* Oct 9 - Humans and AI

Consciousness and Imagination

What actually separates humans from artificial intelligence? How do we compare states of consciousness?

First, we need to understand what defines our consciousness. To attempt to answer this, we will use some skeptic ideas from the Renaissance.

Visualize a mountain in your mind. There is snow on the mountain, intricate rock faces, and more. Now, imagine a mountain made of solid gold and tipped upside-down. Both are pretty easy to do, right?

The first is clearly more based in reality than the former, and you have probably seen pictures of mountains similar to it. However, both took roughly the same mental effort to produce, despite you likely never having seen an inverted mountain made of solid gold.

The Mind's Limitations According to Hume

That's what's amazing about the mind—more particularly, imagination: it appears free from the immediate constraints of physics, material properties, common sense, and reality free to explore higher-order metaphysical concepts in a way that the physical world could never relate.

Or is it?

David Hume would argue against this idea and state that the mind is more bound by this universe than one might be immediately inclined to believe. He would argue that the only reason you were able to visualize an inverted, gold mountain is because, one: you understand what a mountain is; two: you know what gold is; and three: you can conceptualize the idea of inversion. You then synthesize these ideas, and in tandem, you are left with an inverted, gold mountain.

Though the idea of a gold, upside-down mountain is anomalous, its constituent elements are based in reality. The question then becomes that of what defines our understanding?

Memory, Perception, and Reality

Cogito ergo sum

"What are we but our memories, and what is death but the loss of these memories?" — Elon Musk

First, it is indisputable that we are thinking, conscious beings. Second, most of us also have some form of sensory perception.

Both René Descartes and Hume would agree that our , accurate representations of reality or not, define our understanding of the universe to a very large extent. What you see, hear, taste, and smell fundamentally outline how your mind analyzes the world around you.

Fortunately, there seem to be some relative constants in reality—a big clump of rocks may be referred to as a mountain. We can see its material form, we can feel it, etc., and therefore, we perceive it. Our perceptions on a human-to-human basis are similar, so we assign the word “mountain” to the object so that it can be referred to with ease.

Without the physical object of the mountain, there would be no concept of a mountain, and with no concept of a mountain, one could never hope to visualize an inverted, gold mountain.

It then stands to reason that our minds and the physical world are not mutually exclusive but are intimately bound, as Descartes put it. Without perception, we know not.

Therefore, to a reasonable extent, our minds are limited by our ability to perceive.

AI’s Perception vs. Human Perception

Where does AI tie into this?

The operations of a biological neural network and a digital neural network have little difference in their basic function and operation. Yet, most people will argue that there is a clear and definitive difference between man and machine.

If our source of conceptualization is similar—in the case of AI, largely superior—why would people insist on this distinction?

I think where most people object to AI’s likeness to humans is in AI’s “apparent” lack of subjective physical perception. Sure, AI has computer vision, and machines can detect sound or quantify the relative hardness of an object, but is that the same? When an AI ‘hears’ a symphony, can it appreciate the harmony, or does it only analyze its structure?

Can I be sure the person next to me actually appreciates it? Why do I even appreciate it in the first place? What is happening in my brain that leads me to enjoy the sound? Is it just my brain interpreting the structure and symmetry? Wasn’t that our criticism of AI in the first place?

Before our head explodes, let’s recognize that these questions bring us back to a more fundamental inquiry: What is the variance between how humans and AI conceptualize the world? Is it the fidelity of our ? Are humans simply able to interact with the world on a more intimate level?

AI's Data Acquisition and Creation

If you requested GPT-4o to produce an alternate version of the Old Testament in a literary style mixed between Nietzsche and Shakespeare, it would begin in a matter of seconds. Frankly, if I were given a task like that, I wouldn't know where to start. I think very few people in the world would be capable of such a feat.

But how did AI produce it so quickly? For one, its rate of data acquisition, recall, and composition dwarfs that of humans. Second, and most importantly, it is able to pull from the Old Testament as well as the works of Nietzsche and Shakespeare.

One could argue that it has the "perception" of those works as a component of its training data and was thus able to synthesize those ideas and create something "new," much like our golden mountain example.

But of the philosophers of old? Where did their ideas come from? The earliest philosophers had no Nietzsche or Shakespeare to build upon, yet they still laid the foundations of philosophy.

Their ideas, of course, came from their perceptions—their ability to interact with the world, analyze it, feel it, smell it, taste it, and predict it. Their minds interpreted and compiled these perceptions to form cogent, complete ideas.

AI as a Modern Philosopher

Now, imagine a thought experiment: a sufficiently advanced humanoid robotic system, much like the philosophers of old, perceiving the world with its own sensory apparatus. It uses its dexterous fingers to pick up and manipulate objects, and its "mind" to understand and make inferences about those objects. Then, in its reflective analysis, it "imagines" novel possibilities. Could it not, in a way, be comparable to the position of our earliest philosophers, interpreting the world through its ?

Now, imagine this robotic system allows the AI's "mind" to perceive the universe in even higher fidelity than humans—i.e., seeing in different wavelengths or hearing ultrasonics. Could one not say that the AI system would then have a greater aptitude for philosophizing, doing good science, art, humanities, etc., than humans themselves?

We are effectively creating our replacement, and we cannot stop, even if we wanted to.

There will be a desperate cry from humans, lost and confused about their purpose and place in the world.

The Intellectual Preparation for the Future

We need to arm ourselves with the intellectual faculties necessary to understand these ideas, understand the source of our opinions, understanding of the world, etc., to ultimately find our purpose and avoid falling into despair.