Human Evolution and Artificial Super-Intelligence with Super Robotics

2019

Thomas A. Burns Ph.D. Klamath Falls, Oregon

In the last ten to fifteen years more and more concerns have been expressed about the consequences of modern humans developing “machines” – robots – with human level general intelligence and eventually with super human intelligence. The pivotal issue is whether biological humans can adequately control super-intelligent robots so that these robots do not achieve independence and the ability to determine their own evolution and to define their own goals to the point where they threaten human survival.

To pursue this topic in detail, I suggest starting with the extensive overview in Wikipedia, “Existential Risk from Artificial General Intelligence.” This entry summarizes the debate among experts over the potential risk the development of both general artificial intelligence and artificial super-intelligence poses.

The fear of a “take over” by a “race” of self sustaining, self-modifying super-intelligent robots is the negative perspective on this potential development, and it is this concern that dominates the present discussion. But, other scientists are now looking at the evolution of humanity and exploring the question of whether the biochemical version of humanity may have run its course. In their view, humans may have reached the point when it is time to transition to an advanced robotic form in order for a new version of humanity to survive – both more responsibly on planet Earth and with the ability to explore our solar system, galaxy and the cosmos beyond. After all, the biological version of humanity is very much restricted by its limited longevity and its dependency on the specific environment of Earth. A super-intelligent robotic version of humanity can be much, much more durable and flexible. Perhaps, a super-intelligent robotic “human” is the “natural” next step in human evolution, just as the various biological versions of humanoids ended with modern homo sapiens as the most advanced, dominant form of the biological species. After all, computer program modifications are the equivalent of DNA and RNA mutations in genetics.

In exploring this issue, we have to ask: For all the additional potential that modern homo sapiens seems to have in complex, civilized society, are humans currently displaying the kind of awareness and orientation to one another and to the planet that would seem to make it possible to see that potential fulfilled? Astounding advances in science and technology suggest that realizing this potential for biological humanity is possible. Unfortunately, psychologically, socially, culturally, and emotionally humans seem to be unable to manage their presence on planet Earth so as to assure their global sustainability long term in

complex society. Most fundamentally, the rudimentary human "instinct" for competition/self-interest in modern complex society and among these societies seems to exclude attaining the global level of cooperation that is essential if humans are to successfully address the several global level challenges that individually and collectively pose catastrophic consequences in the relatively near future. In essence, we are paralyzed at the national and especially the global level by the underlying condition of who we are biologically, genetically and emotionally. While we have the ability to rationally plan for the long term and to change to accommodate and implement such planning, our behavior remains so committed to our competitive, short term orientation that we find it extremely difficult to overcome our relatively minor differences and truly cooperate in behalf of the sustainability of humanity as a whole.

Maybe a super-intelligent robotic version of humanity is what is required. Maybe this is just the next logical evolutionary step – to give up the biological manifiestation of ourselves and to literally create the first version of a more "competent" and sustainable eletro-mechanical "species" of humanity. Of course, there will be those who will insist that it is the consequences of our emotions playing upon our underlying competitive – cooperative dynamic with all the corresponding mental operations that make us Human. Eliminate these "complications" and we reduce ourselves to machinery. On the other hand, it is not at all clear that a sophisticated version of a super-intelligent robot could not be motivated by ideological social and ecological values but with all of our interfering complications and limitations "cleaned up."

If modern humans do not like the super-intelligent robotic prospect for humanity, then the answer is not to just stop artificial intelligence and super robotic research/development. We have to first demonstrate that we are able to get serious about committing to global level cooperation and begin to operate more as a whole species organism pursuing the best interests of all of humanity. And second, in behalf of sustaining the evolutionary opportunity for the biological version of homo sapiens, we must agree <u>collectively</u> to regulate artificial intelligence research/development so as to avoid the consequences that have the potential to be catastrophic for bio-humanity.

My personal view: "Good luck" achieving commitment to this needed regulatory framework in today's competitive, "me first," market society where caution and restraint are regarded as hindering opportunities to achieve potentially maximal self/corporate "benefits." In behalf of fame and/or profit, there is always some researcher/corporation willing to bypass regulations and risk letting the genie out of the bottle. So, we humans are most likely to take the risk and the consequences of developing the super-intelligent robotic version of ourselves.