The Enhancement Debate:  
Or  
Able-ism leads to transhumanism

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First let me thank the James Martin Institute for inviting me to this timely conference.

When I was invited to this conference I suggested that I would talk about  
enhancement medicine and in doing so I would outline some shortcomings in the  
discourse around body and NBIC politics and the consequences of them.

**ENHANCEMENT MEDICINE**

The average person very likely will perceive the term ‘Enhancement medicine’ as  
being a contradiction in terms. They might associate medicine with the effort to  
eliminate diseases whether through curative or preventative measures. And they might  
associate enhancement with doping steroids and so forth.

**How does one end up with enhancement medicine?**

First one needs science and technologies products which are able to enhance the  
human body. We have heard at this conference about the ever increasing ability of  
science and technology research and development products to modify the appearance  
and functioning of the human body beyond existing norms and species typical  
boundaries.

Second one has to link enhancement products to a very particular flavor of the term  
health. Indeed enhancement products are often sold in terms of human betterment in  
general and in terms of better and/or more sustainable health care, better health and  
more efficient health systems in particular.

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concept of human right, personhood and sentient right; the concepts of  
anthropocentrism, normocentrism, cognocentrism and abilitycentrism; the concept of  
transhumanism and the consequences of the increased ability of science and  
technology products to modify bodies -human and others- beyond species typical  
boundaries. His webpage is www.bioethicsanddisability.org/start.html
What flavors of health do exist?

Roughly one has three choices.

A) The first, the WHO model defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". In this model the term “health” through the different wellbeing determinants combines the areas of “medical health” and “social health.”

B) However many do not adhere to the WHO definition of health and do not treat wellbeing as a determinant of health. They define health as “the absence of disease and illness”. This model limits the term “health” to mean “medical health”/“medical illness”. “Health” is used to cover the domain of "medical" determinants of "wellbeing." “Social health” is not covered anymore under the term “health.”

The difference between A and B) is that we medicalizes health taking out the social wellbeing component. However that by itself does not lead us to Enhancement medicine because this medical understanding of health still assumes species typical functioning. One needs one more change in the meaning of medical health.

The new kid on the block: the transhumanist/enhancement model of health

Within the transhumanist/enhancement model of health, the concept of health no longer had the endpoint that someone is “healthy” if the biological systems function within species-typical, normative frameworks. Within the transhumanist/enhancement model all Homo sapiens bodies – no matter how conventionally “medically healthy” – are defined as limited and defective in need of constant improvement made possible by new technologies appearing on the horizon (a little bit like the constant software upgrades we do on our computers). Health in this model is the concept of having obtained maximum (at any given time) enhancement (improvement) of one’s abilities, functioning and body structure. Disease, in this case, is identified in accordance with a negative self-perception and non-enhanced body (i.e., “I feel un-well because I feel confined to the normal human body and I want to add capabilities to the body as soon as it is possible”). It also linked social wellbeing and “social health” to the availability of enhancement procedures.

The pure transhumanist/enhancement model of “disability/impairment”

The transhumanist model of health and disease sees every Homo sapiens body as defective in need of improvement (above species-typical boundaries). Every Homo sapiens is, by definition, “disabled” in the impairment /medical/patient sense. Within the transhumanist model of “disability/impairment”, disabled people are those who are not able improve themselves beyond Homo sapiens normative functioning. (techno poor disabled)
The transhumanist model of "disability" views science and technology – including NBIC – as having the potential to free everyone – the now "all disabled people" from the "confinement of their genes" (genomic freedom) and the "confinement of their biological bodies" (morphological freedom).

Taking the last model of health into account enhancement medicine is an emerging field whose actions modify the human body beyond its Homo Sapiens typical boundaries by improving on existing capabilities or by adding new capabilities to the human body providing the remedy to ill health through surgery, pharmaceuticals, implants, and other means.

**REALIZATION OF THE TRANSHUMANIST/ENHANCEMENT MODEL**

**Step 1: Make “healthy” people feel bad about themselves**

The transhumanist/enhancement model of health, disease, disability, and well-being perceives the human body in general as defective. This sentiment is the ultimate endpoint of the existing medicalization of the “healthy”, where perfectly healthy persons are made to feel badly about their appearances or functioning. It sells to healthy people the idea that they are sick. Disease-mongering is a term some people use.

The reality of medicalization is acknowledged by many. An editorial in the British Medical Journal, which rephrased an editorial of Amartya Sen in the same issue, stated:

“Amartya Sen, an even more distinguished economist, discusses the paradox that people in America feel much less well than those in Bihar, India, though their life expectancy is much better.” (p.860)

In a recent issue of the Seattle times one reads:

The number of people with at least one of four major medical conditions has increased dramatically in the past decade because of changes in the definitions of disease. “The new definitions ultimately label 75 percent of the adult US population as diseased,” according to calculations by two Dartmouth Medical School researchers.”

The traditional form of medicalization artificially assigns a subnormal label toward normal variations of human characteristics. More and more variations of normal characteristics of the human body are labeled as defective and in need of fixing, with the endpoint being the transhumanist/enhancement model of health and disease and the transhumanization of medicalization.

**Step 2: Add enhancement to the mix**

"I believe in transhumanism: once there are enough people who can truly say that, the human species will be on the threshold of a new kind of existence, as different from
ours as ours is from that of Peking man. It will at last be consciously fulfilling its real destiny." Julian Huxley, First Director-General of UNESCO. (9)

The transhumanist/enhancement model of health and disease defines the human body in general as defective, or as a work in progress, elevating the medicalization dynamic to its ultimate endpoint, namely, to see the enhancement beyond species-typical body structures and functioning as a therapeutic intervention (transhumanization of medicalization).

**SOME PROBLEMS:**

The debate around human body structure and functioning enhancement and enhancement medicine has a variety of characteristics and several pitfalls leading to a higher probability of bodily enhancement beyond species typical boundaries and enhancement medicine for the affluent

**PROBLEM 1**

Most people in the health field are not aware of the redefinition of the term health in the transhumanist sense and therefore no real discourse exist around the transhumanist model of health

The health promotion, public health and most other health related debates take for the most part not yet into account the increased ability of science and technology products to modify the appearance of the human body and it’s functioning beyond existing norms and species-typical boundaries.

**Problem 2 ) The line drawing**

Too often the debate boils down to the argument that one can draw a line between therapy versus enhancement or therapeutic versus non-therapeutic enhancements a line which I think is impossible to draw. Many therapies have enhancement aspects.

Many enhancements can be classified as therapies and many therapeutic interventions can and are used later on for non-therapeutic purposes.

The line drawing between therapy versus enhancement or therapeutic versus non-therapeutic enhancements is in essence a feel good about yourself ‘you don’t have to feel threatened’ line. This line is not tenable.

These ‘feel good about yourself ‘you don’t have to feel threatened’ line’ was also employed in another context.

In the case of pre-birth genetic tests the tests where sold with the line of ‘severe impairment’ versus ‘non-severe’ so that the ‘non-impaired’ would not feel threatened in regards to their characteristics such as sex/gender although it was clear that ‘severe’ was an untenable line.

And indeed after prebirth genetic tests were established for ‘severe impairments’ such as Tay Sachs and Down Syndrome application of prebirth tests moved on to greener pastures such as sex selection where much more money could be made.
Interestingly one side effect of the transhumanist model of health and impairment is that one can not draw a line anymore between sex selection (embryo) and sex deselection (fetus) and impairment deselection (embryo/fetus) because that line drawing dependent on the difference between de/seletion for medical (impairment) and social reasons.

Problem 3) Not consequent

Many arguments used to demand the prohibition of enhancement will not work until similar actions are not taken in areas where enhancement does only mark a techno difference but does not pose a new problem. For example if we do not changes the inequity to education in the first place then ones arguments against a brain chip which would allow the upload of information based on the selective access to the chip by a few is on very shaky ground. As the WTA FAQ states:

For example, if some form of intelligence amplification becomes available, it may at first be so expensive that only the wealthiest can afford it. The same could happen when we learn how to genetically enhance our children. Those who are already well off would become smarter and make even more money. This phenomenon is not new. Rich parents send their kids to better schools and provide them with resources such as personal connections and information technology that may not be available to the less privileged. Such advantages lead to greater earnings later in life and serve to increase social inequalities. http://www.transhumanism.org/index.php/WTA/faq21/65/

With other words if one does not question able-ism one will have a hard time to question transhumanism. In the end transhumanism is an extension of able-ism

(Ableism: a network of beliefs, processes and practices that produce a particular kind of self and body (the corporeal standard) that is projected as the perfect, species-typical and therefore essential and fully human. Disability/Impairment then, is a diminished state of being human)

As Arthur Caplan said in the Demos book Better Human the problem is not the technology but the injustice.

"Equity and fairness
It is true that we could find ourselves, in the developed world, having access to genetic engineering, biological engineering, brain implants, biochemical interventions that poor people in other places cannot get. It’s also true that we could find ourselves, within rich countries, with a lot of people unable to buy or purchase many of these things that might enhance or improve capacity. But I have a very simple question. Is the problem modifying and improving our biological nature? Or is it a problem of inequity? I’m not in favour of inequity. But, if I said, ‘We’re going to guarantee access to anyone who wants it to a chip that might be put into somebody’s head and improve their memory,’ and if I took equity off the table, there’s no argument here other than it’s bad to have inequity. Inequity is bad. But it’s not connected necessarily to biological changes. It’s connected to all sorts of important resources. We already have a two-class system. I don’t celebrate it. I don’t endorse it. I think those inequities are wrong. But what’s wrong is the inequities. It’s not that they’re biological. Any inequity that leads to these kinds of different abilities to enjoy and pursue life ought to be
redressed. So what the inequity criticism misses is that what’s wrong is inequity, not biology. And worse, those people who keep telling us that they care about it so much do nothing to suggest rectification of environmental, social and familial inequity. They have nothing to say. It’s only if I put a chip in my head. I can attend Harvard all day, apparently, and come up with the $40,000 it takes to go there and they don’t care. But if it’s some kind of intervention that might be biochemical, or bioengineered, that, for some reason, is a different kind of inequity and they don’t like that.”

Problem 4) Disabled people and transhumanism: Lack of choice?

Taking into account the reality of (a) the negative perception of disabled people, (b) legal decisions indicating that disabled people have the obligation to fix themselves and (c) the non-acceptance of a social model of disability by many “non-afflicted people” it comes as no surprise that the governance and debate around health research and R&D of science and technology focuses mostly on offering disabled people medical solutions (prevention or cure/normative adaptation) and moves toward transhumanist/enhancement solutions (augmentation, enhancement of the human body) but rarely offers social solutions (adaptation of the environment, acceptance, societal cures of equal rights and respect). NBIC “health” products are sold with the promise to diminish/prevent the suffering of disabled people through (a) increasing their “abilities,” (b) fixing their “impairments” or (c) preventing them from being born through a variety of eugenic measures.

The transhumanist/enhancement model/transhumanist/enhancement determinant combination is seen by an increasing number of disabled people as a valid solution for two reasons. One reason is that the medical model views disabled people as deficient in relation to non-disabled people, which is hard for many disabled people to swallow. Another reason is that many disabled people do not feel that society will ever accept them for who they are and will never provide the “social cures” needed. In their eyes, the transhumanist/enhancement model allows disabled people to seek out transhumanist/enhancement solutions without feeling inferior to so-called non-disabled people and without having to wait for social cures.

Problem 5) Disabled people and others as stakeholders.

If one looks at the discourse in regards to disabled people one has two groups of disabled people; disabled people who perceive themselves as patients or as non patients. However the non patient flavor rarely is at the table. As the NSF was mentioned here at the conference as wanting to involve stakeholders one has to say that disabled people were not present period at the 2001 social implication of nanotech workshop organized by the National Science Foundation (NSF), USA. They were more by accident at the NBIC workshop of the NSF. But the non patient voice did not make it into other meetings related to NBIC after that. Other voices such as indigenous people are also highly underrepresented.
Another issue the non-patient flavor of disabled people has to deal with increasingly is the fact that the non-patient flavor of disabled people is labeled as disability rights extremist (Citizen Cyborg (Abstract) Disabled Cyborgs and Secular Scientists) or pro disability extremist [http://www.terasemfoundation.org/webcast/ppt/Hughes.ppt](http://www.terasemfoundation.org/webcast/ppt/Hughes.ppt) in a calculated move to disenfranchise the group of disabled people who are critical of the fixing and elimination of their characteristic focus.

**Problem 6) Simplicity of Concept**

The debate uses terms such as choice, morphological freedom and trickle down in a very simplistic way which does not reflect realities populations within low income countries and marginalized groups. Choice and morphological freedom is really about the choice and morphological freedom for the affluent. And the trickle down really does not happen in a significant way.

**The consequences of Homo sapiens enhancement**

If one can’t prevent enhancements a few problems are imminent which one has to deal with. However as the debate around the issues and the governance of science and technology is structured in the moment it is unlikely that it can deal with any of the below problems.

*a) An intensification of the personhood and species-ism debate*

“A advances in NBIC will increasingly allow for the modification and enhancement of the human body beyond species typical boundaries and will enable the appearance of cyborgs, artificial life forms and new species through synthetic biology. This leads to numerous questions. Should *Homo sapiens* retain special elevated status (see debate around species-ism)? If yes towards what towards whom? Is the Homo sapiens the ultimate step in the evolution of the hominid family or is another step in evolution to be expected or desired? If another step is forthcoming and/or desired how does that one look like? How do we define human beings? What are the criteria for personhood? How do sentient being relate to today’s concept of personhood? Do we have to redefine personhood to take into account new technological realities? How does any given redefinition of personhood affect people perceived as persons today? Might some people who are perceived as persons today become non-persons?

*b) The generation of an ability divide (trickle down concept really does not hold true)*
The more enhancements are available the bigger the ability divide will become. This is self-evident and in tune with the divides developed after the introduction of other technologies. As we seem not to be able to close any of the other divides, (i.e. 98% of WebPages are not accessible to blind people) it is doubtful we will be able under current policies to close the ability divide. It is stated that it eventually will trickle down.\(^2\) However if this would be the case why do we still have poor people, unclean water, many places without phones and electricity? Policy changes have to happen which can deal effectively with divides in general. In addition, a debate has to happen as to which divides are acceptable under what conditions and why and the consequences of other divides. Indeed people and groups who promote ability enhancement use the existence of other societal accepted divides to further their cause. The transhumanist FAQ states: “Rich parents send their kids to better schools and provide them with resources such as personal connections and information technology that may not be available to the less privileged. Such advantages lead to greater earnings later in life and serve to increase social inequalities.”\(^3\)

**c) The new Poor The new Inequality**

Every technology led to a new group of ‘the Poor, the marginalized’ and to new inequalities. There is no reason under today’s global policy realities why this would be different if the human body becomes the newest frontier of commodification. Nearly all the point made from a-i) are examples and different facets of the new inequality and the face of the new poor. As much as human enhancement technology will become an enabling technology for a few, it will become a disabling technology for the many. No technology can fix inequalities without a change in today’s societal and political realities i.e. technologies for cheap clean water exists already but they do not reach the people with the greatest need. That will not change with a new technology only with a new global contract between societies and countries. The idea that human enhancement technology would make the life of the marginalized better just does not hold true. It will lead to new groups of people who will be marginalized to a new group of ‘the technological/ ability poor’.

However, under today’s realities it cannot to be expected that enhancements will not come for the few. Therefore one need to change the whole system towards distributive justice may be giving the enhancements first to the ones who need them most. And as this is not very likely the second best is to absolutely ensure that no one can gain any positional advantage from enhancements and no one can force their desires and self perception on others whether its their child or child to be or others. If we go on as we do today, we will see the appearance of a new underclass of people the non-enhanced beings.

**d) Enhancement Medicine versus curative medicine**

If one links the possible inevitability of enhancement (at least some of them) with the increased popularity of the transhumanist/enhancement model of health, disease and

\(^2\) [http://www.transhumanism.org/resources/faq.html#31](http://www.transhumanism.org/resources/faq.html#31) 3.1Will new technologies only benefit the rich and powerful?

\(^3\) [http://www.transhumanism.org/resources/faq.html#31](http://www.transhumanism.org/resources/faq.html#31)
wellbeing, the dynamic of medicalization and the transhumanization of medicalization one can expect augmentative/enhancement medicine to become a growing, flourishing field of medicine. Further if one looks at quotes like the one from Murray and Acharaya (Murray being the father of the disability adjusted life years a measure which according to Murray was developed to "curtail allocative inefficiency" in health interventions4) “… which states “individuals prefer, after appropriate deliberation, to extend the life of healthy individuals rather than those in a health state worse than perfect health”
The spirit of this quote makes it realistic to expect that “individuals prefer, after appropriate deliberation, to ENHANCE the life of healthy individuals rather than those in a health state worse than perfect health”

One can easily envision that enhancement and preventative medicine might become popular and that curative medicine will be seen as futile care and wasteful form of medicine.

e) Enhancements will lead to an increase of people perceived as ‘impaired’ and the transhumanist/enhancement model of “disability/impairment”5

The group defined as “impaired people” will change. The transhumanist model of health and disease sees every human body as defective and in need of improvement (above species-typical boundaries) leading to the transhumanist model of “disability/impairment” where every unenhanced human being is, by definition, “disabled” in the impairment/patient sense. The only way out of the impairment/patient label is to enhance oneself beyond species typical boundaries. Everyone who cannot afford the enhancement of his or her body will be labeled as impaired.

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