## **Redesigning Man?**

C. T. A. Schmidt

Abstract In speaking of ideas at the intersection of transhumanism, advanced robotics, and related fields, I wish to provide a few theoretical elements necessary for addressing questions like "Should we redesign humans?" While some find such a question somewhat out of place, others seriously think of alternatives to their present ways of life, even if they do not intend to take action. To fathom the extent of inquiry into alternatives, one must simply look to the strength of the human imagination – the various dreams it allows as well as our flirting with futuristic scenarios in popular books and films. It seems that some specialists of the human brain and body wish to bring scenarios of various human forms of being to life. It can be difficult though to accept novelties when it comes to modifying standard human heritage, no matter how similar it may be to our present state. My goal herein is not to provide a panorama of technical endeavours but to up-date the key concepts (originating in Computer Science and related fields) necessary in treating question of the said kind.

According to S. L. Esquith (2005), we must keep ethics in mind when considering the cultural significance of particular technologies. In other words, we must check the effect technologies have on our everyday cultures when we take action against some of them or confirm their soundness. To support his view, Esquith cites Sherry Turkle's (1997) "Seeing Through Computers: Education in a Culture of Simulation": "We make our technologies, our objects, but then the objects of our lives shape us in turn. Our new objects have scintillating, pulsating surfaces; they invite playful exploration; they are dynamic, seductive, and elusive. They encourage us to move away from reductive analysis as a model of understanding. It is not clear what we are becoming when we look upon them – or that we yet know how to see through them".

I intend to relate questions on simulations and enhancements, both corporal and cognitive, to our relation with technology and study it from a logical point of view, one which takes the relation to be a separate dynamic entity at the helm of change. Though

C. T. A. Schmidt, Le Mans University

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this topic cannot be fully treated here, such a relation may provide sufficient grounds to apprehend what must be considered when deciding whether or not the concept of biodiversity, as it is used by the media today, should be applied to humans.

## 1 Presuppositions to a Categorisation Problem

The advent of powerful computers is enabling society to formulate 'different' questions that concern an average person's life directly. These entail questions about the world in which we live and our perception of it. The appearance of highly intelligent machinery on the market, and to some extent in our homes, has provided the humanities with a whole new ballpark in which to play. Due to the exponential rise of calculation strength in machinery, the answer to the question in the title of this chapter progresses from a mere yes or no to a full-blown philosophical description of the ambitions of intelligent robotics, evolutionary computation, and medical transformations of humans. Many musings and responses to this question are now available, as humanization of fully non-human entities (computing machinery) has become commonplace as has the personification of these entities.

It would seem that computers, the tool for everything computational, are in some sort of neutral area or "buffer zone" between Man and object. Some would say that computers are not just ordinary objects: one may ascribe emotion to them, lend them desires and beliefs, make them speak or translate, increase their learning capabilities, give them bodily functions, make them play games with us, have them help us learn, use them to help children or the ill to express themselves, and so the list goes on. Yet the average person would say they are, nonetheless, non-persons. But can we really leave computers in the same category as the everyday chair, spoon, or wooden block? Are computers simply another artifact if they can do so much? The fact that the issues are not clear in the minds of most scientists, especially those working in Artificial Life and Intelligence, shows that a definitional problem has arisen out of the research in these highly related fields, and that the title of this chapter represents a mere preliminary question to a more in-depth inquiry into the nature of the relation between humans and machines.

Let us look back at the two original entities (man and object) as they existed before computers came to be some sixty years ago. If one juxtaposes Man and Object and express them in a linear way as we do in English (i.e., man|object), there are more interesting things to say of such a system as time goes on. For instance: Could one say they are being merged? Is there an answer to such a question?

Let me sum up the difficulty over the initial question set forth. The growing relationship between two entities, Man and Technical Object, raises further questions, especially about computers. The following are amongst the many questions asked. If computers are not human, what are they? 1. If one says that computers are nonpersons, does this mean they are just ordinary objects? If so, the observer would have to modify his definition of what an ordinary object is, especially in the light of the "living characteristics" computers display in the explosive worlds of multimedia