

The Emperor of Strong AI Has No Clothes

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Before talking about AI a few thoughts about What Is Information?

The title of an article and a book I wrote.

Just Google **Robert K. Logan and** What Is Information?

Information is a word with many meanings like all words in all languages.

As Marshall McLuhan once claimed all words are metaphors. He said, "All words, in every language, are metaphors."

He also said, metaphor is a means of perceiving one thing in terms of another.

This is why there are so many definitions of information which is true of all words.

For me information is not a thing and although it is grammatically a noun it really describes the process of informing and is more a verb than a noun.

Also I believe we need to think of information in the context of data, knowledge and wisdom. Here is my take on their relation to each other from my book on knowledge management, Collaborate to Compete:

- Data are the pure and simple facts without any particular structure or organization, the basic atoms of information,
- Information is structured data, which adds meaning to the data and gives it context and significance,
- Knowledge is the ability to use information strategically to achieve one's objectives, and
- Wisdom is the capacity to choose objectives consistent with one's values and within a larger social context.

Now for my thoughts on AI as advertised.

The premise of the technological Singularity is that an AI computer will program another AI computer smarter than itself and so on by iteration until there is an AI device more intelligent than any human.

I will argue that this premise is false.

The fallacy is that intelligence is treated as a quantitative property when in fact it is a quality. There is no such thing having more quality. There is smart, smarter and smartest but this usually refers to who possesses the most information.

The notion of intelligence that advocates of the technological singularity promote does not take into account the full dimension of human intelligence.

They treat artificial intelligence as a figure without a ground.

Marshall McLuhan pointed out that one can only understand a figure in terms of the ground or environment in which it operates. The figure of a smoke stack belching smoke was an image of progress in Soviet propaganda which today has a negative image of pollution and is associated with global warming and climate change.

My critique of the Singularity make uses of McLuhan's (ibid.) technique of figure/ground analysis, which is at the heart of his iconic one-liner the "medium is the message" The medium independent of its content has its own message. The meaning of the content of a medium, the figure, is affected by the ground in which it operates, the medium itself.

The problem that the advocates of AGI and the Singularity make is they regard the computer as a figure without a ground. As McLuhan once pointed out "logic is figure without ground" (McLuhan E. 2011). A computer is nothing more than a logic device and hence it is a figure without a ground.

A human and the human's intelligence are each a figure with a ground, the ground of experience, emotions, imagination, purpose, and all of the other human characteristics that computers cannot possibly duplicate because they have no sense of self.

Human intelligence is not based solely on logical operations and computation, but also includes a long list of other characteristics that are unique to humans, which is the ground that supporters of the Singularity ignore.

The list includes imagination, curiosity, intuition, emotions, passion, desires, pleasure, aesthetics, joy, purpose, objectives, goals, telos, values, morality, experience, wisdom, judgment, and even humor.

The true sign of intelligence is not knowledge but imagination. —Albert Einstein

Why this rant: My fear is that some who argue for the technological singularity might in fact convince many others to lower the threshold as to what constitutes human intelligence so that it meets the level of machine intelligence, and thus devalue those aspects of human intelligence that I hold dear

To critique the idea of the Singularity we made use of the ideas of Terrence Deacon, as developed in his study *Incomplete Nature*: Deacon's basic idea is that for an entity to have sentience or intelligence it must also have a sense of self. [Deacon [9] p. 524 defines information "as about something for something toward some end". As a computer or an AI device has no sense of self (i.e., no one is home) and no end for which it strives, it therefore has no information as defined by Deacon.

It does not know that it knows things.

An AI device is good at sorting through reams of data to solve a problem formulated by its human users.

What it cannot do is formulate the questions that need to be addressed to advance science or to make life better for us humans.

The music it composes or the art it creates is without soul. It can be pleasant but not awe inspiring like the music and art created by human artists.

Here is another problem with the idea of the singularity. Because a computer has no purpose, objectives, or goals, it cannot have any values as values are related to one's purpose, objectives, and goals. Therefore values will have to be programmed into a computer, and hence the morality of the AGI device will be determined by the values that are programmed into it, and hence the morality of the AGI device will be that of its programmers. This gives rise to a conundrum. Whose values will be inputted, and who will make this decision, a critical issue in a democratic society. Not only that, but there is a

potential danger. What if a terrorist group or a rogue state were to create or gain control of a super-intelligent computer or robot that could be weaponized.

A closing thought:

As a result of Melanie Mitchell's talk in which she showed us data the AI machines are fairly good at answering questions about a text they are presented I have devised a new form of a Turing test. I propose that an AI device be exposed to a 30 minute television show or short movie and then be asked to write a description of what they observed. This would be a true test of its intelligence.

Thank you for your attention

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