

After Humanity? Philosophical and Moral Perspectives on the Idea of Posthumanity

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Abstract

The author provides a philosophical and moral evaluation of a number of arguments against and in favour of posthumanism. Some of the arguments explored are: the claim that current evils are necessary to maintain our humanity; Sandel's association of radical enhancement with the striving for mastery and perfection; psychological concerns about posthumanism; the "simple conservative argument" (Buchanan); the idea of unlimited longevity; as well as possible issues in the relationship between unenhanced people and posthumans. The author defends the idea that radical enhancements are justified in view of the possible lag of natural selection to select desirable/necessary current human traits. He also rejects the idea that "human nature" ought to be regarded as a moral desideratum. His conclusion is that the possibility of radical (also biomedical) human enhancements does not warrant blanket moral approval or disapproval. We ought to see what specific possibilities arise, and then judge those possibilities on their own, specific merit.

Key words: Enhancement; Genetics; Human nature; Posthumanism; Transhumanism; Simple conservative argument

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Homo sapiens sapiens has, as a distinct species on this planet, evolved over the past two to three million years. What we are as a species today, is the outcome of the

process of evolution based on natural selection – a process over which no living or dead member of our species has ever exerted conscious control. That, we are told from the ranks of current-day biotechnology experts, is about to change dramatically. For the first time in our history we as a species have, as a result of evolution based on natural selection, reached the point where we are set to take our future evolution into our own hands and steer it in directions that we ourselves will consciously determine.

This means that we are about to radicalise the process of enhancement to which our species has always been subjected. The debate about post-humanism, about which this paper will provide an overview of, is firmly embedded in the wider bioethical and philosophical conversation about the nature, future, morality and implications of the phenomenon of human enhancement.

No other species on this planet has enhanced itself over the millennia as much as we have. From the moment we constructed the most rudimentary tools, or learned perfunctorily that we can use sounds as vehicles for communication, and that the communication potential of that activity is tenfold increased if we also externalise our language into written symbols, and thus objectify the contents of our minds in order to attain more clarity and more accuracy in terms of what we think and what we know – from these revolutionary beacons in the story of how we became what we today are, we have always and consistently enhanced ourselves. We have, for example, created *institutions* that enable us to act, not only as individuals, but as groups, tied by bonds of (initially) fear, but later also of survival, order, justice, knowledge and faith. We have, as another example, created *technologies* that enhanced the power of our *limbs* and our *senses* immeasurably – from the tools we used to cultivate the fields where we learned to grow our crops, to the cranes and escalators that we use to lift whatever is held down by the force of gravity. Our eyes and the visibility of the world were immeasurably enhanced by the advent

of telescopes, microscopes, television sets and radio-telescopes. Our hearing, or power to make auditive sense of the world, was transformed by the telephone and the radio. Our mobility attained a completely new meaning the day we exchanged horses, donkeys, camels and elephants for bicycles, motor vehicles, aeroplanes and space-craft. Our powers of calculation and computation were revolutionised by computers whilst our earlier belief that reliable knowledge or information can only be attained through laborious and sustained study, is in this very day challenged to its core by arguably the most revolutionary manifestation of human enhancement yet: the Internet. To enhance ourselves is something we have always done. It is the hallmark of being human.

The question is: are we about to transform, not only the *technologies and institutions* that enable our seemingly unchanged bodies to live more comfortably in the world, but also *those very bodies and minds themselves* into a kind of super-species, the continuity of which with the rest of us is no longer self-evident? What is the potential of our penetration into, and resultant knowledge of, the human genome? Talk about “post-humans” is nowadays, by and large, the outcome of reflection, not on our ability to enhance our *life circumstances*, but specifically on the idea of *biomedical enhancements*. The latter is defined by Allen Buchanan as: “deliberate interventions, applying biomedical science, which aim to improve an existing capacity that most or all normal human beings typically have, or to create a new capacity, by acting directly on the body or brain.” (Buchanan, 2011).

The idea of super-humans is, of course, in itself not new. We know it from an avalanche of science fiction, epitomised by various larger than life super-hero characters. The big difference between traditional fantasies of super people and the current debate, is, however, the fact that the idea of posthumanism has now become a serious talking point of science. With the revolution in biomedical and genetic sciences, we have reached a point where fantasy and reality seem to move towards each other with accelerating speed. What else can be the explanation for top-level research universities such as Oxford and Cambridge, and many others in recent years, creating a number of eminent research centres to explore this very possibility? What has happened to justify such developments which, a mere decade or two ago, would have created the impression of utterly unfounded flights of fantasy, unworthy of serious academic or scientific attention?

Space constraints prevent a full exploration of the many possible valid answers to this question. However I would like to highlight two points. Firstly, take into account how we, living in a developed context in the year 2013, would appear to ancestors of 100 or 200 years ago, should they be resurrected today. With our prowess in driving fancy cars, globe-trotting, spending most of our

days in front of computer screens, not to mention the most unfathomable idea of all, the fact that we conduct the bulk of our communication through little hand-held bars called “cell-phones”; we would undoubtedly appear like a super-race to these ancestors. Now ask the question: if the world, and we with it, could have changed so much in so relatively short a time-span, what awaits us over the next century or two? In other words, if we extrapolate future rates of technological growth from the pace of growth as it has been manifested in the past, we are well justified to expect ever more rapidly growing technologies that might well impede on the nature of the beings that are their origin and that increasingly interact with artefacts of technological innovation.

We are, according to the posthumanists (more popularly called the “transhumanists”) unstoppably *en route* to the development of a new species. Someone like Max More claims that “humans are but a transitional stage standing between our animal heritage and our posthuman future” (More, in Tirosch-Samuels, 2001, p.23). Nick Bostrom, the leading philosopher of transhumanism, defines transhumanism as: “a way of thinking about the future that is based on the premise that the human species in its current form does not represent the end of our development but rather a comparatively early phase” (Bostrom, 2003, p.26). This new species will emerge through technologies such as “genetic engineering, life-extending bio-sciences, intelligence intensifiers, smarter interfaces to swifter computers, neural-computer integration, world-wide data networks, virtual reality, intelligent agents, swift electronic communication, artificial intelligence, neuroscience, neural networks, artificial life, off-planet migration and molecular nanotechnology” (Tirosh-Samuels, 2011, p.23-24). At some point the name *homo sapiens* may become be inappropriate for the new species that will emerge. Perhaps it will be replaced by *robo sapiens*.

Space constraints prohibit me from elaborating in detail the way in which this is thought to be achievable. It will suffice to briefly draw attention to one of the most remarkable of these posthuman manifestations on which serious research is currently being conducted, namely longevity or radical life-extension technologies. I refer in particular to the, for many people, outrageous claims of this technology’s most vocal current exponent, Aubrey de Grey, who identifies himself as a “biogerontologist” and is currently chief science officer of the SENS (Strategies for Engineered Negligible Senescence) Foundation in Cambridge. He claims that aging is no more than a widespread, extremely destructive, yet avoidable cluster of diseases that could all be reversed or cured in view of extending our lifespan almost indefinitely. *We can grow old without becoming aged*. To quote De Grey himself: “Recent biotechnological progress indicates that many aspects of aging may indeed be effectively treatable

by regenerative medicine in the foreseeable future. We cannot yet know whether all aspects will be curable, but extensive scrutiny has failed to identify any definite exceptions. Therefore, at this point there is a significant chance that such therapies would postpone age-related decline by several years, if not more, which constitutes a clear case for allocating significant resources to the attempt to develop those therapies” (De Grey, 2011, p.67-68). Virtually every disease or degeneration of the human body associated with the process of aging can, according to De Grey, be “reverse-engineered”. The great challenge is to arrest the process of aging, not at the equivalent of the bodily prowess of a 90 year old, but rather at that of a 40 year old. De Grey is highly confident that the first person to reach the age of 1000 has already been born, and furthermore, has high hopes that it will indeed be himself.

In the remainder of this paper, I will develop a few evaluative philosophical and moral perspectives on the idea of post – or trans – humanism. The first is the acknowledgement that, as already indicated, we have always enhanced ourselves as members of our species. To therefore be “against enhancement” *in toto*, as is seemingly the case with prominent philosophers such as Habermas (2005), Sandel (2003) and Fukuyama (2002), makes little sense; it is analogous to being “against technology” or “against globalisation” – attitudes that simply fail to come to grips with inevitable phenomena and trends of our current life-world. Sandel and others are particularly concerned that the phenomenon of biomedical enhancement, as increasingly foreseen and practised, is indicative of a morally unwarranted “obsession with mastery and perfection”. In as far as it is directed at the genetic manipulation of children, Sandel argues that biomedical enhancement is indicative of a refusal to “accept children as they are, as a gift” that we are not allowed to manipulate in our own or some idealised image (Sandel, 2003, p.80).

But these arguments are not credible. Are we not, always, *educating* our children, thereby doing our best to mould them into a fashion of desired beings that we inevitably choose? What is, in principle, the *difference between education and enhancement*? We resist disease – also genetic disease - with all our might, thereby acknowledging that we do not uncritically “accept” everything nature bestows on ourselves and our offspring from birth. “The given” that Sandel wishes us to accept includes Huntington’s chorea, cystic fibrosis and cancer. Must we “accept” these conditions? To enhance ourselves and our children is not to pursue a coherent blueprint for the future. Enhancements have in the past and will hopefully in the future proceed in a *piecemeal* manner, tinkering here and there, making small-step advances, analogous to the piecemeal mutations that, according to Darwin (1971, p.80-127), occur in the process of natural selection. There is no teleology that natural selection tries

to fulfil. The point of enhancement is *not mastery*, but *improvement*.¹

The second point I’d like to make is that, of course, science is not value-free. All evolution – also, and in particular, the evolution of henceforth controlling ourselves and steering our physical and mental development in a direction we choose ourselves, is not necessarily good. What we can do, particularly in the future, is not necessarily what we should do. Science and technology can be miraculously advantageous instruments of social progress for ourselves and our world, as we have so often seen. But they can, as demonstrated by Auschwitz, Hiroshima and Chernobyl, be horrifically destructive forces that create unimaginable suffering. When we are told that it may one day be possible to utterly transform ourselves and our current species-type into one with inconceivable capabilities and powers, our sense of moral vigilance ought to be aroused anew. We will have to sharpen every moral instinct that we possess in order to not only keep abreast of what is, and could be, occurring in the future; but also to evaluate whether such developments will be to our advantage and why.

There are at the philosophical, psychological and moral levels serious critical questions to ask about the prospect of posthumanism. At the psychological level, aspects of what is being foreseen for transhumanism can be seriously questioned. Transhumanists are often inclined to work with a too fragmented, mechanical image of the human-being, disregarding the organic and integrated nature of the kind of being that we are. I refer here to the transhumanist idea that the decision regarding which capacities would be enhanced, should be left up to individuals themselves. This implies that human beings, based upon their personal preferences, could pick and choose the qualities they would wish to enhance and that something like intelligence, for example, could be isolated and radically enhanced without at the same time requiring that other aspects of the human personality be considered. It would however be of scant value if we succeed in enhancing an individual to the level of being able to solve the most complex mathematical or engineering problems, but embed that intelligence in a personality that has not progressed beyond the idiosyncracies of a selfish adolescent. Nicholas Agar correctly remarks in this regard: “[T]he human mind-brain is an exceedingly complex system and an increase in intelligence is but one among many effects produced by [a transhumanist] intervention...Naming one good outcome – increased intelligence together with an enlarged repertoire of experiences – and pronouncing the sum of [the] known and unknown consequences [of this intervention] good is a bit like singling out a beneficial effect of climate change – increased wheat production in Siberia – and forming an

¹ For a more extensive critical discussion of Sandel’s arguments, see Van Niekerk (2012): 589-590.

optimistic opinion of climate change as a whole” (Agar, 2011, p.138-139).

It is, thirdly, a pity that the *possibility of radical life extension or increased longevity* has captured so much attention and has thus tended to become most closely associated with public perceptions of posthumanism. To my mind, this possibility offers one of the least plausible claims regarding the possible benefits of posthumanism. I cannot but agree with the well-known Oxford philosopher-ethicist Bernard Williams, who already in the 1970’s identified the probability of sheer boredom as arguably the most persuasive argument against the prospect of indefinite longevity (Williams, 1973). If I were to last 1000 years, and we take 100 years as a reasonable duration for, e.g., a career, it would imply that I would have time for embarking on 10 different careers. I can see the fun in a second, or maybe a third career, but thereafter sustained career changes could become ridiculous and boring. Furthermore, if radical life extension is prone to be limited to a few, as it surely will be for a very long time, what would the implications be for the relationship between these few Methuselas² and the rest of us? Could we ever be friends? Could we ever be taken seriously by people who have lived hundreds of years before us? Finally, there is much to be said for the idea that life acquires much of its meaning and urgency in view of the fact that we are finite and mortal. What is the sense of doing good, committing sacrifices for others and taking chances if the postponement of such actions has no consequences, and the opportunity for such actions could always come again? *What do we live for if we live forever?* In this regard, I am attracted to the following argument of Tirosh-Samuelson: “Since the human is an *organism* rather than a mechanical device, human beings undergo the cycle of birth, maturation, aging, and death, which exemplifies the rhythm of creation and the gift of life”.

It is self-evident that when we contemplate the possibility of transhumanism, a major moral concern is the issue of *safety*: will such a development be safe for not only those who are subjected to such interventions, but also for those who remain what they are and who have to co-exist with these new beings? I accept this concern. At the same time, concern about safety and risk is often proposed as justification for what Allen Buchanan calls “the simple conservative argument” – an argument that cannot be accepted without qualification. This argument claims that: “Biomedical enhancements, leading to transhumanists, carry extraordinary risks, and given how well off we already are (thanks in part to past enhancements) those risks are not worth taking. So even if we could have been wrong – indeed stupid – to have forgone the major historical enhancements, we should draw the line now” (Buchanan, 2011, p.55).

² See Genesis 5:22-27 of the bible. According to this story, Methuselah was the man who lived to be the oldest ever – 969 years.

To this my reply is that it is hardly credible to assume that the risks of new enhancements – even the creation of a new species - will be greater than those of the past. Two examples may be noted. Firstly, we have enhanced our ability to generate power immensely by nuclear power, but at the same time created the danger of destroying our entire civilization by that very same power. Secondly, we have enhanced our mobility immensely by air travel, and at the same time created unknown dangers of destructive global pandemics (e.g. SARS and Swine influenza which are most effectively spread by aviation).

Why should we therefore assume that “we have gone far enough”, i.e. that we are not in need of significantly more enhancements to sustain our own well-being and/or extend that well-being to people in need of it? It is an inescapable fact that progress, particularly in science, technology and medicine, inevitably requires a measure of risk. Compare, for example, the risks taken by the first patients who received chemotherapy, the first receiver of a transplanted heart and the first astronauts. It is not for nothing that the US anthem sees the future as the property of the brave.

We might nevertheless be very concerned about what the relationship could be between so-called “normal people” and the race of posthumans that the acquisition of power over our future evolution might yield. Is it conceivable that a *modus vivendi* will be found to manage peaceful and just co-existence between us and what might well turn out to be a “different human species”? Here we obviously enter the avenue of conjecture, and I don’t want to give the impression that I possess definitive answers to all the scenarios that we might imagine in this regard. Let me nevertheless remind you of an interesting article by the Harvard bioethicist Daniel Wikler (2009), who raises the question as to whether, in a hypothetical future situation where very clever people have come about as a result of posthumanist technologies, it would be morally in order for these posthumans to act paternalistically towards the rest of us in a manner analogous to the way in which we act towards mentally disabled individuals and children.

The issue here would be whether it will be in order for them to infringe upon what we regard as our human right to competence (e.g. to make decisions pertaining to our own health care and lifestyles) on the basis of their superior knowledge and judgment. Wikler argues that the answer to this question depends on how we understand the notion of “competence”. There is one of two possibilities: Firstly, there is a *relativistic view of competence*: here, we could, for example, point out the relative difference in intellectual ability between statistically average people and the intellectually disabled, as well as to the corresponding (probable) difference in favourable outcomes of key decisions when made by these two categories of people. We could then develop a “Rule of Thumb” which stipulates that if the two groups’ IQs differ

by 28 points or more (irrespective of where on the overall scale the highest and lowest score falls); one group would be regarded as “smart” and the other as “dull”, and the first would be therefore considerably more competent.

Compare this to what Wikler calls a *threshold concept of competence* (or what Rawls would call a “range property”). In this case, that which determines that one person is competent and the other not, is not the relative difference between them in respect to intelligence, but rather on which side of an *absolute threshold* their intellectual capacities fall. Therefore: if you meet the minimum threshold (e.g. IQ 90), you are competent, irrespective of whether you score 90 or 140.

Whereas Wikler argues that a future group of super-humans probably will be morally justified to act paternalistically towards the unenhanced, Buchanan argues this matter in terms of a “threshold concept of human rights”. This means that such enhanced people will not have the right to infringe upon my human rights once I meet the basic threshold (Buchanan, 2011, p.212-217). I certainly prefer this latter argument.

To conclude, I see little wisdom in an attitude of either embracing or rejecting the idea of posthumanism in its totality. As a species, we have always enhanced ourselves. Why would it be problematic, in principle, to follow the logic and possibilities to more revolutionary destinies than what we may have thought possible in times before technology had attained its current and future capabilities? I think it is a mistake to elevate the notion of “human nature”, as we currently are familiar with that phenomenon, to a *moral ideal* or a *moral desideratum*. *Why should it be morally required of us to maintain and preserve human nature as we currently know it, at all costs?* As I have already mentioned: we are extremely different from our early ancestors, and we will continue to change in accordance with the nature of our predispositions as human beings. Furthermore: if we are to elevate “human nature” to the level of something that we are morally obliged to preserve at all costs, bear in mind that we are then compelled to accept and preserve the reality of human nature “warts and all”! Human nature, after all, is not only that which manifests itself in our ultimate human and moral role models, such as Jesus, Mohammed, Mother Theresa and Nelson Mandela. Part of the fabric of “human nature” is, unfortunately, also the likes of Stalin, Hitler and Jack the Ripper! If we believe that “human nature” is to be preserved in its current spectrum of varieties, they are part of the baggage we willfully have to take on board.

Of course we ought to be cautious of the possibility of creating a super-species whose set of morals might clash head-on with our own and who have the power and intelligence to disown the rest of us and plunge our world into greater chaos than it already knows. But there is also another possibility, namely, the possibility that these

highly intelligent descendants of ours might immeasurably improve our world; and might even succeed in persuading the majority of us of a deeper and more profound meaning that reside in our values – an understanding of our professed values that might actually persuade the majority of us that it is not only necessary to believe in a better world, but that such a world is attainable through measures and initiatives that we are too selfish or stupid to realize or implement.

In particular, I would like to caution against bad arguments for skepticism about posthumanism such as those of Michael Sandel and Francis Fukuyama, whom I admire as political philosophers, but who disappoint me greatly as bioethicists. Add to them a very able thinker such as Nicholas Agar, who writes an excellent book about posthumanism, but then allows himself to flirt with the argument that we ought not to try and improve ourselves since we can only exert our good qualities in the presence of the possibility of acting badly, and that the good that is accomplished in the world requires the continuance of evil to provide it with its meaning and significance (Agar, 2010, p.180-181). This kind of argument is a barely disguised effort to romanticize the presence and necessity of evil. It is but a small step from this kind of argument – which originates from a theodicy already developed by the church father Irenaeus³ in the second century A.D. – to the argument that claims that Hitler and the Holocaust were necessary to produce inspirational moral heroes such as Anne Frank and Alfred Schindler. I myself prefer the belief that we could entirely do without all the human monsters of history, and the possibility of transhumanism provides a new motivation for an ideal that is not bogus.

To conclude we may ask: is it wise to fool around with nature? Will nature not take its own unforeseen revenge? Does nature not know best? This is, of course, on the first level of analysis a silly question because we are, ever since we came into being, all the time impinging on nature and transforming it into a habitable environment for ourselves. That is what all technology, and medicine in particular, is about. Yet, drawing on an argument of Bostrom and Sandberg (2009), we might, for argument’s sake, assume for the time being that “nature knows best”. The question then arises why, if an enhancement is really urgently required for our species, has nature not provided it herself in the light of the wisdom of natural selection? Take, for example, the current-day urgent need for all people to possess a significantly elevated capacity to do mathematics. We all need it, and yet we are all witness to our education system’s lamentable and seemingly sustained inability to deliver this skill; hence the ever-growing industry of extra curriculum mathematics classes! Why has nature not produced this skill in us through natural selection? The answer is

³ For a discussion of Irenaeus’s argument, see Van Niekerk (2005: 613-617).

simple. About 10 000 years ago, when our ancestors lived in caves and were hunter-gatherers, they required very little mathematics to survive. To count to ten, was more than ample! It took a mere 10 000 years from that time until now – a time in which we direly need mathematics. Ten thousand years in evolutionary time, is hardly a blip on the radar screen; it is way too brief a period to enable “Nature” to succeed in getting us to successfully select for mathematically skilled children. Bostrom and Sandel have, in light of this, developed what they called a moral “heuristic” which now, to my mind rightfully, claims that when we are experiencing a need that nature has not had the evolutionary time to develop in us, we are more than justified to seek it through other means – even if that means is the prowess of cognitively enhanced people who have outgrown our general mathematical incapacity and who might, in that way, improve our world.

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