

MERGE OR PURGE?

Prof. Dr. Hugo de GARIS

profhugodegaris@yahoo.com
<http://profhugodegaris.wordpress.com>

Abstract

*Will humans **merge** with their machines (a la Kurzweil) or will they **purge** themselves of cyborgs, Cosmists, and artefacts in a gigadeath Artefact War (a la de Garis)? This “species dominance” question will dominate our global politics this century. This essay presents the two main options, and then discusses which is the more likely.*

1. Introduction

Ray Kurzweil and I have crossed swords several times in the media in the past on the question of whether humanity will “merge or purge” our increasingly intelligent machines.

This essay presents the two main views on what is likely to happen to humanity as our machines become artefacts (i.e. godlike massively intelligent machines, trillions of trillions of times above human levels). I have labeled these two views the “*merge*” view (Kurzweil’s), and the “*purge*”

view (mine) for simplicity. I begin by discussing the *merge* view.

a) The “Merge” View (Kurzweil)

Kurzweil thinks that the most likely scenario for humanity as our machines become increasingly intelligent is that, to quote him, “*We will merge with our machines.*” He thinks that in subsequent steps, the human side of our cybernetic selves will soon be swamped by the vastly greater machine capacity, and that “we” will become increasingly machine-like, i.e. artefacts. He is not alone amongst prominent commentators on the species dominance issue, who hold this view. Another prominent figure with a similar take is Kevin Warwick in the UK.

b) The “Purge” View (de Garis)

I think it is much more likely that the Terrans (the people opposed to the creation of artefacts), will go to war against (i.e. purge) the Cosmists (who want to build artefacts), against the Cyborgists (who want to merge with their machines, e.g. Kurzweil), and against the artefacts themselves, before the cyborgs and the artefacts become too intelligent. This war will be waged with second half 21st century weapons and hence will kill billions of people (“gigadeath”).

Discussion

Kurzweil is skeptical of my scenario, because he thinks that if it finally does come down to a war between the Terrans and the Cyborgs/Artilects/Cosmists it would be a “no contest” because the latter would be so much smarter and more capable than the (human) Terrans. As Kurzweil puts it colorfully - “like the US Army fighting the Amish!) (For those of you, probably non American, who are unfamiliar with who the Amish are, they are an American religious sect, who do not use any technology later than the 19th century. So they drive around in horse and buggy, don’t use telephones, or the internet.) So naturally, they would lose against the modern US Army.

Of course Kurzweil is correct in thinking that *if* the Terrans wait until the artilects and cyborgs come into being before hitting back, it would be a no contest. It is for this reason, that I believe the Terrans will take the Kurzweil argument to heart and therefore reason that they will have to first strike while their intelligence levels are sufficient, to have any chance of winning.

So, Kurzweil’s “no contest” argument can thus be refuted. But there are other points that can be made re a potential conflict between the Cosmists (Cyborgists) and the Terrans. What if Cyborgism proves *so popular*, that there are in effect no Terrans left, i.e. everyone goes Cyborg. If this were to happen then there would be no gigadeath artilect war, because it takes two sides at least to wage a war.

The heart of the issue, and the major thrust of the remainder of this essay, thus seems to be just how popular Cyborgism will prove to be.

Kurzweil is an inveterate optimist (almost childishly so, and has been roundly criticized for this, to the point that he is now publicly defending himself in the media saying that he is well aware of the potential hazards of the rise of the artefact.) His *raison d'être* is to better the quality of life of humanity by his inventions, e.g. his hand-held text-to-voice reader for the blind. No one questions the value of his inventions and only praise him for it. Where Kurzweil is weak however, is his inability to weigh equitably the pessimistic with the optimistic consequences of the rise of the artefact that seems inevitable this century.

It is not enough to be optimistic. Optimism is fine if it does not conflict with realism, but when it does, taking a “Pollyanna” view of the world will only get one into trouble with the “cold eyed” political realists who have so much experience of the past horrors that humanity is capable of inflicting upon itself. For example, the 20th century was the bloodiest in history, killing about 200-300 million people for political reasons (wars, genocides, purges, ethnic cleansings, etc).

So, taking a “cold eyed” look at the rise of the cyborgs and the artefacts, what do I think will happen, most likely?

I do think there will be cyborgs, probably billions of them. In the early stages, Kurzweil may probably be right. There

may be very few pure Terrans left. Nearly everyone will be adding memory enhancers to their brains, so that they can, for example, learn a language in a day, and be able to look up facts from a huge nanoscale database in their heads, etc. This view that I have just expressed, is widely held by many people in the species dominance community. But it is at this moment in history that the problems really start.

Humanness Destroyed

If everyone modifies themselves in the same way, at the same speed, then hypothetically, the whole of (post) humanity could march lock-step into an artefactual future without any real problem. But that is totally unrealistic. What is far more likely is that some people will cyborg themselves fast and heavily, while others do so more slowly and more moderately. It is also virtually certain that there will be a wide variety of ways to cyborg oneself, offered by a slew of different cyborging companies.

This will lead to what I call the phenomenon of “*cyborgian divergence*”, i.e. there will be a huge variety of quasi humans in the environment, including within families, couples, amongst friends, etc. Early cyborgs will then wake up viscerally to the fact that traditional humanness is being destroyed, and that the emotional price being paid may be extreme, causing alarm bells to go off in a major way.

For example, I consider it likely that the artefactual components being added initially to ones brain will allow significant memory enhancement, and with not much

intelligence increase, if any, but may have unanticipated side effects, such that personality and behavioral changes occur, enough to make people feel that they have “lost their friends”, or “lost their children” etc.

For example, imagine a young mother gives birth to her first child and adds a grain of sand that has been nanotech'd to increase the mental capacity of her baby's brain by a zillion fold. As the baby grows into a toddler, the mother feels she cannot talk to her child. The child's behavior appears to be autistic - not because the brain areas of the child are poorly connected, as with a real autistic child, but because the cyborg child is thinking a million times faster than its mother and is utterly bored by her, preferring its own (hugely faster thinking) company.

To the mother, she will feel she has lost her child. This will cause real emotional trauma to the mother, and turn her bitterly against cyborging. She will hate what she has done.

Similarly with older parents who feel they have lost their adult children, when the latter decide to cyborg themselves.

The above two examples are just a drop in the ocean of the type of things that could go wrong with cyborging. There is ample scope for “Murphy's Law” (i.e. if something can go wrong, it will go wrong) to operate during this historical period of “cyborgian divergence.”

As more and more early cyborgs begin to wake up to the huge emotional and human cost that they are paying from

what is happening all around them, they will learn to value humanness a lot more than they did earlier, and will start to make political strategic decisions.

I believe it will take time for the cyborgian components added to people's brains to move up from being quantitatively superior, e.g. faster, to being qualitatively superior, e.g. allowing higher intelligence. It will take several decades at least for neuroscience to attain a quasi full understanding of the neural nature of human intelligence. Cyborgism could be operating several decades before such full human intelligence understanding is attained and incorporated into cyborgian components.

This non rapid increase in qualitative capability will allow the Terran-inclined early cyborgs to keep intellectually competitive with the non Terran-inclined cyborgs.

I see these Terrans (or early Terran cyborgs) arguing now along my traditional lines. They will choose to remain essentially human, and feel a visceral rejection to what they see happening all around them, and organize politically.

They will be fully aware that time is not on their side, so that if they wish to remove the risk that they will be superseded by a growing tide of artefacts and artefact-like cyborgs, they will have to organize politically, and quickly, and then first strike, purging the cyborgs, the artefacts and the cosmists so that the existential threat of humans being wiped out by highly advanced artefacts in the future is removed.

Surveys on Species Dominance

Predicting how the mix of Terrans, Cosmists, Cyborgists, and artefacts will interact with each other will be complicated, especially as views on species dominance begin to polarize. It would therefore be helpful to be able to work with some real opinion data on this issue and this is something the professional sociologists can do. Let me spell this out.

I think the opinion pollsters should start making regular polls on the question of species dominance. Since it is this year (2011) that the issue of species dominance is going main stream in the (US) media, the general public can begin to think about where they stand in the Terran/Cosmist spectrum, and then be able to give a fairly informed opinion to the pollsters.

Once one has the data, i.e. knowing the proportion of people who want artefacts to be built or not, or who choose to cyborg themselves etc, then more realistic policy decisions can be made by the strategists/intellectuals of the various competing parties – i.e. Terran, Cosmist, Cyborgist.

Some early surveys have already been made, and the results are interesting. I know from the experience of my own lectures that I have given over the past two decades on the issue of species dominance, in which at the end, I invite my audiences to vote on whether they are more Terran than Cosmist, that the result is usually 50-50.

At first I thought this was a consequence of the fact that the species dominance issue is too new - that people don't really understand it and hence vote almost randomly, giving the 50:50 result. But, gradually, it dawned on me that many people felt as ambivalently about the issue as I did (i.e. pro Cosmist due to the awe inspiring nature of the artefact, and pro Terran, due to the fear that the artefacts, in an advanced form, might decide to wipe out humanity). Typically my Terran/Cosmist split would run from 40:60 to 60:40 (although I do notice that with my very young Chinese audiences in computer science that the pro Cosmists are at about 80%).

I can give two quasi official poll results on the Cosmist/Terran split. One is by the BBC in Oct 2006, when the general public was invited to vote between Kurzweil's optimistic "merge" scenario (about 60%), and my "purge" (i.e. artefact war) scenario (about 40%). Another vote took place a year before on the popular US radio interview show "Coast to Coast". At the end of my interview, listeners were invited to vote their preference, Terran or Cosmist, and the split was 55% Terran, 45% Cosmist.

This more or less 50:50 split will only make matters worse I feel. If the split were 10:90, or 90:10, then one group could wipe out the other if it came to a war, and humanity need not be nearly as traumatized as with a 50:50 situation. The 50:50 split, if it is maintained, could not be worse. It shows how profoundly divisive this species dominance issue is, which will only increase the passion level of the

conflict and the size of the final horror – a gigadeath
artilect war.