

The Cyborg Scenario – Solution or Problem?

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Abstract

There are three main human ideological groups in the species dominance debate – the Cosmists, who want to build godlike artefacts (artificial intellects), the Terrans, who are opposed to artefact building, and the Cyborgists, who want to become artefacts themselves, by adding artefactual components to their own brains. This essay discusses whether the “Cyborg Scenario” can overcome the likelihood of a “gigadeath Artefact War”, between the Cosmists and the Terrans, using 21st century weapons, killing billions of people.

1. Introduction

The most murderous ideology in history “*up to now*” (see below) has been Communism. The Russian Communist Party killed about 60 million people, mostly under Stalin, one of the greatest tyrants in history, and the Chinese Communist Party killed about 80 million people, mostly under Mao, *the* greatest tyrant in history. These parties felt they had the moral right to exterminate their enemies, because they considered their enemies were utterly evil, and hence exterminable. They saw their enemies as

exploiters, as thieves who siphoned off the “surplus value” of the labor of the proletariat. If one translates this from Marxist ideological terms into ordinary English, it means that a worker earned his wage by working for a certain number of hours per day, and then the extra hours he worked went to the employer, who was thus exploiting him, stealing his labor power. Communist ideology emphasized this form of theft and generated a powerful hatred of the early capitalists, who did indeed exploit their workers and in many cases became very rich as a result.

The Capitalists were a small minority, so Communist ideology favored the idea of exterminating them, for the sake of the vast proletarian majority. But, when one starts exterminating millions of people, one can only do this in a highly totalitarian state. The mass murder and the totalitarianism generates new hatreds against the repression, creating further enemies, who then need to be killed, and hence the large numbers of victims at the hands of the Communists.

I say, “*up to now*” above, because it is quite possible, that an even more murderous ideology is on the rise that may kill more than just tens of millions of people, but literally billions, namely Cosmism, the ideology in favor of humanity building godlike artifacts, later this century.

The scenario resulting in this “gigadeath” runs as follows.

The Cosmists will push very hard for the creation of artifacts, which would indeed be godlike, with their mental

capacities that would be trillions of trillions of times above the human level, according to the possibilities allowed by the physics of computation. To the Terrans, these artefacts would be a profound existential threat to the human species, to such an extent that when push really comes to shove, the Terrans will be prepared to exterminate the Cosmists for the sake of the survival of the billions of human beings. From the Terran viewpoint, exterminating a few tens of millions of Cosmists, is the lesser evil, compared to allowing the Cosmists to build their artefacts, which could then, in a highly advanced form, look upon human beings as such inferior beings, that they wipe us out as pests. There would always be that risk - one that the Terran politicians would simply not tolerate.

However, the Cosmists would be prepared for a Terran “first strike” against them, and with 21st century weapons, the scale of the killing in an “Artefact War” would be in the billions – “gigadeath”.

2. The cyborg scenario

The above scenario is mine. Let us call it the “Artefact War Scenario”. It is obviously horrific, so not surprisingly a lot of people have tried to find alternative scenarios that are far less catastrophic. The main alternative scenario, as advocated by such people as Kurzweil, Warwick, etc is as follows.

There will be a lot of people who would like to become artefact gods themselves, by adding progressively artefactual components to their own brains, thus creating a continuous transition from humanness to artefactuality. If most of humanity decides to make this transition, then a gigadeath artefact war could be avoided, since there would be no Terrans or Cosmists, because (nearly) everyone would be Cyborgists, converting themselves into cyborgs.

In other words, the Cyborg Scenario simply avoids the problem of species dominance by “going around it.” A bitter confrontation between Terrans and Cosmists can be avoided, by suggesting simply that there *will be no* Terrans and Cosmists. Everyone (or nearly everyone) will have converted themselves into cyborgs. Hence there is no Artefact War, and hence no gigadeath.

Ray Kurzweil and Kevin Warwick also add the idea that if a small number of Terrans do decide to fight the cyborgs, the latter would be so much more intelligent than the Terrans, that (to use Kurzweil’s colorful phrase), “It would be like the Amish fighting the US Army.”) For those not familiar with the Amish, they are a religious sect in the US, whose doctrine forbids them from using technology more modern than that of the 19th century. So they ride around in horse and buggy, don’t use telephones, nor the internet etc. Their life style is stuck in the 19th century. The Terrans would feel so outclassed by the advancing cyborgs, that they would very probably abandon any hope of defeating their hugely more intelligent cyborgian enemies.

3. Weighing up the two scenarios

I am very conscious that there is a LOT at stake regarding which of the above two scenarios is likely to be more correct. If the first (the Artilect War) scenario is more probable, then I'm glad I'm alive now, and will probably not be alive to see this gigadeath horror. If the second (the cyborg) scenario is more probable, then humanity can escape gigadeath. Thus it would appear from a human perspective that the cyborg scenario is preferable, because instead of billions of human beings being killed, they become gods instead.

Its sobering to reflect on the idea, that individuals, tapping away on their laptops, can dream up scenarios that may sound science fiction like to most people at the time of writing, but may very well end up becoming true, and whose ideas, indirectly, kill billions of people. Actually, it's terrifying. There are times, when I shudder at the prospect, when I put myself in that role.

I wonder if Rousseau or Marx had any conception of the future wars their ideas would generate, and the tens of millions of people who would die indirectly as a result of their ideas? These "arm chair philosophers" have great power, and rule the minds of the politicians whom they motivate to change the world according to their philosophical visions. In my view, the Rousseaus and Marxs of the world are far more powerful people than the

Jeffersons, Roosevelts, Lenins or Maos. The former create the ideas that the latter follow.

Despite the enormous weight of intellectual responsibility on the shoulders of the ideologists in the species dominance debate, one must press on, and not be crushed by the enormity of what is at stake. It is better to be realistic than optimistic, when the two clash. One needs to think realistically about which of the above two scenarios is more likely to actually happen in the future.

Before attempting to weigh the plausibilities of the two scenarios, let us spell them out in a bit more detail. This will allow us to make a more accurate comparison.

How might the cyborg scenario unfold? One can imagine a kind of “cyborgian creep”, i.e. people add components to their brains in incremental steps, and at such a pace that humanity has enough time to adjust and to accommodate these cyborgian changes. If the benefits of the cyborgian changes are considerable and hence very popular, then one can imagine that the changes will be wide spread, i.e. nearly everyone will want to be modified - to be “cyborged.”

A bit later, the next major set of innovations are discovered, and the already modified humans update themselves again. This process can continue indefinitely, and considering there is potentially more (nanoteched) computing capacity in a grain of sand compared to that of a human brain, by a factor of a quintillion (a million trillion), fairly soon, the

cyborgs are no longer human. The human portion will have been utterly drowned by the artefactual capacities of the machine portion. Effectively, these cyborgs will have become artefact gods.

How likely is the above scenario? It is the favorite of Kurzweil and Warwick and many others.

Think about it. How nice would it be to be able to remember far more than with the memory capacity of an unmodified human brain? If one could increase one's intelligence by 10 IQ points, or 50 or 100, wouldn't most people want to do that? Wouldn't nearly everyone? The stragglers would then feel the superior competition, and argue "If you can't beat them, then join them." They would then too have themselves modified, or "cyborged". Since they would be surrounded by millions of other "people" (if that is still the appropriate term), who (that) are doing the same thing, then "cyborging" will acquire the status of being "normal". Hence huge numbers of people will move down the cyborgian route. As Kurzweil puts it – "We (humans) will *merge* with our machines."

Kurzweil paints a very rosy, optimistic picture of this process, as humanity enhances its capabilities. His *raison d'être* is to invent machines that help humanity, e.g. his hand held gadget that can read and speak text for the blind. Kurzweil gives the impression of being genetically optimistic.

On the other hand, there are people like me, non Americans, who have lived in the old world, who do not have the American optimism, an optimism that old worlders are cynical of, feeling they know better, from first hand experience, about the negative side of human nature. For example, the Europeans went through WW2 on their own territory. The Chinese went through the horrors of Mao even more recently. The Americans on the other hand have to go back a century and a half before they come across a major catastrophe on their territory, namely the US Civil War. But even it was a relatively minor affair, killing “only” half a million soldiers, and was confined to about half a dozen states. At the same time in China, during the Taiping Rebellion, 20 million Chinese died.

I notice a cultural correlation on the level of pessimism regarding the final outcome of the species dominance issue. The Americans are more optimistic than the old worlders. The old worlders are more cynical than and of the Americans and find the American attitude rather child like and naïve. The old worlders feel they know better, because they have had centuries more experience of how humanity can hurt itself, due to their much longer histories.

How then, might the proponents of the Artilect War scenario criticize the Cyborg scenario?

We start with the initial few additions of artilectual components to people’s brains. How will this change things? Common sense says that the variety of “quasi-humans” will then increase. There will be many companies

offering such additions, so it is to be expected that some humans will want a lot of change, some less, some not at all. Humanity will thus lose its uniformity, and this “cyborgian divergence” will generate many problems, such as mutual alienation, and distrust.

At about the same time, nanotech will be coming into its own. The computational capacity of nanotech matter is huge. As stated above, “A single grain of nanotech matter has more computational capacity compared to the human brain by a factor of a quintillion.” With quantum computing when it comes, the superiority factor will be hugely greater. Thus fairly quickly, the behavior patterns of the cyborgs will become quite different from traditional humans. The unmodified humans will notice this and become alarmed.

There are two examples I usually use to illustrate this alarm. The first is that of a young mother who cyborgs her newly born baby with “the grain of nanotech sand,” thus converting her baby into “an artefact in disguise” and in a manner of speaking, “killing her baby”, because it is no longer human. It is effectively an artefact, with a human form. Its behavior will be utterly, utterly alien. This will cause the mother deep distress, once she realizes what she has done. She has lost her baby.

Another example is when older parents watch their adult children “go cyborg”. Their children then move away from being human to being “something else”, that the parents are totally unable to relate to. The parents will feel that they

have lost their children, and this will cause them enormous stress and bitterness.

The above two examples are just scratching the surface. As the cyborgification process continues, there will be many other types of problems that will arise of a similar nature. The cyborgification process will profoundly undermine humanity, i.e. humanness, and cause a lot of people, some of whom will be very powerful people, to raise the alarm.

These people, I have labeled “Terrans”, based on the word “Terra” (the Earth) because that is their perspective. They will want to see human beings remain the dominant species on the Earth. In contrast, are the “Cosmists”, based on the word “Cosmos”, who want to build artifact gods, which will then presumably move out into the cosmos, in search perhaps of even more advanced artifacts from other and more ancient civilizations.

The Terrans will become alarmed by the cyborgs all around them, and will be able to read the “writing on the wall”. They will feel a visceral rejection of the alien nature of these cyborgs and fear their growing capacities.

It is probably genetically programmed in human beings to be fearful of genetic difference. The physical anthropologists tell us that there was a time not too many hundreds of thousands of years ago when there were several humanoid species coexisting. It is therefore likely that they were in conflict with each other and learned to fear each other. Some such anthropologists think that it was

homo-sapiens who wiped out the Neanderthals about 30,000 years ago.

If humans are genetically programmed to fear minor genetic differences (e.g. slittiness of eyes, skin color, etc) how much more fearful will Terrans be of cyborgs, who may look the same as humans but behave very differently?

As the cyborg population diverges, and thus disturbs profoundly the traditional status quo of humanness, the Terrans will probably feel alarmed and hence motivated to stop the process while it is not too late, i.e. while they still have the mental abilities to stop it. If they wait too late, they will become too stupid to compete with the cyborgs and artefacts.

The Terrans will organize politically, and then go on the greatest witch hunt humanity has ever known. They will go to war against the Cosmists, the Cyborgists, the artefacts and the cyborgs. They will aim to keep human beings as the dominant species, because if they sit around and do nothing, fairly soon, the cyborgs and artefacts will be indistinguishable and utterly dominant. The fate of the Terrans will then lie in the hands of the Cosmists/cyborgs/artefacts.

4. Choosing sides

I ask you – which of the above two scenarios do you consider to be more realistic - the optimistic Kurzweilian

“cyborg scenario” or the deGarisian “Artilect War scenario”? There appear to be elements of plausibility to both scenarios, so what probability weighting to give each of them?

In my own view, the issue will divide humanity profoundly. We already have some evidence of this. Surveys are now beginning to be taken on this issue. The result is that humanity seems to split right down the middle. About half feel that humanity should built artilects or become cyborgs (virtually the same thing from the Terran viewpoint) and the other half are fearful of such developments.

Hence it is very important, as the level of awareness of the species dominance issue increases that regular opinion polls are taken on the issue to see just how divisive it is.

Once a sizable proportion of humanity is dead set against the rise of the artilect/cyborg, then we have the makings of a major war, an “artilect war.” The Terrans will be fighting for the preservation of the human species. The Cosmists will be fighting to build gods. The Cyborgists will ally with the Cosmists to become artilect gods themselves.

What about the timing factor? For example, if the cyborgs and artilects advance faster than the Terrans can organize, then it might happen that the artilects/cyborgs come into existence before the Terrans can wipe them out. With their greater intelligence levels, they will easily be able to overcome the Terrans.

The Terrans however will be painfully aware in the early days of this scenario and will plan for it. They will first strike while they still have a chance of winning. The Terrans will organize, politicize, and exterminate, while they are still able.

The above is my personal view. I think my scenario is more realistic, more probable than the optimistic scenario of Kurzweil/Warwick. I may be wrong. These things are difficult to judge in advance. Predicting a complicated future is extremely difficult. I hope I *am* wrong, so that the artifacts do come into being, AND that humanity is *not* wiped out, either by a gigadeath artifact war, or at the hands of an exterminating artifact population.

But, I fear, that the most *probable* scenario will in fact prove to be the *worst*, i.e. gigadeath, as a result of the Artifact War, the worst that humanity has ever known.

What is your opinion? Which way do you think future history will go?