A noted academic bioethicist and British media pundit with a named chair at the University of Manchester, John Harris has recently given birth to an odd literary child. His latest book, Enhancing Evolution: The Ethical Case for Making Better People, hails from an esteemed university press, but it is informal and tendentious, often jeering at opponents, both popular and academic. Despite his credentials (an Oxford D. Phil. in philosophy, co-editorship of the British Journal of Medical Ethics, a lengthy curriculum vitae), Harris has created a popular polemic better fitted for the entertaining and energetic repartee of the Daily Show with Jon Stewart than academic discourse.

The book’s style is in some sense unsurprising, as it derives from public lectures by a media-savvy intellectual. Even the distracting preface from the sponsors of the lectures (ix–xiv) affirms a strongly activist bent, an impression confirmed by Harris’s own introduction (3–4). Still, the degree of colloquial informality (frequent repetitions, reuses of identical quotations, simplistic recitals) and polemicization (name-calling and the creation of strawman opponents) is somewhat surprising in a book written by an academic within his discipline. To rebut two of the West’s most prominent political and ethical philosophers, Michael Sandel¹ and Jürgen Habermas,² with pungent sarcasm and reductio ad absurdum violates most canons of academic discourse. While Harris is correct that excessive reliance on mere authority may be dangerous and academic distance enfeebling, his snippy, self-assertive argumentation does little to solve either problem.

Despite flaws in rhetoric and substance, this book offers several important challenges to those who reject so-called enhancement technologies
and interventions on human embryos. Harris is clearly well-informed and
cognitively agile. The great strength of Harris’s treatment is his ability
to show the inconsistencies in many current normative views relating to
human enhancement. As he and many others are wont to exclaim, even
eyeglasses are enhancements, and in our longevity-obsessed, death-
dreading culture there is little \textit{a priori} reason to resist further attempts
to prolong the span of life or improve its quality. If nothing else, Harris
forces readers to articulate their positions and views with greater rigor.
This of course does not mean Harris is correct, merely that many of us
have not yet trained our minds carefully on these issues. The encounter
with Harris will likely be uncomfortable; still, there is much to be learned
from the experience.

In his book, Harris treats the main themes in the debates about human
enhancement and the manipulation of undifferentiated biological material
to modify resulting humans. He discusses athletic, cognitive, and psychi-
atric enhancements (19–58), the quest for immortality (59–71), reproduc-
tive choice (72–85), the nature of disability in the face of enhanced ability
(86–108), “designer children” (143–59), and the moral complexity—the
“irredeemable paradox”—of the human embryo (160–83). He adds a logi-
cal albeit controversial epilogue (184–206) on the moral duty to participate
in biomedical research.

Because Harris treats, superficially, a dizzying array of arguments,
I will limit myself to considering some of the possible Latter-day Saint
valences of the themes Harris treats and then focus on one important
problem in Harris’s treatment—a basically evolutionary definition of
good. I end my somewhat informal, personal response with some spiritual
reflections on the book. While Harris’s roughshod treatment invites rebut-
tal, owing to constraints of time and space, I will defer to another setting
responses to two other critical components of Harris’s enhancement pro-
posals—the meaning of human identity and the ethics of contingency, the
obligations to those whose very existence is shaped by another individual’s
decisions. (Harris is harshly dismissive, without much analytical sophisti-
cation, of reservations to enhancement based in those two areas.)

\textbf{Latter-day Saint Vantages}

Many, though not all, Latter-day Saints will find Harris as spiritually
nettlesome as Richard Dawkins or his fellow New Atheist popularizers
of science. Harris has certainly not met religious audiences halfway. In
an extended treatment of a problem fundamentally framed by defini-
tions of the soul and control of human identity, Harris mentions the soul
only tangentially in one location (73). While policy in a plural society necessarily cannot rely exclusively on disputed religious beliefs, personal philosophical analyses can and perhaps should derive from private and corporate religious beliefs. For populations whose moral compass will be challenged or damaged by a policy, these views merit at least some discussion. On an issue on which religious bodies and individuals have made their reservations both public and vocal, Harris mentions religion only casually and dismissively, as something undignified or even frankly evil (73, 81, 136).

Harris’s aggressive New Atheist worldview should not distract Latter-day Saints from substantial intersections between Mormonism and the themes of his book. Enhancement, particularly in the eternal scheme, is no stranger to a tradition often labeled perfectionistic by religion scholars. From the earliest teachings on physical translation and the sanctified state of humanity during the Millennium, to the physiological benefits of polygamy or obedience to the Word of Wisdom, to the modern Mormon Transhumanist Association anticipating the technologies of the “Fourth Epoch” that will usher in the “Singularity” of superhuman innovations, Latter-day Saints have long embraced the possibility that they can become better, both body and spirit. Independent of these themes within Mormonism, enhancement (with the associated promise of immortality) resembles nothing quite so much as the blessed state of the righteous in the next life. If in the afterlife we will be free from all sorrow, pain, and suffering, why should we not pursue our own taste of heaven here on earth? The creation of heaven on earth has been central to our communal goals as a church since at least the 1830s, whether through consecration, eternal families, or the building of the kingdom of God.

For some, framing enhancement as the medical approximation of resurrection will make biomedical enhancements seem like nothing quite so much as the Tower of Babel narrative, when, according to early Latter-day Saints, people sought to build their own ladder to heaven on the plain of Shinar. From this Babel perspective, believers could argue that it is the one who makes us immortal rather than the mere fact of immortality that matters most. The perfect immortality of the afterlife comes through Christ and a moral transformation, while the perfect immortality of biomedical enhancement comes merely at the price of purchased technology. Mormons could argue that God has already “enhanced” Enoch’s city, the Apostle John, and the Three Nephites. To turn that holy process into the equivalent of a steroid-augmented athletic contest seems a sacrilege. Many Latter-day Saints believe that we should focus on changing our hearts; in his due time, God will change our bodies. In the other
envisioned enhancement of the body, there is no attendant change of heart. The immortal but unredeemed person proposed by Harris resembles no one quite so much as the hypothetical Adam who ingested the fruit of both trees (Alma 12:22–27).

Harris, beyond dismissing such beliefs as absurd, obscurantist, and superstitious, would likely claim that because we do not reject current medical therapy as bricks in a mounting tower at Babel, we should not reject more aggressive efforts. Harris repeatedly and explicitly invokes a slippery slope, but he uses it to force his point rather than to urge caution, as the trope is normally applied. Though many religionists believe in and cherish faith healings, they generally exercise caution and also turn to physicians to heal their bodies. In contrast, if any enhancement, even eyeglasses, is reasonable, then all enhancement must be reasonable, Harris argues. If the embryo is morally indeterminate, then so is the seriously disabled infant—he actually advocates infanticide (98–100) in certain circumstances. Most reasonable people will recognize that this sort of absolutism is unlikely to be fruitful, that the best solution lies somewhere between the extremes. Somewhere between eyeglasses and biomedical perfection of the body may stand an important threshold or region that should not be crossed.

Grounding the Good

Moving from the realms of personal and corporate religious belief, I have a more vital objection to Harris’s pursuit of enhancement. For a project that, according to Harris, must override such foundational concepts as human identity, the rights of future humans, and the meaning of mortality, surely there must be a reliable standard for the weightier good. The determination of the good to be achieved, though, is the Achilles heel of his approach.

Harris does not make his grounding of the good terribly explicit, but it appears to arise from two sources, a metaphysical and teleological belief in evolution as a mandate for “progress,” and an implicit or imagined consensus of the majority of “reasonable” people. The former is as unsupported philosophically as the religious worldviews Harris rejects, while the latter is an inconsistent pseudo-democratic impulse that ignores the moral impulses of the large majority of actual people (who are by Harris’s metric unreasonable).

Repeatedly, Harris affirms the moral necessity of enhancements or embryonic selection on the basis of doing “good.” He invokes a “responsibility shared by all moral agents, to make the world a better place” (3).
He repeats himself on the next page: there is “a clear imperative to make this world a better place” (4). Later he provides a hint of greater detail as to what he might mean: “Saving lives, or what is the same thing, postponing death, removing or preventing disability or disease, or enhancing human functioning” is the good we must all seek (50). Harris’s dream is of “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” (185). True, these goals sound desirable, but why? In a world where humans are merely agglomerations of genetic material, what impels us to privilege human enhancement over otter or gerbil enhancements or the building of a giant abacus? For Harris, human functioning seems to be a euphemism for evolutionary or medical fitness—more powerful, sexually attractive, and cognitively sophisticated. These definitions postpone or ignore the question of the good. Surely the measure of human meaning is more than existing indefinitely in excellent physical health and physicosexual potency. Harris skirts the issue by defining the meaning of existence in terms of medicalized fitness or longevity.

Harris’s choice of a title for his book is an important indication of his broader approach. He justifies biomedical enhancements as the next phase in evolution, appropriate because the impersonal forces of nature have long engaged in similar “behavior.” Harris seems to argue that evolution makes us better, so why should we resist the chance to do the same to ourselves that evolution has historically done to us?

Without being entirely explicit, he also absorbs and disseminates the broader religious sensibilities of New Atheism. Evolution thus becomes not only scientific consensus but a potent metaphor for the meaning of existence. Evolution makes us live longer, look better, and be smarter. It guides us to want these better outcomes for ourselves and, to borrow an image from Richard Dawkins’s odd metaphysics of genetics, it guides the genes that reproduce themselves throughout the generations. Within the evolutionary model, particularly the one that is biomedically enhanced by Harris’s anticipated therapies, what we consider human is a mere artifact of a given moment in our development from the ancient Mitochondrial Mother Eve to whatever superhero awaits. Mitochondrial Eve—the essentially heuristic assumption of an African first human ancestor—along with Y-chromosomal Adam, are terms much beloved by evolutionary polemicists but that also betray a certain holy reverence. This heavily teleological vision of evolution is as nonrational as the groundings of meaning that Harris rejects. Darwinian evolution, strictly speaking, argues that reproductive fitness within a particular ecological niche tends to be maximized
over long periods of time. The only way to get something else from evolution is through quasi-theological and, frankly, worshipful amplifications.

The persistent question is why should reproductive fitness in a given ecological niche matter fundamentally? What is it about the hunger for survival and pleasure of *Homo sapiens* that requires its normativization now and in the future? And if the definition of the good derives from something fundamental about humans, how can we decide the good without reference to the meaning of being human?

There is a certain Benthamite inevitability about Harris’s calculus. Unfortunately, traditional assumptions about how to bring the most good to the most people (the core impulse of Bentham’s utilitarianism) have seen significant challenges in recent decades. Evolving data from economics and experimental psychology suggests that happiness is not correlated with wealth, and while happiness lessens with disease, there is no clear evidence that happiness is improved with supranormal functioning. In fact, data suggests that marked inequality tends to limit human happiness for all but those at the upper echelons, while full equality may fail to deliver happiness for certain participants in a society. Our highest performing illegally enhanced athletes, while they win games and break records, are not manifestly thereby happier. But if happiness is not the metric for the good, is it merely longer lifespan and freedom from activation of nociceptive nerves responsible for communicating physical pain? It is difficult to define the good without coming to terms with the human and its grounding, both cosmic and moral. But Harris explicitly refuses to engage in such philosophical struggles.

How, in Harris’s calculus, does one distinguish an enlightened society of mortals from a benighted society of immortals? What does it mean to live smart, healthy, and long without a soul (either in the metaphysical or metaphorical sense)? For believers in the Christian scriptures, this would seem to be a textbook case of what Jesus described as losing life in the attempt to save it (Matt. 10:39; 16:25–26; Luke 9:24; 17:33). In the absence of an overarching system of meaning, what makes Harris’s goals any less arbitrary than the goals espoused by others—such as Michael Sandel or Leon Kass—to experience the emotion of humility or to appreciate the poignancy of our temporary existence? Harris dismisses his opponents as neo-Luddites, but he does not offer any more persuasive arguments to support his goals.
Personal Thoughts

I should confess that, as a socially and politically liberal academic physician, prior to reading this book I supported most enhancement applications, including embryonic research. The presentation of these arguments by Harris has given me pause. When the apologia is an unreflectively metaphysical attachment to the “more is better” school of evolutionary theory, the entire program seems flimsy, a kind of faddish construct making the rounds of college campuses and coffee shops. That Harris evinces an almost Pollyannish certainty that biomedical science will succeed gives the book an air of science fiction. This fictitious quality to the project makes Harris seem less credible still.

Though the Nazi card can be overplayed in analogies within biomedical ethics, it is worth remembering that the concept of intentionally improving the fitness of the human race through medical or pseudomedical interventions antedates by at least a century the deciphering of the genetic code. The field of eugenics existed long before German National Socialism; individuals as varied as Winston Churchill, Oliver Wendell Holmes Jr., George Bernard Shaw, Margaret Sanger, and in a way even the late nineteenth-century Latter-day Saint polygamists all believed in some form of biological intentional manipulation of future generations to improve the species. The similarities between enhancement and eugenics can be overstated, but it would be incorrect to dismiss entirely such criticisms by comparison. Using Harris’s own reasoning, the refusal to provide an enhancing technology is morally indistinguishable from the active causation of harm of a similar degree. Restriction, even if by market forces, of enhancements from those at the socioeconomic margins may be the functional moral equivalent of forced eugenic policy, even if no single individual or legislative body can be easily blamed. Allowing wealthy parents and social groups to shape the physical makeup of their next generation, to “enhance” evolution, may make the offspring of poorer parents less fit (and less happy) still, since reproductive fitness (and happiness) is always defined situationally.

Chasing per capita income and consumption has not clearly improved the quality of life or reported levels of happiness in the West over the last several decades. Is there any reason to believe that escalating this arms race of personal power into the genome will yield better fruit? Is it not likely that artificial enhancements will create new forms of economic and social classes together with their own invidious forms of discrimination and competitive imperialism? Even if biomedical outcomes of enhancement technologies (a subject better suited to speculative fiction
than rigorous science) were known with certainty, the social and human implications for populations are difficult to map predictably. We cannot reliably foresee the outcomes of our genetic interventions. Even the much milder enhancements of engineered pharmaceuticals have unexpected results missed in the decades of research and testing leading up to product release. How would the drug recall of a meddled (and thereby muddled) genome take place? While Harris dismisses concern about the risks of misfires or unintended side effects without argument, the experience with cane toads in Australia (ecological mayhem) and thalidomide in morning-sick women (severe birth defects) may give us pause. Closer to home are the COX-II inhibitors (VIOXX is the best known) that were proved after their FDA approval and broad dissemination to increase the risk of heart attacks. In as complex a system as human heritability (which is not strictly limited to the genome, either \textit{in} or \textit{ex utero}, a point the biomedical community is only now beginning to comprehend), the probability of predictable outcomes, except in very rare settings, is quite low.

Ultimately, though, my primary objections to Harris’s line of arguments are my belief in divinity and an actual afterlife, the problematic nature of declaring the good when neither human nature nor God is available as a signpost, and that extremism impairs our ability to draw the line in complex situations. A crucial point is that in these novel areas of ethics and ability, there will need to be lines drawn somewhere. Even Harris agrees that genetic enhancement should not be undertaken against the will of a cognitively intact adult or as part of a system of human enslavement (such as engineering clones with large muscles and stamina and limited intellectual reserve specifically to work in factories). Yet his extremism makes even such scenarios and determinations problematic when the overwhelming good is defined as duration of life and augmented fitness for each agent able to purchase such outcomes.

The book is a lively and challenging read, though, whatever its flaws. My primary satisfactions with \textit{Enhancing Evolution} result from Harris’s exceptional ability to expose the unconscious compromise and inconsistencies we engage in when discussing medicalization and enhancement. He has made me think much harder about the meaning of human identity, even as he himself refuses to engage it. \textit{Enhancing Evolution} provides a highly readable overview of a strongly argued libertarian and technophilic position on the questions of human enhancement. Given the tendentious tack of the author, it may be a book best read on loan from a library—many theists will find themselves uninterested in supporting the author financially, even though they are obliged to confront his arguments.
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1. Sandel’s essay began in *The Atlantic* (April 2004) and has been revised and published by Harvard University Press as *The Case against Perfection: Ethics in the Age of Genetic Engineering* (2007).

