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QUESTIONS OF HUMAN ENHANCEMENT

In Support of Human Enhancement

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In Support of Human Enhancement

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Abstract

This short comment presents arguments in support of human enhancement.

What is enhancement? Surely it is a procedure that improves our functioning: any intervention which increases our general capabilities for human flourishing. We exclude from consideration those procedures often termed "enhancements" that are of dubious overall benefit (for example breast or penis augmentation, or the taking of anabolic steroids to increase muscle mass). Equally we are not talking of "designer" modifications which are more akin to aesthetic or fashion preferences than to improvements: hair colour, eye colour, or physique. An enhancement (as we are using the term) is something of benefit to the individual.

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It follows that there can be nothing morally wrong with human enhancement per se: we already accept and actively encourage the use of enhancements in various aspects of our activities. Dietary supplements to improve health and wellbeing; prosthetic limbs for the disabled; vaccination to increase immunity to disease, reading glasses, opera glasses and hearing aids : all of these represent enhancements. It may be argued that some of these constitute medical treatment rather than enhancement, but is this a meaningful distinction?

It is difficult to see how there could be a moral difference between improving reduced function to normal levels and improving normal function to super-normal. Consider: the very concept of what we think of as normal has changed across time, through altered environmental and genetic factors. In a health context, better nutrition, scientific knowledge and the intervention of modern medicine have all produced improvements to the "normal" condition. (For example, it was once considered normal for women to die in childbirth and the pain of childbirth was considered part of the authentic experience¹). Proponents of the notion of "species-typical function"² as a benchmark for distinguishing between treatment and enhancement often ignore the fact that many interventions considered to be treatment actually alter typical function, and that the present definition of "normal" includes many species-atypical features. At an individual level, therefore, the concept of normalcy lacks both precision and moral content; "treatment" and "enhancement" are morally indistinguishable.

Arguments against enhancement often single out genetic enhancement in particular as being unacceptable. If enhancement itself is not wrong, is there anything that is added by a genetic component that makes a difference? There is no special moral significance to genetics itself (although genetics has acquired a sort of popular mystique³); genetic technologies are factually different but morally similar to enhancements we already utilise. The hereditary nature of germline

¹ Farr, AD 1980 Early opposition to obstetric anaesthesia. *Anaesthesia* 35, 9, 896 – 907

² Boorse, C 1975 On the distinction between disease and illness. *Philosophy and Public Affairs* 5, 1, 49 – 68

³ See for example Silver, L 1998 *Remaking Eden* Weidenfeld and Nicholson; Human Genetics Commission 2002 *Inside Information* Department of Health, London.

genetic modification may give rise to objections regarding the consequences for future generations: that we do not have the right to decide what genetic heritage they should receive. However, once the technology for genetic enhancement exists and has been established to be safe, to refrain from using it is equally to make a decision about the genetic heritage of our descendants: that they should not receive such enhancements. If enhancements are (as suggested above) beneficial, all things considered, it is unlikely future generations will thank us for refusing to adopt them.

A common but fundamentally absurd objection to genetic enhancement is that it is somehow “unnatural”. Aside from the fact that it is difficult to distinguish what, exactly, constitutes “natural”, there is no logical or ethical reason why that which is natural should be preferred to that which is unnatural. If humans are morally obliged to be inert, passive players in the game of life, to refrain from exerting any influence or control on the world around us, then a vast proportion of human achievement to date must be classed as unethical, since it is unnatural. Much of human activity is against the course of nature: indeed, it may be argued that our capacity to shape our environment according to our conscious desires and wishes is a crucial part of what it is to be human.

The risk of detrimental effects is often cited as an ethical argument against enhancement through genetic modification. At the current level of technology, this is probably true: our grasp of genetic modification and its effects remains tenuous, and to apply these techniques as they exist at present would involve a substantial and probably unacceptable chance of unpredictable, possibly harmful consequences. It does not, however, follow that it would be wrong to develop the technology to a point where it is safe and subsequently apply it. Although the risks may never be eliminated entirely, the potential benefits are sufficiently significant to justify incurring a certain amount of risk, as is the case with many activities (enhancing or otherwise) that we willingly undertake. It is hard to think of a medical advance that has not been more risky in the early stages than has later proved to be the case.

When considering genetic enhancement, it is likely (though not certain) that enhancing modifications will need to be performed at an early stage of life, perhaps at an early embryonic stage. This raises issues of parents’ right to control and make decisions about their children’s future, the expectations of children that parents may have and whether it is ethically acceptable to provide means to fulfil such expectations. These issues, however, are not unique to genetic enhancement: they apply in equal measure to parents who subject their children to intensive academic, sport or musical training regimes, who monitor their children’s diets to ensure good health, who pressure their children into careers seen as more successful – in short, any parent who has aspirations for their child and seeks to bring these to fruition by interventions that cannot be consented to by the child

and which may involve some risk. Consider again vaccination which is routine for children and routinely involves risk. The mere availability of genetic means to achieve this does not make it more or less wrong to do so.

It has also been proposed that we should not seek to enhance already healthy individuals, a tenet that amounts to the platitudinous exhortation "If it ain't broke, don't fix it." If this is the case, we should never seek to improve ourselves through any means, a position which runs counter to familiar notions of human aspiration and achievement. Besides, as previously pointed out, there can be no absolute qualitative or moral difference between enhancing healthy and unhealthy individuals. There may be a requirement to consider resource allocation issues in deciding what is done with public funds, and whether to improve the situation of the needy rather than the well-off. However, we do not prohibit parents from sending their children to private schools. If genetic enhancement was privately financed, arguments founded on distributive justice would not suffice to provide moral reasons against it.

An objection against enhancing those who are healthy also begs the question of what defines a "healthy" individual or child. The only logical answer to this question is "as healthy as possible". For example, we know that certain maternal behaviours during pregnancy can have adverse consequences for child health: alcohol and tobacco use increase the risk of low birth weight and associated developmental delay, and poor maternal diet can increase the chances of developing Type 2 diabetes in later life. We encourage mothers-to-be to improve their child's health by avoiding these factors; indeed, we consider it irresponsible for them to fail to do so. Similarly, we advocate folate supplements as a positive measure to decrease the risk of spina bifida. That is, we see it as a strong obligation on parents to use the available knowledge and medical technology to maximise their children's health.

Surely, then, this argument also applies to genetic enhancement. If we could, with safety and certainty, engineer immunity to viral infection, protection from heart disease or reduced susceptibility to cancer in our children, we should do so. In other words, not only is genetic enhancement morally acceptable⁴, but if and when it becomes safe and affordable, there will be a moral imperative to use it for the benefit of future generations.

⁴ Harris J 1992 *Wonderwoman and superman: the ethics of human biotechnology*. Oxford University Press. John Harris, *Enhancing Evolution*. 2007, Princeton University Press.