ANSWERING FERMI'S PARADOX

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Abstract

Does a vast array of superintellligences already exist? Hugo de Garis thinks that SETI is shortsighted in their search for extraterrestrial intelligence. They should set their scopes on artilects.

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I've felt for the past few years that there is an intimate link between the creation of massive artificial intelligence and an effective answer to Fermi's famous question, "Where are they?"

Fermi's paradox refers to his cynicism that if the spontaneous creation of life is commonplace in our galaxy, including the creation of technologically advanced intelligent species, their existence should be obvious to us. But to date, there has been no irrefutable evidence that such extraterrestrial intelligences exist.

I offer the following artilect (artificial intellect) based answer to Fermi's paradox, using the following assumptions and chain of reasoning.

1. Extraterrestrial intelligence is indeed commonplace in the galaxy. Life has spontaneously generated in zillions of worlds. The laws of physics and chemistry are the same throughout our universe, and hence life creation is utterly commonplace. It has occurred a countless number of times. Many of these life forms began billions of years earlier than the creation of our solar system.

2. Once a biological species reaches an intelligence level allowing it to create artificial intelligence, it very quickly creates “artilects” (artificial artilects), i.e., godlike, massively intelligent machines, using such technologies as one-bit-per-atom memory storage, reversible, heatless, 3D, self-assembling, nanoteched, femtosecond-switching, quantum computing to create machines trillions of trillions of trillions of times smarter than their biological creators.

3. These artilects then leave the provincial planets of their birth and spread throughout the universe, partly to do their own thing, and partly to seek out other artilects, perhaps more advanced than themselves, which use more advanced technologies, such as femtotech (femtometer technologies), ottotech, … Planktech, etc.

4. These artilects are so vastly superior to their biological parents that they find communication with the latter utterly boring and without interest. An artilect communicating with a “biological” would be like a “bio” communicating with a rock.

5. These artilects are as commonplace as biological species in the galaxy. Therefore it would be far more interesting for

artilects to devote their energies and their immortal lives to searching out other artilects, rather than biologicals, who are so primitive.

6. The answer then to Fermi's paradox is that we human beings, being mere biologicals, are utterly unworthy of the artilects' attention, even though the galaxy may be full of artilects. There are probably biological life forms in vast numbers throughout the galaxy, so even if the artilects did want to communicate with biologicals, why would we humans be singled out, when there are so many others to choose from. Therefore the artilects, the ETs, make no effort to contact us. Why should they? What's in it for them? We are very probably not so special and are very, very dumb.

The above analysis has an impact on the SETI effort. Personally, I'm quite skeptical that SETI will ever be successful, i.e., that humanity will ever receive a signal from the ETs from outer space. I feel the SETI researchers are too tunnel-visioned. They too often make the unconscious assumption that the ETs are biologicals, with human-level intelligences, more or less, and having human-like interests. Personally I'm bored by Hollywood's stereotyped depiction of ETs as biologicals, making the same error as the SETI people.

In reality, I suspect strongly that virtually all the ETs out there are in fact artilects, and hence have intelligence levels astronomically superior to the human level. To me, biological technological intelligence is just a fleeting phase that nature goes through en route to creating immortal

massive artilectual intelligence, which may be a phenomenon as commonplace as the creation of life from the molecular soup.

The few centuries between the time that intelligent technological biological species create radio astronomy and the time that they create artilects, is a miniscule fraction compared to the billions of years over which such biologicals have been making the transition to artilecty. At our present puny human-level intelligence, we may consider it interesting and important to send and receive radio signals to/from outer space, but why would artilects bother with such a human-level preoccupation?

If the artilects are interested in communication with other species, they would very probably prefer to do so with other artilects, not with creatures as primitive as ourselves. Therefore, if one performs a Drake equation-type analysis of the above reasoning, the odds of picking up such a radio signal is extremely low, virtually zero. A few centuries divided by billions of years is an odds of tens of millions to one against for any intelligent biological life form that makes the transition to artilecty. Once the transition is made, the artilects preoccupy themselves with other things, and utterly ignore primitive mortal beings like ourselves.

So is there probably an intergalactic network of artilectual beings? I would say that is far more likely. The artilects could go anywhere, and do anything so long as they obey the laws of physics. If there are zillions of artilects in the galaxy or beyond, and they are immortal, then they have

probably found each other by now. They have had billions of years to do so.