Reply I.D.: qqtv

More Thoughts On Artificial Intelligence

by Nate A. Lindell, created 23 Aug. 2015

Yes, I ran across the idea that we might be A.I. ourselves, similuted life in a simulated universe. However, I choose to entirely sidestep that discussion & proceed on the assumption that our reality is actually real, in order that I might better understand the nature of our universe, including better understanding Intelligence, thus figure out how to create A.I.

Others may freely contemplate the infinite possibilities.

I am persuaded that we are but one universe in an infinite multi-verse. From my reading of Greene's <u>The Hidden Reality</u> & from listening to or watching radio or T.V. shows on the topic, the most persuasive view of our Cosmos is that there's an infinite number of universes that make up the multiverse: (though these universes are inaccessible to each other) & each of those universes' characteristics are what they are (their laws of physics, life forms, etc.) due to pure chance rather than some intelligent design (not necessarily the intelligent design of "God", but of any intelligent being, who may be neither omnipotent nor omnipresent). From a scientific (vs. a theological) perspective, we must assume such is at least a possibility. Infinity being infinite, we must concede that some universes out there (or in there) are sim'd, the "creation" of some intelligent beings or being. (See how easily this slope slips into the possibility of the simulator being... God?)

There's a shit pile of über complex math known as string theory that requires the above reality to be reality. I can't under-stand even the surface of that math, so I contemplate the concepts instead. (Nothing to be ashamed of — even Einstein relied on Minsky to do the math for some of his theories).

Sadly — and it really is sad to me — even those concepts are

are too much for many to wrap their minds around, or those concepts have scary implications,[1] so they choose to grasp at simpler, safer theological straws — not because they've been persuaded by the science that God exists.[2]

I too am an Antitheist/Atheist, a Humanist (as you've shown that you are☺). Thus I share your skepticism of answers to questions about the nature of reality that even merely permit theological beliefs, which Nick Bostrom's "Simulation Argument" indeed permits. (See F.N. 2) However, I don't recall reading about Bostrom's thoughts, specifically, in any of the books you've sent me, which I no longer have.

Your thoughts would make for some good coffee-house chat though☺! Who needs LSD when you have theoretical cosmology.

Another reason, the main reason, why we shouldn't all (some is enough) get sidetracked into a ditch about our U' possibly being a sim: this is our U'! Even if we do live in a sim, we ought to find out the nature of it; maybe then we can figure out how to jump out of the petri dish... or enjoy it while it lasts.

Curiously monotheism & even classical polytheism has God or the Gods & Goddesses treating us like we're in a sim....

F.N. 1 If there's no God, there may not be eternal life (or there may — infinite variety being infinite...), which offends our instinctive fear of death, making belief in God attractive as hell (pun intended). Gustave Jahoda's The Psychology of Superstition more thoroughly explains why humans developed their religious beliefs.

F.N. 2 In an infinite multiverse, one universe may have a God, though not necessarily the God of the Bible. And, one universe's God can't be the God of more than one universe, let alone the whole multiverse, or the variety of universes would not be infinite.

Anyway, back to my initial subject — A.I.

Once our thoughts have been cleansed of any magical/theo-logical (?) notions, the creation of A.I. by us becomes so feasible that we should wonder why we haven't already created it.

Presumably by "intelligence" we mean human-like intelligence. And human intelligence is ridiculous in light of the havoc we've wreaked on each other + to the environment we depend on to go on living:

- nuclear waste — lasts for millenia, stored in sites that will not remain geological stable for millenia;
- sadistic abuse of our own kind — the Inquisition, Stalin's purges, the Holocaust, the Prison Industrial Complex (P.I.C.)
- mass extinctions of other species
- etc., ad nauseum.

Thankfully we have Claude Monet, Voltaire, Aristotle, e.e. cummings, Einstein + me ☺ as positive examples of human intelligence.

Secondly, other species are not only amazingly intelligent (given our apparently innate assumption that we're the smartest animal, no doubt a trait inheritted from our religious past), but, often are more humane, more noble than humans, some humans anyway. Consider the very true accounts in some of my posts (i.e., "Laddie," if I posted it, tells how my collie died saving my life; "When I Was a Spider's God," posted around July of 2011, revealing the great intelligence of a tiny mind; "Jail-Bird Watching" + its 2nd part, posted around Aug. of 2013) + Mark Twain's observation that the difference between a dog and a man is that you can take a hungry dog off the street, feed him, give him a home + the dog won't bite you. You'll probably cry over this point if you go to **radiolab.org** + look up the 21 Aug. 2015 episode + see the photos of Lucy, a chimpanzee raised by Maurice Temerlaine (spelled how it sounded to me over

as if she were Maurice's daughter & also studied by Charles Siebert.[3]

The more research that is done on the human mind, the more we find that it is ridiculously frail and faulted, bound by material reality & thus implicitly caused by material reality. Several fine examples of this were revealed in the 3 July 2015 episode of "Radio Lab" (an N.P.R. series — e-mail: radiolab@wnyc.org):

- N.Y.U. researchers & authors of The Emotional Brain explained how every time we remember something we also rebuild the connections between the neurons that constitute that memory — the more we remember it, the more we change it
- a drug that prevented the formation of specific neural proteins prevented memory formation in mice, wipes mice memories when given to them while they're recalling the memory, & softens traumatic memories in humans;
- U.C. Irvine Psychology professor Elizabeth Loftus revealed how false memories can easily be implanted, grafted onto authentic memories, so that a person believes something happened that didn't happen;
- a guy named Clive, after a case of herpes encephalitis, lost all ability to make memories, suggesting that the part(s) of his brain that produced the forenoted neural proteins was or were

---

F.N.3 Check out Susan Casey's Voices In the Ocean too, which, as Men's Journal Sept. 2015 summarized, reveals that: "Humans have had our large brains for somewhere between 200,000 and 800,000 years; dolphins,... 35 million years. [...] They also have an estimated three times more spindle-cell neurons — responsible for functions such as judgement, intuition, and awareness...." Etc. Nor do dolphins destroy their own environment like us damned dirty apes do!

damaged or impaired.

To artificially create our "awesome" intelligence, we need to simulate (ah, those sim's again☺) a human mind, just an average one, which includes these components: a peripheral nervous system that enables a central nervous system to guide a body how to survive in the being's environment (i.e. eat, stay healthy, reproduce).

I'm not sure that any computer sim of A.I. can or does include a body and a peripheral nervous system as essential components of a mind, which I think is a major flaw, given that our intelligence evolved so that our bodies would survive. The evolutionary biological view of our minds, a.k.a. human consciousness, is that they are merely by products of our evolution, a characteristic that popped up, happens to help us survive, so the genetic programming for it was preserved, passed on.

Moreso, it'd make for a finer sim of A.I. if the material an A.I. being was made up of similulated the cells that constitute our bodies, because our cells are:

- are micro-miracles of energy efficiency, resilence, organization, function (as specific organs & elements of those organs), etc.;
- sensitive to their environment;
- subject to the forces of natural selection, thus permit the further evolution of the A.I. being.

Of course these sim'd cells would need something like genetic material to dictate their actions, preferrably (out of respect for our epigenetics) "within the bounds of decency & honor" established by their environment.

Others are surely thoroughly explicating the elements of our brains, even spinal cords, so I won't beat out those qualities here. (Take a peak at "Secrets of the Brain" by Carl Zimmer in the Feb 2014 issue of National Geographic & "The Master Code" by Adam Piore in the May 2014 issue of Popular Science for short versions of

what brains do)

You'll notice that the elements that I believe come together to constitute our intelligence — peripheral nervous system, by, CNS — are each enormously complex in their own right. Then, the artificial cells + their artificial genes to run them could be so complex that we probably can't build them from scratch[4] with present technology. But, if we could artificially create (as computer sims or actual materials) the <u>components</u> of our minds, within one being we'd — I think — be able to create intelligence that is very realistic, maybe too realistic. (Read Dean Koontz's <u>Frankenstein</u> series, e.g.)

I'm basically talking about creating a living being, possibly a biological being, which those who've only thought of A.I. in terms of robots and computer programs may find distasteful. It's more comforting to think of having an A.I. computer as a servant than a flesh-and-blood being, right? But, if a program was truly A.I., to the degree I'm talking about, it'd be unethical to restrain its liberty too, wouldn't it?

Anyway, the coffee-buzz has fizzled. Next pack of posts I'll lay out a complete plan for creating an A.I. program, maybe with biological components, along with my material theory of mind (so we know what I'm talking about artificially creating.

Sincerely,

Nate A. Lindell 99582-555
Terre Haute USP
P.O. Box 33
Terre Haute, IN 47808

F.N.4 What's wrong with going Frankenstein, using scraps of bio-material — not necessarily complete organs or even complete cells, but, maybe the walls + contents of cells (e.g. mitochondria, nucleuses) that've been chopped, joined + "welded" into our own customized cells.