# Recovered Journal Entries: 2049-2055

Arya Kaul

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#### January 14, 2049

According to ancient Hindu legend, the world and all of its inhabitants exist on the back of an infinite series of turtles all balancing on one anothers' shells. "Turtles all the way down." While not scientifically accurate, it is closer to the physical truth than one might expect. My research points to our experienced Universe being made up of infinitely smaller Universes, all existing in the 'empty' spaces of the atoms that make up our physical world. Tomorrow, I plan to inspect these Universes.

For I have been able to construct a device capable of providing me a window into these worlds. What wonders I will find! Advanced civilizations, wondrous fauna, spectacular creatures! We thought we had to take to the stars to see these, little did we know it exists all around us!

Tomorrow, I turn on my machine.

## January 15, 2049

I have spent the day using my contraption, and I am proud to say that it works as expected. I have visited stars and planets indistinguishable from their larger bretheren, yet too infinitely small to see. However, so far I have found only what our telescopes pointed outwards see: barren rocks. Interesting rocks no doubt, but rocks nonetheless. I have yet to find life in these infinite Universes.

No matter! There are infinite worlds to explore, and I am certain some contain the life I am searching for. To speed up the process, I have set a machine to automatically trawl these spaces for life.

## January 16, 2049

Despite running overnight, my program has yet to find any evidence for life. Given the number of regions searched, I have calculated the probability of life developing on any world capable of supporting carbon-based life to be  $10^{-200}$ .

January 17, 2049

Still nothing.

$$P(life) = 10^{-500}$$

January 20, 2049

$$P(life) = 10^{-4,000}$$

# February 1, 2049

I have turned off the program. I do not have the strength continue watching our loneliness be mathematically determined. At last calculation,

$$P(life) = 10^{-1,000,000,000,000,000}$$

In the 1960s, Dr. Frank Drake proposed a probabilistic equation to determine the number of civilizations we might hope to communicate with. It contains a number of terms; however, my work demonstrates that the dominating term is  $f_l$ , the fraction of worlds that could support life that actually develop life. Given my work,  $f_l$  may be approximated to 0. This implies not only is Earth the only planet with life in our Universe, but also it is the only planet with intelligent life in the Universe. *Homo Sapiens* are alone, and we are dying... I am too broken to continue, I will return when I have a coherent thought to share.

# February 12, 2049

I have determined a course of action. The next two entries will serve to formally prove it is the only rational option.

First, I must establish immediate action is needed. Since the 1950s, and the very first plotting of the Keeling Curve, scientists have known that human activity was leading to profound changes in the ecology of our planet. Since then, human-led ecological destruction has only accelerated at a rapid pace. The people in power chose to ignore the collective calls of our youth, scientists, and rational observers; instead selling our very world to the oil, plastics, and agricultural lobbies. Out of 1 million atmospheric particles, 500 are now determined to be carbon dioxide. This is the highest level in recorded human history, and the trend shows no signs of abating. There are now more megatons of plastic in our oceans than marine life. Extreme weather events are increasing in accordance with a power law, while worldwide biodiversity is declining at a similar rate. Today, scientists anticipate that in 50 years the outside atmosphere will be too toxic to support any known form of multicellular life. Can you guess what the proposed solution is? Instead of halting pollution or cleaning up the planet, we plan on constructing artificial atmospheres for future generations to live in. While the technology exists to save our planet, we plan to live in fishbowls.

Before I was angered by these facts; but, I remained placated by the notion that though our planet was doomed, life existed elsewhere. But life does not exist elsewhere. This is it. My anger has tempered to cold, calculating resolve. I refuse to stand idly by as the last vestiges of life self-cannibalizes itself in this fetishizing cycle of self-interest. No matter what, life must go on. Not just the microbial life that will adapt to the noxious world humans leave behind, but self-aware life. Life that creates art, life that constructs monuments, life that asks questions, life that lives!

Now, consider the following thought experiment:

If you were an omnipotent, omniscient, *rational* Being. Would you provide your Creation with free will? If so, how much?

We can imagine a one-dimensional graph with free will on one end, and predetermination on the other end. I would argue the most rational approach would be to simulate infinite Creations with differing levels of free will. Empirically, one would be able to determine the optimal level necessary to sustain compassionate, humble life. If this is the case, and we are a manifestation of such a Being, then I believe we are one of those simulations cursed with an excess of free will.

We are too quick to promote the interests of the individual over the long-term interests of our species and our lived environment. What angers me the most is that the solution is so profoundly *simple*. We *can* collectively choose to respect our natural environment. We *can* collectively choose to treat our fellow Man with compassion and kindness. We *can* collectively choose to humble ourselves. And while many do make these choices, far too many prioritize self-interest. It is this selfish rot that has brought human civilization to its knees.

Consider the now extinct species, Coptotermes formosanus. Known as 'termites' by past humans, they belonged to a group of insects who exhibited 'eusocial' behavior. Such eusocial creatures co-exist in a society ('colony' in the parlance of Coptotermes) with a division of labor between all members of the society. Each individual termite performed a set of low-level actions that by itself was negligible; however, the aggregate sum of the individuals cooperative work served to promote the survival of the colony as a whole. It was their cooperation, their selflessness, their desire to put the needs of the many over the needs of a few that made them so successful. It is not just them.

Every major jump in life's evolution has been marked by cooperation. Multicellular organisms arose when individual cells realized that working together is more advantageous than working individually. Our earliest human ancestors were able to settle the world when they chose to cooperate, forming the first human civilizations. We did not require a radical altering of our physical selves, merely a change in our way of thinking. If we hope to survive, we must begin choosing the selfless route. This cannot be a choice, this *should* not be a choice.

## February 13, 2049

Allow me to clarify. reconsider the one dimensional graph described yesterday. My goal is not the eradication of free will; indeed, our individuality is part of what has made our species so successful. However, I believe the notion of the

Individual must be expanded to include extant members beyond the Individual. To expand the notion of the Self to encompass our fellow Man.

Towards this end, I plan to create and release self-replicating nanomachines capable of directly interfacing and modifying the complex biochemistry of the human mind. These machines will not only be capable of mediating interactions between themselves and their host; but also between each other, and thus, between hosts.

The pain of the individual will no longer be relegated to the individual, but will become the pain of all. The joy felt by one will be meaningless, unless shared by others. In this way, it is my sincere hope that with this new expanded consciousness, mankind will be able to suppress the agenda of self interest and pursue that option more conducive to the long-term betterment of the Society. To suffuse mankind with that sense of selflessness found within *Coptotermes*.

There are those who would argue that my proposal is draconian and immoral. To an extent, I am inclined to agree with them. But what choice is there? When confronted with the extinction of all life in all Universes, is not *any* action justified?

My decision is final. This is the only option I see to preserve life.

#### June 20, 2055

I have spent years feverishly working towards my plan. In the time since I last wrote, humanity has driven itself even further along its lonely path of annihilation. If not for my solution to guide me, I am certain I would have joined the countless who have chosen suicide then continue existing in this hellscape. Famine, war, and disease are rampant. If organized religion still existed, they would point to the current state of affairs as evidence of their predicted apocalypse.

But I have done it. I have engineered the nanomachines in enough quantity to infect the remaining human population. I plan to release them tomorrow.

I have taken pains to ensure the machines are safe, but there are no guarantees. If my machines wipe out humanity, then I will have saved the remaining 'natural' non-human life that exists. If my machines save humanity, then I will have preserved the only vestige of self-aware life in the Universes.

I am at peace with my decision. I do not ask for your understanding, nor your support. I will be vindicated in the eyes of my Maker, for I will do what He should have done initially.