

Readers are invited to contact Greg S. Loeben in writing at Midwestern University, Glendale Campus, Bioethics Program, 19555 N. 59th Ave., Glendale, AZ 85308 (gloebe@midwestern.edu) regarding books they would like to see reviewed or books they are interested in reviewing.

Enhancing Evolution: The Ethical Case for Making Better People, by John Harris. Princeton, NJ: Princeton University Press, 2007. 242 pp. \$28.95.

Genetic engineering, regenerative medicine, reproductive technology, and nanotechnology have the potential to produce healthier, fitter, and more intelligent humans with significantly longer lives. These interventions in the natural lottery of life may enable us to take control of our evolution and alter the limits it has imposed on us. Whether we should enhance human capacities is perhaps the most contentious issue in bioethics today. In *Enhancing Evolution*, John Harris argues that we are not just morally permitted to enhance but in some cases have a moral duty to do so. This duty rests on the claim that enhancements “make us better people, less the slaves to illness and premature death, less fearful because we have less to fear, less dependent, not least upon medical science and on doctors” (p. 185).

Based on keynote lectures Harris delivered at the James Martin Institute for Science and Civilization at Oxford University in March 2006, this 11-chapter book is a major contribution to the debate on enhancement. It is distinctive because of Harris’ comprehensive discussion and compelling defense of the practice. Written with Harris’ characteristic clarity and verve, the book is provocative, engaging, and at times entertaining. His theoretical framework

combines a libertarian view of parental and individual autonomy with a consequentialist view of preventing harm and conferring benefit. There are two main strengths of the book: Harris exposes many flaws in the arguments of those who oppose enhancement, and he presents largely persuasive arguments for the permissibility of and duty to enhance. The second strength is particularly significant, because for many any claim of a moral duty, not just permission, to enhance is intuitively morally objectionable. For Harris, enhancement does not imply perfectionism or a transhuman agenda. He says that “there are powerful reasons for ensuring the safety of the people and for enhancing our capacities, our health, and thence our lives. If the consequence of this is that we become transhumans, there is nothing wrong with that, but becoming transhumans is not the agenda” (p. 39).

In the first three chapters, Harris argues that “the boundaries between therapy and enhancement are not precise” (p. 57). There is a continuum from treating dysfunction to enhancing function. “Treatments or preventive measures which protect humans from things to which they are normally vulnerable, or which prevent harm, . . . are necessarily also enhancements”

(p. 57). Vaccinations and reading glasses are two examples. In addition, he considers Francis Fukuyama's claim that we have an essential property—"factor X"—that gives us a special moral status among species and makes any substantial changes to human nature unacceptable. Presumably, this would prohibit any form of enhancement. Yet Harris argues that if this factor is worth preserving and can be preserved through enhancement, then Fukuyama would have to endorse enhancement (p. 23). Harris also asserts that, without a clear sense of how probable or serious the risks of enhancement would be, there is no rational basis for a precautionary principle limiting or prohibiting these interventions.

Against Norman Daniels, Allen Buchanan, and others, Harris argues that the aim of medical therapy or enhancement is not to promote equal opportunity. He offers an example of twin sisters suffering from cancer—one curable, the other not—to show how a commitment to equal opportunity would mean leaving the curable twin untreated because we cannot treat both (p. 49). Cases like this have "nothing to do with equality and everything to do with saving a life or alleviating pain, suffering, and distress when presented with an opportunity to do so" (pp. 49–50). Nor does the idea of restoring or retaining normal species-typical functioning do any work in the morality of enhancement. Rather, whether enhancement can be morally justified depends on the extent to which it can postpone death and prevent harm.

The discussion of longevity and immortality in chapter 4 is the most philosophically interesting in the book. Harris maintains that a very long life would not necessarily undermine personal identity. Even if it did, it would not be crucial to a coherent desire for

indefinite survival. He asks us to suppose that "Methuselah" has three identities, A, B, and C: "A will want to be B, who will remember being A; B will want to become C, who will remember being B but possibly not remember being A" (p. 65). Yet many individuals would insist on transitivity from A to B to C in their desire to extend their lives and with it the capacity to remember A when one is C. Because memory is an essential component of psychological continuity and our experience of persisting through time, the prospect of C not recalling any desire or experience of A might make indefinite survival less appealing. Harris has an ingenious reply to those claiming that longevity would result in or exacerbate overpopulation. A succession of disconnected selves would mean that A would disappear and be replaced by B, who in turn would be replaced by C. This would result in the creation of extra individuals without creating extra bodies. It would limit consumption of opportunities or space that additional bodies would require. Such a multiplication of selves within the same body would be more environmentally friendly and a more desirable method of procreation. Nevertheless, how this scenario affected population would depend on the birth rate and how many bodies were already in existence. Also, it is not clear that longevity would reduce suffering if the physical and cognitive decline leading to death were simply postponed. This could be avoided by compressed morbidity just before death. But neither longevity itself nor the technological means through which we could achieve it would guarantee this.

In chapter 6, Harris addresses the charge that selecting against disability, as for example in preimplantation genetic diagnosis (PGD), discriminates

against people with disabilities. To say that it is better if a child is not disabled does not imply that a nondisabled child is a better child than a disabled one. Harris emphasizes that disability should be defined, not relative to normal species-typical functioning, but relative to possible alternatives. Disability is a harmed condition that one has a rational preference to avoid because it limits these alternatives. Harris repeatedly points out that having a rational preference not to become disabled or not to have children with disability is not the same as having a rational preference for the nondisabled as persons. This is an important distinction that upholds equal respect for the disabled and nondisabled as individuals with the same rights and moral status. He is avowedly against the idea that the birth of children with disabilities should be prohibited. Indeed, he says that "for those who can only have children with disabilities, having such children may well be morally better, for the parents and for the children, than having no children at all" (p. 108). Harris' reframing of the core ethical questions about disability moves the debate on this issue forward in a constructive way.

Harris takes on the three most prominent opponents of enhancement in the next two chapters. He criticizes Michael Sandel's notions of giftedness and the unbidden and his claim that taking drugs or other forms of enhancement are cheating and an affront to our sense of excellence. Harris insists that excellence is not so much a function of our natural endowment as it is of our own free choices and capacity to take responsibility for them. Excellence results from effort and practice, not just from our given traits. Against Jurgen Habermas' concern about the fate of genetically altered children, Harris argues for the responsibility

of parents to do the best for their children. This would include removing handicaps through genetic or other means prenatally and postnatally. Failing to intervene to prevent a handicap that will harm our children can be morally reprehensible. Still, the most significant discussion in these chapters hinges on the concept of autonomy. After dissecting Leon Kass' arguments against enhancement, many of which rely on inadequately supported moral intuitions, Harris says that it is all very well if the likes of Kass, Habermas, and Sandel object to enhancement. But this should not lead to policies that would outlaw the option of enhancement. Competent individuals should be allowed to choose enhancement for themselves and their children, provided that it does not entail a significant risk of harm. This position is consistent with the liberal democratic presumption that the freedom of citizens should not be interfered with unless there is sufficient justification for doing so. In a comment that applies to Kass and Habermas as well, Harris says that "Sandel can have the unbidden and the welcome, but on condition that he will let me and others have access to the bidden" (p. 122). Harris' points here are well-reasoned and defensible.

The last three chapters address gender selection, the moral status of embryos, and the idea of an obligation to participate in medical research testing enhancement technology. On the second topic, Harris shows that the argument that embryos have a protected interest in achieving their potential has implausible implications. As a matter of consistency, those who defend the protection of the potential of embryos must also defend the potential of gametes to become embryos. This would not only prohibit all forms of contraception but would also entail an

obligation to actualize the potential locked in every cell of the body. It would “entail an ethic of maximal procreation, of never knowingly missing an opportunity to create and protect embryos” (p. 172). Harris concludes the book by arguing that we have an obligation to participate in enhancement research to the extent that we can benefit from it. This is contrary to the prevailing view that participation in medical research is supererogatory. The obligation is based on the idea that we are members of “a community which accepts mutual responsibility, not least because such mutuality has been accepted by others and because all have benefited from the actions or forbearance of others” (p. 190). We would be free riders if we failed to participate. Harris does not claim that this should be an *enforceable* obligation. Not everyone would feel the same

sense of obligation to do this, however. Some may be more informed of the potential risks of the research and be more risk averse than others. They may conclude that it would not be rational to participate in the research, the result of which could be inequality and unfairness in how different people were exposed to these risks.

Enhancing Evolution is bioethics at its best. It is scientifically well informed, with imaginative examples, incisive critiques of widely held views against enhancement, and persuasive arguments in favor of these interventions. This is by no means the last word on the subject. But Harris has hit a powerful volley against those who have argued that human enhancement is morally objectionable. The ball is now in their court.

—Walter Glannon