of physical attributes, across a continuum of intellectual capacities, and with values relative to their own species and its characteristic abilities. Human persons might be able to radically enhance themselves to become members of a different species and ascend to higher levels of bodily ability, intellectual capacity, and moral consciousness. Agar says they should not, not because they would not be better, but because they would not be human and would not retain the human experiences they value as humans. If he applied this rationale consistently, he would say the same thing about monkeys who had the ability to become human beings.

I think the truth is otherwise. I think we should want to be better and to attain the greatest possible perfection of our physical, intellectual, and moral capacities. I do not think radical enhancement proposals of the kind Agar considers would likely bring us closer to that perfection. Far from making us superhuman, I think they are much more likely to make us subhuman for many of the reasons that Agar identifies: the likelihood that radical enhancement would lead to the breakdown of loving relationships, social injustice, and exploitation of the poor. Radical enhancement might make us better at computation and improve our bodily health—things that are authentically good and rightly to be

sought. If it also makes us uncaring of our neighbors, disloyal to our families, abusive to the needy, and independent of our God, then we are made worse, not better. Our path to perfection is not to be found in the radical enhancement considered in this book. It is not in making ourselves post-human. It is in God making us fully human. As St. Irenaeus said, "The glory of God is man fully alive."

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- 1. Presenting Pascal's wager authentically does not seem to be Agar's concern. In any case, his presentation is not wholly authentic. For example, Pascal claims that if one bets in favor of God's existence, one loses nothing. According to Agar, one loses "little—You waste time worshiping god(s) ... [and lose] time to devote to more pleasurable or meaningful activities" (40).
- 2. In this example, the pre-enhancement human's moral consciousness of the consequences of global warming is presumably based on a human perception of the reality of global warming. It would seem to follow that the post-human's superior intellectual perception would mean the more cerebral concerns that take precedence in his moral consciousness would be superior concerns based on more important realities.

Beyond Humanity? The Ethics of Biomedical Enhancement by Allen Buchanan

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Allen Buchanan's wide-ranging book argues strongly in favor of what he calls biomedical enhancement. His position is influenced by his expertise in international law coupled with his considerable experience in bioethics. Significantly, the first edition of *Beyond Humanity* was published simultaneously with *Better than Human: The Promise and Perils*

of Enhancing Ourselves in 2011. The first is presented as a scholarly work, whereas the second is more popular and explicit in its presumptions and conclusions. Better than Human does not ask a question; it manifests what is only implicit in Beyond Humanity.

The preface to *Beyond Humanity* reveals one of Buchanan's basic premises: "Human

beings have always tried to enhance themselves—to improve their mental, physical, and emotional capacities" (xi). The first sentence of chapter 1 provides the middle term: "Biotechnologies already on the horizon will enable us to be smarter, have better memories, be stronger, quicker, have more stamina, live longer, be more resistant to diseases, and enjoy richer emotional lives" (1). The rest of the book builds on the premise to demonstrate that the middle term is true and good while objections to it are dead wrong. The reader is easily led to the conclusion that enhancement is beneficial, perhaps necessary, under certain conditions. Buchanan also proposes to survey the enhancement debate, which he finds frustrating on account of the low quality of the dialogue. Next, he discusses five deplorable trends. Surprisingly, an analysis of Buchanan's own account shows that he follows many of them.

Murky Rhetoric Masquerading as Argument

Buchanan states, "Perhaps more so than in any other area of ethical controversy, some of the most prominent figures in the debate persistently substitute high-sounding rhetoric for reasoning" (2). He argues that this is the case among some of his opponents, including George Annas, Michael Sandel, Jürgen Habermas, Francis Fukuyama, Leon Kass, and the now-defunct President's Council on Bioethics. There is some irony here, for Buchanan employs rhetoric extensively. Although a tu quoque argument rarely settles a debate, it is worth noting that Buchanan is not shy about employing ad hominem attacks and obfuscation to defend enhancement.

The first seven pages of *Beyond Humanity* give us a flavor of Buchanan's rhetorical prowess. He says that his opponents are dead wrong and frustrating; their positions stem from careless inaccuracy; and they have "a tendency to substitute rhetoric for argument," since their claims are obviously false, demeaning, and misleading (1–7). These value-laden expostulations are part of the author's overall strategy, as can be seen in their tactical deployment.

Sweeping Empirical Claims without Evidence

Buchanan is quick to attack his opponents' "sweeping empirical claims" that are offered "without a shred of evidence" to support them (5, 8–10), but his own discussion of nature as "a source of substantive moral rules" reveals unsubstantiated moral presuppositions (125-134). For example, he notes that "if biomedical technology eventually made it possible to create an individual by combining DNA from partners who were of the same sex, this would not be human procreation [according to natureas-normative proponents] ... this would be inhuman or less than human" (127, original emphasis). Indeed, Buchanan's opponents might respond that procreation in the fullest sense exists only within the complex ecosystem of a male-female marital commitment; anything else is a disordered production of a human.

Buchanan continues to build an argument by equating intellectual objections to homosexuality with racism: "The history of prejudice and persecution is replete with normative essentialist claims: homosexuality is unnatural, marriages between the races are unnatural" (131). His rhetoric intensifies: "Their deployment of the notions of human nature and the natural has been shown to be naive and superficial in the extreme: they proceed as if ... the long history of oppressing people by branding their relationships as 'unnatural' or less than human had never occurred" (139). He is essentially saying, if you disagree with me, you are on the side of prejudice and persecution.

Fundamental Obscurity: What's the Bottom Line?

Effective dialectic is founded on clarity of positions, and Buchanan is rightly frustrated with his opponents' passionate rhetoric, strawmen, and the ambiguity of their actual positions (10). This leads to the question, what is the essence of the enhancement enterprise according to Buchanan? There are good reasons to think that the term is a euphemism for transhumanism and eugenics. *Beyond*

Humanity avoids discussing these subjects, but the more palatable term enhancement means nearly the same thing.

In his seminal 1957 article, "Transhumanism," Julian Huxley argues that humans can consciously direct their evolutionary progress. He writes, "The human species can, if it wishes, transcend itself-not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity." Therefore, "Whether [man] wants to or not ... whether he is conscious of what he is doing or not, he is in point of fact determining the future direction of evolution on this earth. That is his inescapable destiny, and the sooner he realizes it and starts believing in it, the better for all concerned."1 Like his predecessor, Buchanan sees human intelligence as the power that can leverage humanity beyond itself. He argues strongly against the notion that evolution is a master engineer that has formed humans according to an optimal design (155-8, 181–93). Rather, it has dealt us a poor hand, but we can deal ourselves the next round: intentional genetic modification "has the potential ... to reduce or avoid the death and suffering" that are a result of evolution (193). Human-directed evolution can overcome the limitations of unassisted evolution and thereby benefit humanity (204). In other words, what is impossible for nature "can be a relatively simple task for a human engineer" (190). This human-directed enhancement of evolution's products, like the process of globalization, is inevitable (11-12). This analysis shows that Buchanan's claims are weaker versions of the contemporary transhumanist line that says humans not only can be but unavoidably will become "engineers of our own evolution."2

In an earlier co-authored work, Buchanan notes that the term eugenics was coined by Francis Galton, and the concept was quickly adopted by his brother-in-law, Charles Darwin. It was originally a euphemism for breeding humans like animals. Galton defines eugenics as the "science of improving stock—not only in judicious mating, but whatever tends to give the more suitable races

or strains of blood a better chance of prevailing over the less suitable than they otherwise would have had."3 We can find the same concept in Buchanan's work, albeit under a new name. Just remove the word "races," and Buchanan substantially agrees: "Because it is not subject to the vagaries of un-assisted evolution, [intentional genetic modification] technology can safeguard valuable genotypes much as early humans cradled fire, protecting the genetic resources needed for survival for current and future generations" (188). It may be that, despite clear sympathies with the substance of original theory, Buchanan updated its techniques to distance himself from eugenics' association with Nazi policies.

Therefore, his discussion of the practical worry that enhanced humans will enslave, subjugate, or maltreat supposedly lesser persons—as was the practice in many twentieth-century dictatorships-is surprisingly brief (225-227). In his view, if scientists can make the master race morally superior, the problem could be solved. This solution overlooks free choice in enhanced humans, and it begs the question as to whether it is possible to morally enhance an individual through physical manipulation, which is inextricably linked to the larger question of what constitutes morally upright behavior. He says a solution would involve a risk-benefit analysis and an evaluation of how fairly the enhancements are distributed (240 note 26). At the same time, Buchanan entertains the idea that an innocent individual could be sacrificed for the sake of a group, and acknowledges that the rights of the vastly less intelligent or technologically sophisticated are unlikely to be preserved by those with greater intellectual and technological power (225, 235). Nevertheless, he holds that enhancement is morally acceptable so long as the benefits of a master race outweigh the sacrifice of a few innocent humans and the enhancements are fairly distributed.

Buchanan labels his opponents as antienhancement and conservative. He defines anti-enhancement by objective criteria: it includes whoever is opposed to enhancement in all cases. Conservative is a complex political concept that Buchanan defines in relation to Edmund Burke, who, although he says nothing about bioethics, voiced a political position that Buchanan attributes to individuals who do not quote Burke (13, 54-60, 84, 143-70). One might think that the obverses of these positions would be pro-enhancement and liberal, but instead Buchanan uses psychological descriptors to avoid the substantive issue: "There seem to be no prominent participants in the debate who are accurately described as 'pro-enhancement,' if this means they endorse enhancement as enthusiastically and as completely as Sandel and Kass reject it" (13, emphasis added). This description of his opponents is surprising because he says that the distinction between therapy and enhancement is often blurred (26). Surely he knows that his opponents strongly support therapy, which, according to Buchanan's own description, falls under the very broad umbrella of enhancement.

Buchanan claims that most people are moderately "anti-anti-enhancement," which, in his view, is moderate, against bad reasoning and in favor of enhancement under certain conditions (13). As for the label liberal, Buchanan attempts to slip out of the political straightjacket he tries to fit onto his opponents by saying, "Some 'liberal' writers (or who at least some would describe themselves as liberal) have strong reservations about enhancement, or even flirt with the 'anti-enhancement' stance" (14). In other words, some liberals are not liberal enough. Their liberalism should be qualified if they either have very strong reservations about enhancement or consider anti-enhancement to be a reasonable, if erroneous, position. For his part, Buchanan lists the advantages of a society that "embarks on the enhancement enterprise" because it recognizes the moral legitimacy of enhancement (17).

Stuck at the Pros and Cons

Finally, Buchanan states that the debate has stalled in discussing the pros and cons of enhancement rather than recognizing its inevitability (11). This shifts the conversation away from questions of morality toward ones

of practicality. Buchanan says that the title Beyond Humanity is deliberately ambiguous (30). For him, the question is two-fold: (1) Is technology powerful enough to help us move beyond humanity, that is, beyond limitations that are natural to humans? (2) "Does humanity, as it is now, have the wisdom and the character to face the challenges of enhancement" (30)? Everything that we have seen so far implies that Buchanan would answer the first with a definitive yes, because he thinks technology will enable us to cheat death (193), and would probably answer the second with a cautious yes, provided we implement his recommendations about building a massive nongovernmental regulatory body to ensure the just distribution of technology (243–279). Buchanan does not ask the obvious question, should we go beyond humanity?

Buchanan avoids a moral analysis by focusing on the enhancement half of the equation and saying little about the humanity half. He performs yeoman service for progress by describing the benefits of enhancement, poking holes in the arguments of its opponents, and proposing reasonable safeguards for its development. His examinations of enhancement's unintended consequences (138-139, 154-155) and its possible influence on economic development and the common good are particularly insightful (44-49, 55-63). But Buchanan is not even sure humanity exists-an "appeal to human nature" has no place in ethical deliberations (135). He engages his opponents with a generic conception of human nature that is devoid of content (118) and so broad that it would count cultural accretions, such as language and the use of tools, as a part, not an effect, of human nature. Buchanan's vision is so qualified that one could argue that immature human beings or even adults whose maturity is contestable do not have human nature.

Ultimately, Buchanan reveals that his interest lies primarily in the realm of power. He asks whether we have the power to go beyond humanity, not whether we should. This is because he does not pose the crucial question, what is humanity? Without answer-

ing that question, the previous two are rather nonsensical, as if someone said, "I think we should make better cellphones, but I don't know what a cellphone is, and knowing what a cellphone is does not matter to its improvement." On the contrary, no one can improve what he cannot identify. If an engineer does not know the difference between an iPhone and a Samsung or if he cannot distinguish among variants of those types, his tinkering will probably turn the phone into a brick instead of a best seller. Buchanan's question, beyond humanity, asks if we can cross a line while saying that we do not know where the line begins or ends or even whether a line exists at all. Without a thorough and accurate knowledge of the thing's nature, we will find, like the ignorant engineer with the cell phone, that improvement will be limited and eventual

destruction will be likely. Whether or not the benefits are worth the risks, Buchanan's thought-provoking work deserves careful consideration.

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- 2. Abigail Tucker, "How to Become the Engineers of Our Own Evolution," *Smithsonian Magazine*, April 1, 2012, http://www.smithsonian mag.com/.
- 3. Allen Buchanan et al., *From Chance to Choice: Genetics and Justice* (Cambridge, UK: Cambridge University Press, 2000), 30, 31.

Unfit for the Future: The Need for Moral Enhancement

by Ingmar Persson and Julian Savulescu

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In this book, authors Ingmar Persson and Julian Savulescu concede that the well-being of the human race depends on socioeconomic factors as well as civil rights and liberties. However, despite the global emphasis on political equality, they anticipate a future global catastrophe. First, the unmitigated efforts of societies, primarily in the West, to maximize their wealth and consume natural resources have triggered climate change, which will have terrible consequences for the world's population, especially the poor. Second, affluent nations that continue to raise their standards of living by misusing natural resources make it more difficult for emerging economies to acquire the food, water, and other natural resources needed for survival. Third, given the relatively easy access that many nations have to atomic and biological weapons, the possibility of doing the "ultimate harm" to

the whole world is more proximate than remote, either in retaliation against exploitative nations or in a bid to secure resources.

According to the authors, there are two solutions to this dire situation. First, there should be a movement to enhance the moral education of the masses. Second, this should be accompanied by a research program to discover pharmaceuticals that can enhance the morality of persons and, eventually, their governments. Prozac already prevents hostile feelings among former prisoners and individuals suffering from major psychoses, and oxytoxcin is being used to treat certain types of depression, for example, enhancing mothers' empathy for their babies. Likewise, steroids, Ritalin, and modafinil can affect mood, memory, and performance. This sounds unrealistically utopian. Changing the feelings of humankind through chemicals to