truth has been severely compromised. Things don't need to be true for them to be believed, and opinions are increasingly a sovereign dominion independent of the idea of evidence. Today we have an opinion without consequences, tomorrow we could also have loose association without causality. The very idea of reason could become unnecessary. We are already seeing signs of the impending age of unreason. One has only to glance at Twitter to know that this fear is not farfetched.

Underneath all of this turbulent change, lies a belief that somehow, human rationality will find a way beyond what we see today. That reason will return, and take us towards a new equilibrium. But when the very idea of reason itself starts becoming superfluous, is it farfetched to worry about where it will take us? Of course, this vision of the future is by no means a done deal. There are some, like Judea Pearl, author of The Book of Why, who argue that the future of AI must necessarily involve the integration of causality. But there exists a possibility that machines may not be aspiring to human-like intelligence, but bypass that goal altogether. We will need then to trust machines and presumptively believe in their good intentions. Or as Will Knight, writing in Technology Review argues, "as the technology advances, we might soon cross some threshold beyond which using AI requires a leap of faith".

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AUTHOR

Santosh Desai

Santosh Desai is a leading ad professional. He says he has strayed into writing entirely by accident, and for this he is "grateful". "City City Bang Bang" l. . .

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