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The case against perfection: *Ethics in the age of genetic engineering*

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Book Review

In book Delta of The metaphysics, Aristotle provided the oldest known definition of perfection: “That is perfect which is complete — which contains all the requisite parts; which is so good that nothing of the kind could be better; which has attained its purpose” (1). In Michael Sandel’s book The case against perfection: ethics in the age of genetic engineering, Aristotle figures only as a source of advice for sex selection — men should tie their left testicles prior to intercourse if they want to select for males; yet the metaphysics of perfection is reexamined through the lens of genetic enhancement. Sandel has written a fine, short book that is well worth the time of the casual reader or the reader in a bioethics class. Although he does not break new ground, he provides an excellent synthesis of the arguments for and against genetic enhancement. Despite his liberal leanings, his sympathies are apparent from the title. Sandel is a professor of political philosophy at Harvard University, known for his work on liberalism and justice. In a development he did not anticipate, he was appointed to the President’s Council on Bioethics. An accidental tourist to bioethics, Sandel brought his on-the-job training back to the academy where he team-taught a course, “Ethics, biotechnology, and the future of human nature,” with Douglas Melton, […]

The case against perfection

Ethics in the age of genetic engineering

Michael J. Sandel
Belknap Press. Cambridge, Massachusetts, USA. 2007.
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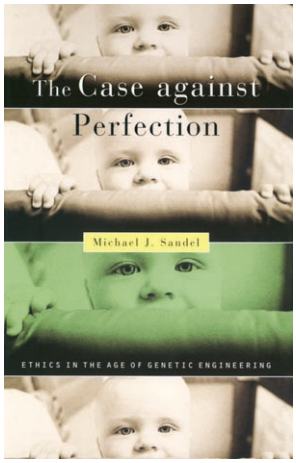

In book Delta of *The metaphysics*, Aristotle provided the oldest known definition of *perfection*: "That is perfect which is complete — which contains all the requisite parts; which is so good that nothing of the kind could be better; which has attained its purpose" (1). In Michael Sandel's book *The case against perfection: ethics in the age of genetic engineering*, Aristotle figures only as a source of advice for sex selection — men should tie their left testicles prior to intercourse if they want to select for males; yet the metaphysics of perfection is reexamined through the lens of genetic enhancement.

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Sandel is a professor of political philosophy at Harvard University, known for his work on liberalism and justice. In a development he did not anticipate, he was appointed to the President's Council on Bioethics. An accidental tourist to bioethics, Sandel brought his on-the-job training back to the academy where he team-taught a course, "Ethics, biotechnology, and the future of human nature," with Douglas Melton, a well-regarded Harvard stem cell biologist. This book is an offshoot of that course.

Sandel believes that parents have a duty to promote their children's excellence. He recognizes that they both do and overdo this already with the use of Ritalin, orthodontics, and Scholastic Aptitude Test coaches as well as in many other material ways. Yet, he asks, if it is permissible and even admirable for parents to help their children in these ways, why isn't it equally admirable for parents to use whatever genetic technologies may emerge to enhance their children's intelligence, musical ability, appearance, or athletic skill? An emerging group of liberal eugenicists believe that eugenic measures, such as embryo selection, are unobjectionable and may be morally required as long as the benefits and burdens are fairly distributed throughout society. Legal philosopher Ronald Dworkin (quoted by Sandel) stated, "If playing God means struggling to improve our species, bringing into our conscious designs a resolution to improve whatever God deliberately or nature blindly has evolved over eons, then the first principles of ethical individualism command the struggle." But despite his willingness to explore arguments pro and con, Sandel is no liberal eugenicist. Rather, he argues that eugenic parenting is objectionable because it shows a misunderstanding of our place in creation and confuses our role with God's. This was the error of Prometheus.

Sandel is bucking the tide of progressive scientific thinking. Recently, noted physicist and mathematician Freeman Dyson boldly proclaimed that the domestication of biotechnology will dominate our lives during the next 50 years, much as the domestication of computers has dominated our lives during the past 50 (2). Biologist Robert Sinsheimer grandly noted that humans can improve upon human evolution. For Sandel, that vision of freedom to undertake genetic manipulation is flawed because it threatens to banish our appreciation of life as a divine gift.

Yet Sandel's arguments about the equivalency of genetic enhancement to other forms of enhancement are too compelling to exclude genetic enhancement on the grounds of Promethean hubris. If we condone the use of athletic trainers, plastic surgery, and, on occasion, performance-enhancing drugs, then why not bioengineering and gene therapy? Following the line of Promethean thinking may provide a clue. Prometheus was punished for stealing fire from the gods, but so too was mankind — Pandora was created and given a box that released all of mankind's evils.

Safety, rather than metaphysics, has been the most critical hurdle for genetic enhancement. Because of early untoward events, advisory panels and regulatory agencies have tried to keep the Pandora's box of cloning and gene therapy closed until it might be opened responsibly. Recognizing that Dolly, the cloned sheep, had a premature death and that other cloned animals show a high frequency of birth defects, the Institute of Medicine of the National Academies called for a legally enforceable ban on human cloning until safety and efficacy could be demonstrated in animals. Unanticipated death and leukemia in children treated with gene therapy for correction of genetic disorders led the Food and Drug Administration to halt all gene therapy trials using retroviral vectors (3). Sandel is cognizant that Pandora's box may be closed for the present, but even if the safety issues are surmounted, genetic enhancement threatens to leave us with nothing to affirm or behold outside our own will.

1. Aristotle. 1999. *The metaphysics*. Penguin Classics. New York, New York, USA. 528 pp.
2. Dyson, F. 2007. Our biotech future. *New York Review of Books*. **54**:4–8.
3. Couzin, J., and Kaiser, J. 2005. Gene therapy: as Gelsinger case ends, gene therapy suffers another blow. *Science*. **307**:1028.