Transhumanism, why people dislike it and why they are wrong

Introduction

This paper will proceed like this in three sections: First, I will explain what transhumanism and related things are. Second, I will mention some bad things people have said/written about transhumanism. Third, I will say some things about those things, typically to the effect that their worries are unjustified or nonsensical.

Throughout this paper I will use information from internet sites including Wikipedia. Some people may not like this but I will do so anyway. First, it is not possible to write material of good quality about this topic (transhumanism) without using internet sources. Second, Wikipedia has time and again been studied for reliability and these studies (too many to mention here) consistently show that (english, henceforth I will omit this qualification) Wikipedia is pretty reliable compared to other encyclopedias and in general.[1] Third, it is hopelessly backward to try to rely upon purely non-online sources. The internet is simply better. I would venture to say that it is the best thing to happen for human enlightenment since the invention of the internet.

I will quote entire paragraphs. Some people may not appreciate long quotes but I think it is important to try hard to avoid quoting things out of context as to give a misleading (consciously or not) impression of what the author meant. I think entire paragraphs are 1) long enough to let the author make whatever point he wants to make, 2) not so short as to give a misleading impression of the work in question or what the author meant.

What is transhumanism etc.?

Transhumanism

To my luck, a leading transhumanist (Nick Bostrom1) has written a nice paper explaining most basic things about transhumanism (Bostrom 2003). Bostrom is kind enough to provide two short and good definitions of "transhumanism":

> "(1) The intellectual and cultural movement that affirms the possibility and desirability of

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[1] Of course, it would be circular to try to justify the reliability of Wikipedia using Wikipedia. But if one has doubts about the quality of Wikipedia one should read these two articles and use the sources listed in them. Justification coming from sources found via Wikipedia is not circular. http://en.wikipedia.org/wiki/Wikipedia#Reliability and http://en.wikipedia.org/wiki/Reliability_of_Wikipedia

fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities.

(2) The study of the ramifications, promises, and potential dangers of technologies that will enable us to overcome fundamental human limitations, and the related study of the ethical matters involved in developing and using such technologies." (Bostrom 2003:4)

Transhuman and posthuman

As explained by Bostrom

"It is sometimes useful to talk about possible future beings whose basic capacities so radically exceed those of present humans as to be no longer unambiguously human by our current standards. The standard word for such beings is "Posthuman" . (Care must be taken to avoid misinterpretation. "Posthuman" does not denote just anything that happens to come after the human era, nor does it have anything to do with the " posthumous" . In particular, it does not imply that there are no humans anymore.)" (Bostrom 2003:5)

"transhuman" is similarly defined as the intermediary form between human and posthuman. The obvious question to ask is: Are some of us already transhuman? I think the answer is obvious: "Yes" Bostrom does not like the question due to the fact that "transhuman" is vague (too vague he thinks). I disagree and think that the question is clear enough to be meaningful and answerable. One can depict it graphically rather nicely like this (my illustration):

Human-transhuman-posthuman progression

Human   Transhuman   Posthuman

Currently, some humans are in the transhuman area. Those humans include humans with pacemakers, prosthetic limbs, and so on. But the most transhuman (or closest to a posthuman) alive that I know of is Kevin Warvick, a British professor of cybernetics, who has successfully had electronic equipment operated into himself (his arm) and successfully used it to control a robotic arm, and most interestingly, after having a similar chip operated into his wife's arm, they could communicate by purely electronic means using the internet ([2]; Warvick *et al* 2004;[3]).

A second reason why Bostrom presumably dislikes use of the term "transhuman" is that it tends to

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[2] http://en.wikipedia.org/wiki/Kevin_Warwick#Project_Cyborg

[3] Warvick's homepage. http://www.kevinwarwick.com/index.asp

cause confusion (among journalists especially) because there is a difference between "transhuman" and "transhumanist". A transhuman is what I explained above but a transhumanist is someone who advocates transhumanism. It is understandable that Bostrom wants to avoid this confusion.

Varieties of transhumanism

There are some different kinds of transhumanism but they are not easy to label and categorize and are definitely not sharply divided. One may think of them as different trends in transhumanistic thought (Bostrom 2003:44). Bostrom (2003) does give a summery but the one Wikipedia gives is better so I will quote it instead:

> "There is a variety of opinion within transhumanist thought. Many of the leading transhumanist thinkers hold views that are under constant revision and development. Some distinctive currents of transhumanism are identified and listed here in alphabetical order:
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> Abolitionism, an ethical ideology based upon a perceived obligation to use technology to eliminate involuntary suffering in all sentient life.
>
> Democratic transhumanism, a political ideology synthesizing liberal democracy, social democracy, radical democracy and transhumanism.
>
> Extropianism, an early school of transhumanist thought characterized by a set of principles advocating a proactive approach to human evolution.
>
> Immortalism, a moral ideology based upon the belief that technological immortality is possible and desirable, and advocating research and development to ensure its realization.
>
> Libertarian transhumanism, a political ideology synthesizing libertarianism and transhumanism.
>
> Postgenderism, a social philosophy which seeks the voluntary elimination of gender in the human species through the application of advanced biotechnology and assisted reproductive technologies.
>
> Singularitarianism, a moral ideology based upon the belief that a technological singularity is possible, and advocating deliberate action to effect it and ensure its safety.
>
> Technogaianism, an ecological ideology based upon the belief that emerging technologies can help restore Earth's environment, and that developing safe, clean, alternative technology should therefore be an important goal of environmentalists." ([4], slightly edited by me)

Transhumanistic technologies to come in the near future

A large number of technologies that can rightfully be labeled "transhumanistic" are under way. It

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[4]   http://en.wikipedia.org/wiki/Transhumanism#Currents

would take too much space to list all of them so I will list a few: 1) Human genetic engineering. Soon we will be able to fix many hereditary illnesses especially those that are caused by a single gene (called "single gene disorder"[5]) like Sickle-cell disease[6.] 2) Implants that make people deprived of a sense (typically vision and hearing) able to use an artificial version of it, later will come implants that are better than our normal senses, 3) The removal of the damage that metabolism results in (that is, aging), see Aubrey de Grey[7] and his various talks[8] and his book de Grey (2007), 4) various drugs that improve our cognitive abilities (called "cognitive enhancers" and "nootropics"[9], see (Bostrom 2003:14), (Bostrom 2009)). Some researchers suggested giving Ritalin (the drug given to people with AHDH) to normal people to boost their performance.[10]

A very nice website containing a lot of science and projected technological advances is http://futuretimeline.net/. I recommend taking a close look at that one for the next, say, 20 years or so to get a good idea of which technologies will be available in the near future.

Why some people dislike humanism (and posthumanism)

Even though it would be nice to have a long summery of all the bad things people have said about transhumanism, there is simply not enough space in this 24000 character paper for that sort of thing. And since it would require even more space to also respond to those criticisms, I will not have space to do that either. What I will do is this: First, I will mention some basic categories of objections. Second, I will quote some different worries that people have about transhumanism, and then in the next section, I will reply to one of them at length.

Bostrom (2003) does discuss a couple of the very typical objections, but I think the summary found on Wikipedia is far superior.[11] It is however way too long to quote in its entirety (it is ~30k characters long). But I will mention the categories of objections that are listed on Wikipedia as they have rather flavorful names that make it easy to figure out what they refer to.

Summary of Wikipedia's summery

- Infeasibility (*Futurehype* argument) - Transhumanists are wrong about how fast technology progresses and the things that they think will happen in the near future (say, de Grey's claims

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5   http://en.wikipedia.org/wiki/Genetic_disorder#Single_gene_disorder

6   http://en.wikipedia.org/wiki/Sickle-cell_anemia

7   http://en.wikipedia.org/wiki/Aubrey_de_Grey

8   A very good one is http://www.ted.com/talks/aubrey_de_grey_says_we_can_avoid_aging.html

9   http://en.wikipedia.org/wiki/Nootropic

10 http://www.dailymail.co.uk/health/article-1092826/Cambridge-professor-calls-healthy-adults-use-Ritalin-boost-brain-power.html

11 http://en.wikipedia.org/wiki/Transhumanism#Controversy

about the advances in medical science) will simply not happen or not nearly as soon as transhumanists predict. Named after a book.

- Hubris (*Playing God* argument) - Typically advanced by religious people (theologians and philosophers) but also sometimes by non-religious people. Transhumanists want to do things God did (or is depicted as having done) in the abrahamic religious texts. Named after a popular phrase.

- Contempt for the flesh (*Fountain of Youth* argument) - Transhumanists want to live forever and be forever young, and the critiques claim that these desires are bad for a variety of reasons. Named after a film.

- Trivialization of human identity (*Enough* argument) - Transhumanists want to change 'fundamental' (whatever that means here) things about themselves such as suscepability to aging/death and cognitive limitations. Critics regard it as morally wrong to change these things. Named after a book.

- Genetic divide (*Gattaca* argument) - Transhumanists want to improve our genes using genetic engineering (modern eugenics). Critics think that this will result in two classes or species of humans or 'humans': The modified (typically claimed as being the rich classes) and the non-modified (the poor), and that one of these (typically the modified/rich) will oppress the other, and that this is bad. Named after a film.

- Threats to morality and democracy (*Brave New World* argument) - Critics think that the things transhumanists want and work for will, when they get them, transform society into a bad one (a dystopia). Named after a book.

- Dehumanization (*Frankenstein* argument) - Transhumanists want to change parts of our genomes to achieve better cognitive abilities and stronger and more healthy bodies. Critics think that this will blur or remove the distinction between the natural and the artificial. They think this is a bad thing because it will lead to hordes of humans clones that are regarded as subhuman and treated badly.

- Specter of coercive eugenicism (*Eugenics Wars* argument) - Transhumanists want to use eugenics (although in a modern form which is just germ-line gene manipulation). Critics look back in history for examples of eugenic movements that were bad, particularly german nazism's use of compulsory sterilization, killing and institutionalizing of people regarded as inferior.

- Existential risks (*Terminator* argument) - Transhumanists want to build increasingly sophisticated technology. Critics think that this makes possible various kinds of catastrophes

that, if they happen, will annihilate the human race. The typical example being advanced robots that desire (or 'desire') to eliminate all humans. Named after a film.

Leon R. Kass - *Ageless Bodies, Happy Souls: Biotechnology and the Pursuit of Perfection* **(2003)**

As far as I can tell, this essay is pretty typical of bad philosophy. It is long for its content (20 pages), has long sentences, has needlessly difficult words, has no summaries/clear descriptions of the main argument(s), and is full of questions and metaphors/analogies/non-literal language. Two quotes will illustrate this rather nicely:

> "What if everybody lived life to the hilt, even as they approached an ever-receding age of death in a body that looked and functioned—let's not be too greedy—like that of a 30-year-old? Would it be good if each and all of us lived like light bulbs, burning as brightly from beginning to end, then popping off without warning, leaving those around us suddenly in the dark? Or is it perhaps better that there be a shape to life, everything in its due season, the shape also written, as it were, into the wrinkles of our bodies that live it? What would the relations between the generations be like if there never came a point at which a son surpassed his father in strength or vigor? What incentive would there be for the old to make way for the young, if the old slowed down little and had no reason to think of retiring—if Michael could play until he were not forty but eighty? Might not even a moderate prolongation of life span with vigor lead to a prolongation in the young of functional immaturity—of the sort that has arguably already accompanied the great increase in average life expectancy experienced in the past century? One cannot think of enhancing the vitality of the old without retarding the maturation of the young." (Kass 2003:17)

The above quote contains a lot of questions, not a single easily identifiable argument and unclear non-literal language. His light bulb analogy is particularly odd and yet he bothers not to explain it. I will explain it briefly with an illustration:
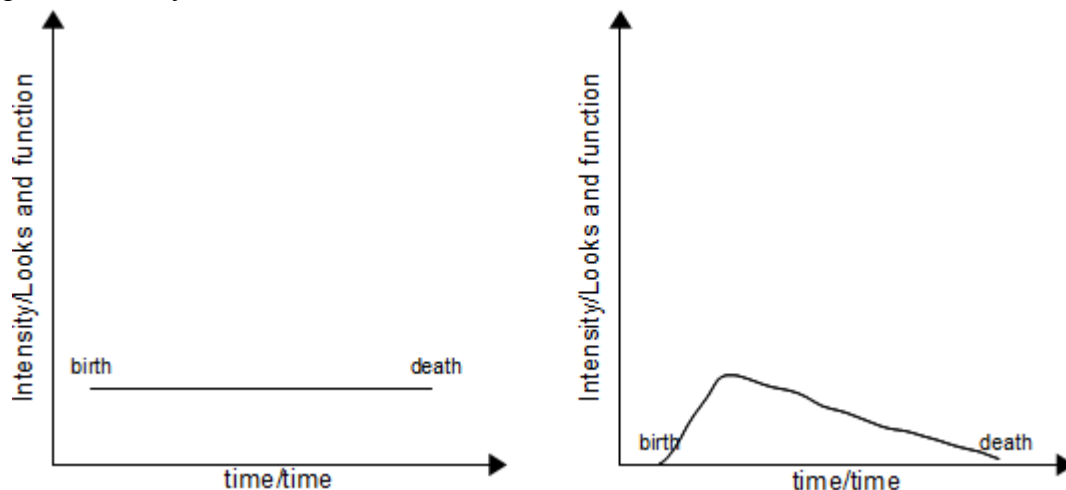
According to his analogy, babies would be born (analogue to the turning on of the light bulb

"burning as brightly from beginning to end") looking like 30-year olds and functioning like them, so, presumably, having already learned to walk, master a (native) language etc. And then when people die they would die suddenly because if there was biological immortality[12], pretty much the only thing to die of is fatal accidents/suicide[13] (the analogue of turning off the light bulb or it burning out).

If we turn his analogy around, we would get that light bulbs at first emitted not very much light, and then rather quickly reached some maximum intensity, and then slowly lost intensity until they completely stopped emitting light. Perhaps Kass would think this is better because light bulbs would certainly not just be "popping off without warning, leaving those around us suddenly in the dark" literally!

> "In a word, one major trouble with biotechnical (especially mental) "improvers" is that they produce changes in us by disrupting the normal character of human being-at-work-in-the-world, what Aristotle called energeia psyches, activity of soul, which when fine and full constitutes human flourishing. With biotechnical interventions that skip the realm of intelligible meaning, we cannot really own the transformations nor experience them as genuinely ours. And we will be at a loss to attest whether the resulting conditions and activities of our bodies and our minds are, in the fullest sense, our own as human. To the extent that we come to regard our transformed nature as normal, we shall have forgotten what we lost." (Kass 2003:16)

A lot of fancy words and stuff, but does it really mean anything? I am not that sure. It is pretty odd for someone with a Ph.D. in biochemistry to write like this. Kass would do well to follow Bertrand Russell's advice found in his essay *How I write* (Russell 1956 but found in Russell 1961:35-7).

I am not alone in my harsh criticism of Kass, see Bostrom (2005).

Eric Lander - *In Wake of Genetic Revolution, Questions About Its Meaning* (2000)

As is typical with various objections to transhumanist ideas, the objections are given in questions and metaphors or pseudo-metaphors, consider:

> "Safety is, of course, a major concern. Given the subtleties of human physiology, quick genetic fixes are likely to do more harm than good. And the prospect of a "product recall" from the human gene pool is too surreal to contemplate. But there will come a time when we

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[12] Biological immortality is not the same as immortality (synonyms: "invincibility", "indestructible"). Immortality is the lack of ability to die. Biological immortality is the lack of ability to age. Biologically immortal organisms still die due to various events such as accidents, disease, or predation. There are a few known candidates for biologically immortal *animals* (in a sense, all or almost all bacteria colonies are biologically immortal), see Wikipedia. http://en.wikipedia.org/wiki/Turritopsis_nutricula http://en.wikipedia.org/wiki/Biological_immortality

[13] One exception would be incurable poisoning and diseases.

can do such things safely, and it's not too soon to ask whether we should. Will we adopt the image of humans as a product of manufacture, rather than a product of nature? If we cross that fateful threshold, I don't see how we can ever return." (Lander 2000:2)

A 'fateful threshold'? He does not mention why it would matter that future people are 'products of manufacture' and what are the criteria for being 'products of manufacture'? This looks more like poorly hidden appeals to emotion than reasonable thought.

Appeals to nature

In the remainder of this paper I will talk about objections to transhumanist ideas based on appeals to nature. Appeals to nature are simply arguments that has one of the following propositions as a premise:

- For any thing, if it is natural, then it is good.

- For any thing, if it is unnatural, then it is bad.[14]

As mentioned in various essays in Baillie *et al* (2004) but especially in *Nature and Human Nature* by Mark Sagoff, lots of different objections to transhumanistic ideas use one of the above propositions as a premise. But as it is equally clear from the earlier link to Fallacyfiles (or any other comprehensive list of fallacies), appeals to nature are *fallacious*.

The first thing to do, is to do as John Stuart Mill did in his essay *On Nature* (Mill 1874), namely, distinguish between the two major meanings or senses of "natural" (and it's derived term "unnatural") as Sagoff writes:

> To make his argument, Mill distinguished between two senses of the term nature. First, nature may refer to everything in the universe—that is, everything to which the laws of physics apply. In this context, the natural constitutes the opposite of the supernatural. Everything human beings do, in this sense, is natural. Second, nature may refer to the spontaneous arrangement of things—that is, all that is independent of or unaffected by human agency. In this sense, the idea of the natural is defined in terms of its significant opposite, the artificial or cultural. (This distinction, fundamental in Western culture, harks back to the Greek distinction between *physis* and *nomos*, nature and convention.) Mill asks whether nature in either of these senses possesses a design, an organization, an order, or—as we might say—an integrity. Does nature either in the sense of "everything" or in the sense of "untouched by humankind" obey patterns, embody principles, or display uniformities that humanity should reckon with and respect? In either of these senses, should we design with

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[14] http://www.fallacyfiles.org/adnature.html This site is a great resource for information about logical fallacies. In particular, the taxonomy is very interesting. http://www.fallacyfiles.org/taxonomy.html

nature, obey nature, or accept its barriers and bounds?" (Baillie *et al* 2004:75-6)

So which of these do advocates of the appeals to nature mean? Most likely the second. It would be plain stupid to use the first sense because anything and everything, good and bad, is natural in the first sense.[15] Suppose thus that they mean the second, but then again, the counter-examples to the propositions are so easy to find that it is mind-boggling that people, especially those well-educated, make these objections.

Almost all diseases (incl. cancer, HIV/AIDS and the bubonic plague[16]) and natural disasters are completely natural, yet they are not good. Thus, the first proposition is false. Medicine, music, art, films, etc. are all unnatural but are not bad. Thus, the second proposition is false.

Closing remarks

I have *not* presented all the criticism of transhumanistic ideas that I could find. There is simply not space enough in this paper to even quote them. And I have mainly focused on objections that I consider to be particularly unreasonable instead of focusing on some of the more reasonable criticisms, such as specific technical criticism of de Grey's ideas such as the paper by Preston Estep *et al* (2006)*.* The reason for this is that most of the criticism of transhumanistic ideas is horrible. There are lots of difficulties (technical and otherwise) to overcome in the process of becoming transhuman/posthuman.

Literature

This list lists only major works. Smaller works and Wikipedia articles are linked to in footnotes.

Nick Bostrom, *The Transhumanist FAQ*, 2003 (updated 2005),
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Warwick, K., Gasson, M., Hutt, B., Goodhew, I., Kyberd, P., Schulzrinne, H. and Wu, X. (2004) *Thought communication and control: a first step using radiotelegraphy*. IEE Proceedings-Communications, 151 (3). pp. 185-189. ISSN 1350-2425

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15   As a consequence, metaphysical naturalism, the claim that everything is natural, is trivially true using that sense. See Augustine (2001). http://www.infidels.org/library/modern/keith_augustine/thesis.html

16   A particularly nasty disease generally believed to be the case of the Black Death which killed some 75 million or 30-60% of Europe's population in the 14th century. http://en.wikipedia.org/wiki/Bubonic_plague

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