

Creating a Higher Breed: Transhumanism and the Prophecy of Anglo-American Eugenics



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Introduction

How we assess current calls for vigorous, or “radical” (Agar 2010, 2014), enhancement through befitting procreative choices depends in part on the plausibility of supporters’ rejecting all substantive ties between their views and earlier eugenics. When denying such connections, today’s advocates of vigorous enhancement (i.e., transhumanists) routinely emphasize that enhancement decisions would stem from individuals and families, not the state.¹ In a multipronged critique, I show the untenability of transhumanists’ denials.

When transhumanists distance themselves from eugenic history, Nazi eugenics tends to be at the fore. Reference to it does not settle the matter, however, for an investigation of links between transhumanism and Anglo-American eugenics yields important connections that span notions of human agency, views of our mental faculties, shared ethical commitments, and deleterious implications for democracy as we know it.

Transhumanists and Anglo-American eugenicists insist that human agency, channeled into scientific and technological innovation, supplant Darwinian evolution and henceforth direct human improvement. Their general lenses on the mind are similar, for the products of said agency would be used to dramatically heighten both rationality and prosociality and to weaken or, better, eliminate “antisocial” traits. Further, the two parties rely on rationales from public health. In so doing, transhumanists align themselves with a utilitarian ethical frame that is also evident

¹Like Hauskeller (2012: 40), I use “transhumanists” as an umbrella term for current advocates of radical enhancement, who share the pertinent commitments, whether or not they apply that term to themselves.

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in their broader defenses of the good of enhancement. Beyond an insistence by prominent figures that moral bioenhancement would be required of everyone (Persson and Savulescu 2008: 174), transhumanists' notions of well-being and harm avoidance yield a utilitarian-style obligation to enhance, particularly regarding cognition, that may be politically enforceable.

Though most transhumanists insist or presume nonetheless that liberal democracy will remain intact, the credibility of their assurance that it will not merely endure but even be furthered is challenged increasingly from within the discourse of enhancement supporters themselves. Not only do some transhumanists recognize that pursuing radical enhancement will involve movement away from liberal democracy, but several bioethicists have recently supported bioenhancement via procreative decision-making for the express purpose of augmenting societal well-being (Jefferson et al. 2014; Douglas and Devolder 2013; Elster 2011; Buchanan 2008). To embrace societal welfare as a basis for reproductive decisions is to risk subordinating personal druthers, by implication or even expressly, to social ends (Duster 2003).

Although the positions of transhumanists and Anglo-American eugenicists are not identical (for which view see Koch 2010), exploring in depth a number of writings from both periods allows one to show how close the parallels between them are on the level of ideas, including in some cases the very terms of their formulation. Knowledge of these connections casts unsettling light on transhumanists' alleged yearning to realize perennial human ideals.

The Need for a Fuller Assessment of Transhumanists' Claims About Earlier Eugenics

The following are representative illustrations of how transhumanists handle the relation of their thought to prior eugenics. In their dismissals of the very notion that common ground exists between their project and eugenic history, Nazi eugenics is often featured expressly, as when Julian Savulescu recently insisted that his vision of our enhancement "is not based on race or on the Social Darwinist values that the Nazi program was," being wedded instead to individual and familial freedom (2013: 41).

Alternatively, eugenic history is presented as unitary in the sense of covering Anglo-American and Nazi varieties. Thus, Savulescu elsewhere describes eugenics as "the movement early last century which aimed to use selective breeding to prevent degeneration of the gene pool by weeding out criminals, those with mental illness and the poor, on the false belief that these conditions were simple genetic disorders. The eugenics movement had its inglorious peak when the Nazis moved beyond sterilization to extermination of the genetically unfit" (2005: 38). Similarly, having observed that following World War II, eugenic undertakings in the USA and Germany "were rightly repudiated," Lee M. Silver demarcates "embryo selection from [those] abhorrent eugenic policies...with the claim that embryo selection

would be freely employed in Western society by prospective parents who were not beholden to the will of the state. As a consequence, the use of the technology would not be associated with any restrictions on reproductive liberty” (2007: 254, 261; see further Pence 2012: 106–108).

Where both Nazi and Anglo-American eugenics are mentioned, the former is all but certain to shape one’s estimation of the whole. This dominance is likely even where Nazi eugenics is merely alluded to rather than mentioned, as when transhumanist philosopher Nick Bostrom deplors “the sorry track record of socially planned attempts to improve the human gene pool....In each case, state policies interfered with the reproductive choices of individuals. If parents had been left to make the choices for themselves, *the worst transgressions of the eugenics movement* would not have occurred” (2003a: 499, emphasis added; see also 2005a: 206; Savulescu and Kahane 2009: 282).

As Diane B. Paul observes, accounts that tether eugenics to “compulsion and jackbooted Nazis allow champions of the new technologies to sharply demarcate their projects from eugenics—to emphasize discontinuity....Indeed, if eugenics is equated with coercion, it allows the enthusiasts to claim either that reprogenetics is not eugenics at all or that it is eugenics of a benign sort” (2007: 7).² This scenario, illustrated above, gives an unearned edge in plausibility to transhumanists’ rejection of all substantive ties to eugenic history, which has helped thus far to limit opportunities for a fuller assessment of the relation of that history to transhumanist advocacy in terms of theoretical commitments and their practical implications. This evaluation has two facets. First, far from arising in a vacuum, Nazi eugenics was impacted by the already existent Anglo-American tradition, inaugurated by Francis Galton, who coined the term “eugenics” in 1883. When it came to law and policy, Germany singled out the USA for praise and emulation because its promulgation of laws on sterilization, immigration, and marriage contrasted with Britain’s emphasis on voluntarism (Paul 1992: 669; 2007: 4; Kühl 1994: 25–26, 116n26). In fact, Germany’s Sterilization Law of 1933—“the first major triumph of Nazi racial hygiene”—deliberately emulated US precedent (Proctor 1988: 7; see also Duster 2003: 141).

In 1911, sterilization laws existed in 6 states; by the end of the following decade, that number was 24 (Kevles 1995: 47, 111). In contrast, sterilization was not legal in Germany prior to 1933 (Proctor 1988: 96). German interest in American legal precedent on this topic is already documented in medical and scientific publications during the second half of the 1920s (Kühl 1994: 24). According to Stefan Kühl, the prior existence of sterilization laws in the USA helped expedite the Nazis’ institution of Germany’s own law within 6 months of assuming power (1994: 39); the Nazis could cite, too, earlier US research on the alleged biological transmission of “criminality” across generations in two families, the Jukes and the Kallikaks (39–40). The influence of US legal precedent in the area of sterilization outlasted World

²Opponents’ likening of transhumanist advocacy to Nazi eugenics may be self-serving, too (Paul 2005: 142); in sum, “both critics and enthusiasts have (disparate) interests in constructing a history that identifies eugenics with brutal coercion” (142). Addressing the point about critics, though certainly important, falls outside my purview here.

War II, for, at the war crimes tribunals, it prevented the allies from classifying Germany's sterilization law as such a crime (Proctor 1988: 117). German admiration was also directed at the USA for its legal restrictions concerning marriage and immigration, including the American Immigration Act of 1924 (173–174; Kühl 1994: 25–26).

Further, admiration of US and German practice was bidirectional; for example, ruing the fact that our Constitution precluded national legislation in areas such as marriage and sterilization, leaving them to states' discretion, American eugenicists not only took pride in US influence on Nazi policy but envied the Nazis' ability to promulgate laws for Germany entire (Kühl 1994: 39, 50). *Eugenical News*, a publication of the Eugenics Record Office in Cold Spring Harbor, New York, was a route through which awareness of eugenics was promoted in the USA during this period (Allen 1986: 245–246). In a 1937 article published there, Harry Laughlin lauded *Erbkrank*, a German film whose US distribution he facilitated (Kühl 1994: 49), for its showcasing of Germany's headway in “applied negative eugenics” (Laughlin 1937: 66). Laughlin denied that the film was racist despite its embrace of the idea that Jews were prone to retardation and moral turpitude (66; Kühl 1994: 49). Beyond the foregoing, in the 1920s and 1930s, a web of ties existed among eugenicists in the two countries, forged and furthered by (1) correspondence, (2) publications, (3) travel, and (4) honorary degrees (for illustrations, see Davenport 1936; Allen 1986: 253; Proctor 1988: 99; Kühl 1994: 19, 59–62, 85–86; Burgers 2011: 139; Comfort 2012: 97).

The second facet of a more open and ample evaluation of how transhumanism relates to earlier eugenics is my focus here: scrutiny of the ideas and arguments of Anglo-American eugenicists shows that granting the distance of transhumanism from “the worst transgressions of the eugenics movement” (Bostrom 2003a: 499) under the Nazis is not equivalent to—and in no way supports—transhumanists' rejection of substantive ties between their views and prior eugenics as such.³ In 1935, American eugenicist Hermann Muller stated that “[o]ur ideas of what sort of progress is possible or desirable for man must depend...upon our views of his nature” (1984 [1935]: 15). Transhumanist Gregory Stock makes essentially the same point: “At a fundamental level, [debate over human enhancement] is about... what it means to be human [and thus] our vision of the human future” (2013: 303). I will argue that transhumanists and earlier eugenicists construe this shared point in similar ways (henceforth, unless otherwise indicated, “earlier” and the like, applied to eugenics, refer specifically to the Anglo-American tradition).⁴

³Though I find the relationship more concerning than she does, I concur with Paul that the true backdrop for transhumanism is Anglo-American, not Nazi, eugenics (2007: 5–6; 2005: 125–126). Bearing on the point about levels of concern, perhaps, is that Paul (2007) features transhumans (5), reserving mention of posthumans, whose capacities would fundamentally surpass ours, for a footnote (15n1). Paul's division suggests that they are detachable, with posthumans being the less directly relevant aspiration. For transhumanists themselves, however, the opposite is the case.

⁴Extensive common ground exists within the Anglo-American tradition despite movement away from the racialism of so-called mainline eugenics that Osborn illustrates (1968: 11, 104–105). Discussing Anglo-American eugenics by stage, including how far racialism was truly set aside, falls outside my purview here.

In the ensuing sections, I document six important, shared ideas. First is the notion that, for human development to continue robustly, our agency must supplant Darwinian evolution, henceforth steering what transpires (“Human Agency Creates, Then Becomes, the Divine”). Since transhumanists and prior eugenicists are deeply concerned with the capacities of future persons, they single out procreative decision-making as a key arena in which this direction should occur. According to Savulescu and Guy Kahane’s (2009) Principle of Procreative Beneficence (PB), parents are morally obliged “to create children with the best chance of the best life.” Or, on Muller’s formulation, “[w]hen we consider what the recognition of [his favored procreative] principle would mean for...children...our obligation becomes clear and compelling” (1984 [1935]: 112).

As to the traits that science and technology would address, reason and prosociality are singled out for augmentation (“Our Elevation with Respect to ‘Non-disease’ Conditions”); correspondingly, our capacity for “negative,” or “antisocial,” emotion would be tamped down, even eliminated (“In Tandem, Eliminate the Allegedly Deleterious”). Turning to social, political, and ethical rationales, one finds argumentative recourse to the sphere of public health, where measures’ justification is always utilitarian (“The Great Wingspan of Public Health”). Further, then and now, the broader ethical grounding of proposals for dramatic human improvement is often itself utilitarian. This is avowedly so for Anglo-American eugenicists, but transhumanists, too, depend on utilitarian rationales, their insistent vaunting of autonomy notwithstanding (“Shared Utilitarian Commitments”). Not only does this reliance shape measures’ choice and justification, but a utilitarian perspective on human improvement has sociopolitical implications that would jeopardize our ongoing commitment to liberal democracy (“Sociopolitical Commitments and Implications”).

This last point is crucial both in its own right and because the bulwark of transhumanists’ defense against the contention that substantive links exist between their thought and earlier eugenics is the claim that the latter was state-managed, while their thought regarding enhancement features personal discretion (cf. Paul 2007: 8; Rubin 2014: 127–128). Absent this barrier between state steerage and personal choice, transhumanists’ ultimate defense against the charge of substantive ties to prior eugenics—that decisions to (or not to) enhance would be our own—evaporates.

Human Agency Creates, Then Becomes, the Divine

Our first shared feature is the view that human agency, or “rational evolution” (Savulescu 2005: 38), should replace the Darwinian variety as the controller of our development, with species-changing results (see also Harris 2010 [2007]: 3–4). Transhumanists emphasize that natural selection is blind (Naam 2005: 232; Broderick 2013: 436; Chislenko 2013: 143) and painfully slow (Stock 2003: 184; Blackford 2010: ii). These features of it, conjoined with our increasing scientific

knowledge and technological adeptness, have rendered natural selection “largely irrelevant to the larger trajectory of [our] evolution,” which, going forward, should instead be governed by “conscious design” (Stock 1993: 227–228).

This scientific-technological steerage is requisite because “[it] will grant us awesome powers...to...proactively remake Humanity... We can transcend our original biological nature, and become *as if* divine; we’ll be as far ahead of current human capabilities as current humans exceed the prowess of our ape forebears” (Wood 2013). Embracing “the imperative to progress” (More 2013c: 267) will lead to our creating “god-like beings” (Walker 2002), or “demi-gods” (Harris 2003: 95). Indeed, vastly augmented existence “is the birth right of every creature, a right no less sacred for having been trampled upon since the beginning of time” (Bostrom 2010). That said, precisely because “[t]he transformation is profound,” posthuman experience is currently “[b]eyond dreams. Beyond imagination” (Bostrom 2010).

Such talk is far from new: Galton proclaimed that “[w]hat nature does blindly, slowly, and ruthlessly, man may do providently, quickly, and kindly” (1904; see further Brewer 1935: 124; Muller 1984 [1935]: 45; Osborn 1968: 117). The key is subjecting our development to “rational control” (Huxley 1936: 28) versus leaving it to chance (Muller 1984 [1935]: 24, 100). Reflecting this mission, work at the impactful Eugenics Record Office, established in 1910, was governed by a vision of eugenics as “the scientific management of human evolution” (Allen 1986: 264). Per Karl Pearson in “The Ethic of Freethought,” to the extent that human reason grasps the infinite and translates that apprehension into practice, “the apparently finite mind of man...rules the infinite...[As the] master of his own reason [man is] lord of the world” (1901: 20; cf. Haldane 1932: 147). In other words, eugenics “is no longer solely an aspiration” (Osborn 1940: 293).

For prior eugenicists—like transhumanists—scientific-technological advance is not valuable intrinsically but because it will enable us to create “the superman of the future” (Haldane 1966 [1932]: 164); fittingly, Haldane named his earlier work laying out this vision *Daedalus* after the ancient sculptor whose creations were said to have powers fundamentally surpassing their original, given natures (1995 [1923]: 36–37; cf. Plato, *Meno* 97d–e [Plato 1903]). Haldane’s optimism about the future stems from his conviction that “not one of the practical advances which I have predicted is not already fore-shadowed by recent scientific work” (1995 [1923]: 46)—a confidence lavishly evinced by transhumanists now (see, e.g., Stock 1993: 158).

Further, like transhumanist philosopher Bostrom (2010), Frederick Osborn employs language of rights, claiming that “greater physical and mental perfection... should be the birthright of every human being” (1968: 111). Earlier eugenicists, too, use religious terminology: “[I]f mankind comes to realize its imperative mission to create out of itself something infinitely nobler and better...then euteleogenesis [i.e., eugenically steered procreation] will become a new evangel” (Brewer 1935: 126). Muller, in turn, exults that “miracles of transfiguration” await (1984 [1935]: 77). Unsurprisingly, transhumanists address the possibility that our successors may free themselves from earth altogether (see Stock 1993: 236; Kurzweil 2005; Moravec 1988, 1999). Muller, however, envisions that prospect, too (1984 [1935]: 62–64),

and in “The Last Judgment,” Haldane presents space exploration as required for the avoidance of human extinction (1927: 287–312; see further 1932: 146–147; Esposito 2011: 42). Finally, for prior eugenicist Osborn, as per Bostrom (2010), because the divide between present and future is steep, the content and modes of future existence are “beyond [our] imagination...today” (Osborn 1968: 116). The foregoing thematic and linguistic parallels are striking, indeed.

Our Elevation with Respect to “Non-disease” Conditions

According to PB, “[a]s...our ability to...select non-disease characteristics increases...[this principle] will require most reproducers to select the most advantaged child” (Savulescu and Kahane 2009: 281). The insistence of transhumanist John Harris (2010 [2007]: 53) that “possible functioning” replace the “normal” variety in the vein of Norman Daniels (1994) points to a similar decisional requirement. Some now view CRISPR as central to PB’s fine-grained implementation, the hope being that “‘fit’ alleles would be fixed into the population with gene editing technologies. The ‘unfit’ alleles would eventually be lost...[U]s[ing] CRISPR to decide which beneficial alleles get passed on...would allow us to bypass natural selection in totality” (Sahu 2017). As to what our agency should act *upon*, a key concern of transhumanists and past eugenicists is to dramatically heighten qualities viewed as beneficial and presumed to be such all the more once augmented. Then and now, the paramount features to be elevated are rationality/intelligence and prosociality.

Transhumanists depict their thought as anchored in the Enlightenment (Bostrom 2003b, 2005a: 202; 2005b; Pence 2012: 18; Bailey 2013: 338; More 2013b: 4, 10). Beyond displaying an allegiance to rational essentialism (More 2013b: 6), they single out reason for radical augmentation (Stock 1993: 56–60; Savulescu 2005: 38; de Grey 2013: 218; More 2013a: 450). Per Bostrom, “if what is good for us is to develop and exercise our rational nature, this implies that it would be good for us to become posthumans with appropriately enhanced cognitive capacities” (2008: 130). Once this occurs, even “today’s greatest geniuses [will] seem like simpletons” (Stock 1993: 167).

In addition, transhumanists offer dramatic comparisons across ontological planes. Though right now, “we’re just dressed-up chimpanzees” (Minsky 2013: 168), posthumans’ ability to think “will exceed human ability...by the same order of magnitude that human ability exceeds” that of chimps (Walker 2002). Beyond this, Stock foresees the emergence of “forms that transcend...human beings...by even more than we transcend the primitive worms and skeletons of the past” (1993: 52), and Hans Moravec anticipates that “disembodied superminds [will be] engaged in affairs of the future that are to human concerns as ours are to those of bacteria” (2013: 181).

For prior eugenicists, too, reason is our paramount faculty. Pearson channels Kant, a preeminent Enlightenment figure, when claiming that what matters most is “uniform obedience to rational law” (1901: 121). Because reason “is the only law-giver...[t]he only practical method of making society as a whole approach the free-thinker’s ideal of morality is to...teach it to use its reason in guiding race instincts and social impulses” (114). In keeping with this view, and like transhumanists (e.g., Harris and Holm 2002: 357, 366; Bostrom and Ord 2006; Savulescu 2013: 54), Pearson’s Enlightenment-style adulation of reason and science prompts him to dismiss opposition to his vision as irrational (1901: 430–431); J.B.S. Haldane, too, is concerned that “irrational” beliefs of non-experts will stymie scientific discoveries (1995 [1923]: 38).

In the 1930s, when “positive” eugenics came to the fore (Kevles 1995: 178), increased emphasis was placed on using reason to augment rationality itself,⁵ for, compared against the heightening made possible by advancing knowledge of human genetics, existing humans are “an extremely primitive and imperfect type of rational being” (Haldane 1966 [1932]: 153–154). Further, like transhumanists, past eugenicists offer comparisons across planes of creaturely existence. Haldane observes that “[t]he change from monkey to man might well seem a change for the worse to a monkey. But it might also seem so to an angel” (1966 [1932]: 153).⁶ Similarly, Herbert Brewer suggests that we are “the forerunners of beings as superior to ourselves as we are to the apes”—which possibility “gives to eugenics its most powerful inspiration” (1935: 121). Beyond this, if Muller is to be believed, we will eventually surpass mankind more dramatically than we now surpass amoebae (1984 [1935]: 124), and, per Haldane, “our descendants may...excel us a great deal more than we excel worms or jellyfish” (1932: 142).

Regarding prosociality, in several publications beginning in 2008, Ingmar Persson and Savulescu judge the “dispositions” of altruism and justice to be the core of morality, and peg our prospects for avoiding existential catastrophe through climate change and weapons of biological and nuclear varieties to the technological intensification of those traits (2008, 2012, 2013; Savulescu and Persson 2012). Earlier eugenicists, too, target prosociality, as when Huxley deems it urgent that we harness eugenics to the improvement of “social virtues” (1936: 28) and Muller contends that, apart from heightened rationality, mankind’s “adjustment to the ever more complicated situations to which he may attain in his progress will require... genetic advance...in the temperamental characteristics that make for coöperative behavior” (1984 [1935]: 37, 102), namely, “sympathy,” “benevolence,” and “altruism” (36, 49, 118; cf. Osborn 1968: 88; McMillan 2016: 106). Relatedly, Savulescu’s (2005: 37) embrace of a genetically instilled “sunny temperament” is matched by Muller’s (1984 [1935]: 69) claim that the very mission of biology is “to make us all...happy in ‘natural’ temperament.”

⁵It was C.W. Saleeby who, with Galton’s blessing, introduced the terms “positive” and “negative” eugenics (Kevles 1995: 321n1).

⁶Haldane eventually retracted his support of positive eugenics (Paul 2005: 132, 143).

In Tandem, Eliminate the Allegedly Deleterious

Further, both transhumanists and prior eugenicists adopt a hostile lens on emotions that they view as individually and socially destructive.⁷ Among transhumanists, Savulescu and Kahane target our very capacity for “negative affect” (2009: 281), as “[t]he problems of a hot temper can include life in prison” (Savulescu 2005: 37). Savulescu and Kahane presume that we would be better off “if everyone were...less aggressive” (2009: 284). Notably, the built-in harmfulness of “negative affect” is inadequately defended; for example, as in earlier eugenics, anger and aggressiveness are conflated (Savulescu and Kahane 2009: 284; Savulescu 2005: 37).

According to Haldane in 1923, science properly seeks “the subjugation of the dark and evil elements in [man’s] own soul” (1995 [1923]: 46); he is optimistic that “[a]s our [biological] knowledge...increases we may be able...to control our passions by some more direct method than fasting and flagellation...to deal with perverted instincts by physiology rather than prison” (43). Muller agrees: once knowledge of the brain suffices, interventions will eliminate what is deemed deleterious from “temperaments, moods, and characters” (1984 [1935]: 72–73). A prominent concern is to minimize or, preferably, eradicate the existence of “antisocial” traits, under which is lodged “criminality”—a term of which earlier eugenicists were particularly fond, to which, however, Savulescu’s (2005: 37) “[a] life in prison” is comparable (on this theme in earlier eugenics, see Haldane 1995 [1923]: 43; Davenport 1936; Mehler and Allen 1977; Allen 1986: 233, 260; Kevles 1995: 71–73, 101, 103; Comfort 2012: 101).

What is more, Haldane presages transhumanist assertions that moral bioenhancement, once available, would be mandatory to stave off existential catastrophe: “Moral progress is so difficult that I think any developments are to be welcomed which present it as the naked alternative to destruction [i.e., human extinction], no matter how horrible may be the stimulus which is necessary before man will take the moral step in question” (1995 [1923]: 47;⁸ see further Esposito 2011). Or, as Persson and Savulescu formulate the point 85 years later, “[i]f safe moral enhancements are ever developed, there are strong reasons to believe that their use should be obligatory, like education or fluoride in the water...That is, safe, effective moral enhancement would be compulsory” (2008: 174). Similarly, for Allen Buchanan, who supports enhancement, albeit not the radical variety, “[g]iven the current human propensity for violence...the human race might come to need [moral bioenhancement] interventions as part of a more complex strategy for [avoiding] catastrophic violence” (2008: 17).

⁷Judgments of positive and negative in the realm of emotion are distinct from “positive” and “negative” eugenics; notably, positive eugenics includes the augmentation of rationality. That said, they are closely related: on the one side, the tamping down of antisocial emotions falls under negative eugenics; on the other, the heightening of fellow feeling belongs to the positive variety.

⁸Cf. Haldane’s “the old paradox of freedom” (48), which he resolves in favor of doing whatever is needed for human survival.

Already in 1924, Bertrand Russell saw a program of pronounced emotional dampening as highly dangerous: either emotional capacities would be narrowly calibrated to people's societal roles or, more bluntly, the physiology of all save authorities would be modified to foster docility (Russell 1924: 53–55). Russell's point about emotional muting is well taken now to the extent that transhumanists, like prior eugenicists, collapse the distinction between aggressiveness and anger, which can be both legitimate and strong. Should we adopt transhumanists' vision of our emotional "advancement," our very capacity for anger—a powerful psychic impetus to individual and interpersonal enrichment, not to mention the amelioration of social injustice—may eventually fall away (for further criticism of transhumanist moral psychology, see Levin 2016, 2017; Jotterand and Levin 2017). But whether or not one shares Russell's concern regarding emotion, he rightly directs our attention to social, ethical, and political frames and justifications for enhancement measures.

The Great Wingspan of Public Health

Regarding those broader frames and warrants, let us observe, first, that transhumanists and earlier eugenicists draw examples and justifications from public health, where measures' ethical warrant is the welfare of society at large, that is, utilitarian. Transhumanist Andy Miah links his argument for radical enhancement with headway in public health by pointing to the salutary impact of fluoridated water (2013: 298). Similarly, Gregory Pence's rubric of "building better kids," used of a utilitarian warrant for vaccinations (2012: 135), promotes his broader goal of defusing resistance to bioenhancement, for "[w]e could be so much more than we are, if only we had the courage to pursue that vision" (186). For Sarah Chan and Harris, there is no moral distinction "between a disability and an inability from the point of view of the legitimacy of altering that state" (2006). Regarding inabilities, healthy, unvaccinated people are no different from those whose memory and concentration would benefit from augmentation inasmuch as vaccinations for the first and stimulants for the second have the same rationale (Chan and Harris 2006). In addition, "if neuroenhancement is of benefit, it may well be desirable to encourage its use. We already accept the society-wide use of other beneficial interventions, from fluoridation of drinking water to the wearing of seatbelts in motor vehicles" (Chan and Harris 2006). With equal warrant, all of these are properly called "enhancement strategies" (Chan and Harris 2006).

Public health references and rationales also figure in defenses of particular types of bioenhancements. Thus, Persson and Savulescu's argument for requiring moral enhancement to forestall existential disaster is presented as gaining traction from existing public health imperatives (2008: 174), while Bostrom pursues the link to public health apropos of cognitive augmentation (2003a). Lowering one's susceptibility to infectious disease has "positive externalit[ies]," namely, "we may...contribute more to society and consume less of publicly funded healthcare" (501).

Bostrom then uses such externalities to justify cognitive enhancement: though “political realities” do not currently allow for requirements, “[i]f...the positive externalities outweigh the negative ones, then a *prima facie* case exists not only for permitting genetic enhancements aimed at increasing intellectual ability, but for encouraging and subsidizing them too” (502).

Similarly, Buchanan references herd immunity and underappreciated economic boons of immunization to buttress his advocacy of cognitive augmentation (2008: 9–10, 29n7). His counterpart to Bostrom’s positive externalities is “network effects,” such that “[w]here network effect *thresholds* are present...the state may see its role as that of priming the pump, by providing subsidies, tax credits, or other incentives to encourage people to have the enhancement” (11). Neil Levy, in turn, leverages fluoridation and vaccines when arguing that cognitive enhancement could be required for its simultaneous benefit to individuals, above all, children, and society at large (2013: 38); the justification for mandatory enhancement becomes stronger to the extent that “the costs (or the forgone benefits) accrue to individuals other than the (un)enhanced person” (38). Levy advocates expressly for surpassing what obtains in the case of fluoridated water, which is hard, but not infeasible, to avoid (38). For him, requiring the use of bioenhancers that augment “general-purpose [cognitive] capacities should be no more controversial than the teaching of logic or general reasoning skills” (39).⁹

In the era of prior eugenics, it and public health were judicially entwined in Oliver Wendell Holmes’ declaration in *Buck v. Bell* (1927) that “[i]t is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind. The principle that sustains compulsory vaccination is broad enough to cover cutting the Fallopian tubes.” Another institutional reference point was the American Public Health Association (APHA), whose annual meeting in 1934 included a eugenics-themed exhibition (Kühl 1994: 44–45). Further, William W. Peter, secretary of the APHA, spent 6 months in Germany during 1933–1934; he was the first American eugenicist who visited that country to gather “information and evidence with which [eugenicists in the USA] could counter criticism” of Germany’s eugenic measures (53–54). The linkage of eugenics and public health in earlier eugenics was no coincidence, for “[g]enetic improvement...was [seen as] the ultimate in preventive medicine” (Comfort 2012: 64), and “[n]otions of purity and perfection conditioned the minds of those interested in heredity and health” (66; for further discussion of prior eugenics and public health, see Osborn 1940: 29–37; Pernick 1997).

Though references to public health are more prominent in prior American eugenics than in transhumanism, the tie is significant there as well. And, to the extent that

⁹Since public health measures are occupied first and foremost with prevention, it may seem odd that transhumanists draw on public health justifications regarding cognitive enhancement. This argumentative strategy fits, however, with transhumanists’ denial of a legitimate conceptual distinction between treatment and enhancement (or, alternatively, per Parens’ [1998: 5] threefold division, among treatment, disease prevention [e.g., vaccinations], and enhancement).

transhumanists use public health analogies and reasoning, they avail themselves of a utilitarian lens to justify vigorous enhancement that appears to be out of sync with their overall focus on autonomy.

Shared Utilitarian Commitments

Regarding ethical foundations, at first blush, there is a fundamental difference between transhumanism and Anglo-American eugenics: prior eugenicists directly embrace a utilitarian imperative to pursue humans' genetic improvement, while transhumanists typically insist that what they propose is not just compatible with but would further, or "maximiz[e]" (Sandberg 2013: 57), autonomy. Max More proclaims that transhumanists "all support personal choice in the use of self-directed technological transformations" (2013b: 13). And, when it comes to procreation, "[m]odern eugenics...gives couples a choice over what kind of child to have and enables them to have a child with the greatest opportunity for a good life" (Savulescu 2005: 38). Further, cognitive augmentation "generally has the effect of enhancing autonomy" (Schaefer et al. 2014: 130).

Today's advocates of radical enhancement must feature individual and familial discretion: otherwise, their defense against the charge of substantive ties to historical eugenics—that decisions to enhance (or not), as suitable technologies come to exist, would be our own—evaporates. That their repudiation of all such links centers on this point of contrast shows transhumanists' awareness of its central role (see, e.g., Savulescu 2013: 41–43; Silver 2007: 254–255, 261; Bostrom 2003a: 499). In what follows, I argue that once subject to critical scrutiny, this alleged bulwark gives way.

Transhumanists' use of rationales from the arena of public health, discussed in the previous section, itself already shows their willingness to invoke a utilitarian frame. Far from being an outlier, this argumentative reliance on utilitarian reasoning is also evident elsewhere. First, by Persson and Savulescu's own admission, personal druthers are moot when we consider the need for moral bioenhancement to forestall existential threats from climate change and biological or nuclear weapons—whatever the implications for our freedom (2008: 174; cf. Buchanan 2008: 17).

Second, as I argue at length elsewhere (Levin 2016), transhumanists' handling of well-being and harm avoidance anchors a moral requirement to enhance beyond that particular realm. Disease matters strictly "because it makes our children's lives worse" (Savulescu 2013: 40). Transhumanists reject the treatment-enhancement distinction because, in their view, the term "enhancement" is properly applied to any measure that elevates well-being, whatever its level of technological sophistication (Levin 2014: 3). Correspondingly, harm is construed in encompassing terms, such that whatever reduces well-being, compared with existing "technological options" at a given juncture (Bayertz 1994: 275), qualifies as such. According to PB, "[o]nce technology affords us...the power to enhance our and our children's lives,

to fail to do so will be to be responsible for the consequences....To fail to improve their physical, musical, psychological and other capacities is to harm them, *just as* it would be to harm them if we gave them a toxic substance that stunted or reduced these capacities” (Savulescu 2005: 38; emphasis added). By this logic, it is “irrational to sub-maximise” (Savulescu 2013: 54; cf. Vita-More 2013b: 76). In other words, the sole rational course is optimization, with available technologies setting the benchmark for what that involves at any particular time; the utilitarian lens that such arguments strongly imply features objective goods such as cognitive ability rather than pleasure or preferences, which are the alternative bases of utilitarian justifications (Levin 2016: 56, 59, 61–63).

The moral imperative to forestall harm, alongside the view that rationality must henceforth guide our development, is ultimately incompatible with our leaving enhancement-related decisions to individual and familial discretion. Savulescu says that “we have an obligation to try to manipulate [features such as intelligence] to give *an individual* the best opportunity of the best life” and that “[t]he critical question to ask in considering whether to alter some gene related to complex behaviour is: would the change be better for *the individual*?” (2005: 38; emphasis added). Regardless of who is choosing and on whose behalf, the rational, morally required decision will be largely or entirely the same (see also Sparrow 2011: 35). In other words, “an/the individual” here is synonymous with “each and every individual.” Though Savulescu does not directly address the query as posed, his answer to the question, “Should we decide what breed of humans to create?” (2005: 37), is clearly yes—as signaled by the article’s title: “New Breeds of Humans: The Moral Obligation to Enhance.” Pace Daniel Wikler, the operative perspective on well-being does not express benign aggregation of individuals (1999: 190).¹⁰

Prior eugenicists openly give primacy to overall well-being. According to Muller, “[t]hrough all our visionings of progress [spearheaded by science] we must again and again remind ourselves that the object of all [our] human efforts must be to increase the sum total of the happiness of humanity” (1984 [1935]: 68). Huxley commends Muller for seeing that “[s]ocial salvation” must supplant “individual salvation,” with “the social system remodelled so that individual success does not conflict with communal welfare” (Huxley 1936: 29); a key entailment of this stance is that “any sacrifice involved in parenthood” will be made with said welfare in view (29). Pearson, in turn, avows that he embraces “a truer expression of the basis of utilitarian morality” (1901: 9, cf. 308); Haldane expresses a similar view (1932: 110–111).

Earlier figures stress the entwining of ethical and political frames. Thus, for Pearson, socialism is at once “a...scheme of political change” and “a new morality...denot[ing] the subjection of all individual action to the welfare of society”

¹⁰A tendency to think in general terms about what is best is also evident in the currently shifting focus from “personalized” to “precision” medicine, which (via, e.g., its statistical bent) “represent[s] a significant departure from the individualistic ethos that initially facilitated public and political support for the genomic medicine movement” (Juengst et al. 2016: 22–23).

(1901: 413). In particular, “[t]he birth of children is a responsibility, the moral gravity of which is far from being properly weighed” (419); because he saw it as conducive to a higher birth rate among those deemed more genetically fit, Pearson supported women’s emancipation (418–428).

Pearson is an avowed socialist (1901: 345) since from its vision alone can scientifically based prescriptions for human improvement be issued with the force of morality behind them (323–324). Thus, when transhumanist Stock contends that the nature and trajectory of scientific and technological advance should drive both our moral obligations and the form that society takes (1993: 199–211), he is broadly echoing a view expressed by Pearson almost a century earlier. Spurred by the foregoing, which underscores that ethical and sociopolitical commitments are interlinked, let us now concentrate directly on the latter.

Sociopolitical Commitments and Implications

The problem here for Stock and other transhumanists is that the scientific direction of what transpires is inseparable from a moral obligation to fund and use enhancements for the sake of human betterment, which lends itself to sociopolitical requirements that clash with a firm allegiance to liberal democracy. Prominent earlier eugenicists welcomed this result. Per prior eugenicist Muller, scientific steering of humanity’s development is required for “happiness,” centrally including that of subsequent generations (1984 [1935]: 44–45). Because “[m]ankind has a right to the best genes attainable...withholding...these gifts...would in itself be a decision, a course of action...directed against the well-being of humanity” (113). Muller makes no bones about the fact that making real headway on his scientifically steered agenda requires social reconstitution (viii, 83, 102, 108; see also Osborn 1940: 291). Muller (1984 [1935]) and Pearson (1901) endorse socialism, while Haldane (1995 [1923]: 47) and Huxley (1936: 24, 27) foresee supplanting national sovereignty, which permits legally sanctioned, variable practices, with a more encompassing sociopolitical frame.

Unlike prior eugenicists, transhumanists routinely insist that personal freedom—the crux of liberal democracy—would be not merely preserved but enriched through one’s chosen augmentations (see, e.g., Vita-More 2013a: 21; Sandberg 2013: 57; Miah 2013: 299). As observed in “Human Agency Creates, Then Becomes, the Divine,” the opportunity for radical enhancement is even deemed “the birth right of every creature” (Bostrom 2010). To those who worry about movement toward state control, Savulescu responds: “The best defence against a slide towards the abuse of any powerful technology is ethics,” above all, “a robust respect for freedom” (2013: 43). Allegedly, it is critics of transhumanism whose “current regulations...are...[harmfully] eugenic,” for “[t]hey are based on a certain vision of how the population should be...and indeed people are coerced into having children this way because they’re denied the freedom to use technology and denied the knowledge that’s available” (41; see also Naam 2005: 166).

One finds confidence that liberal democracy will remain intact across the broad spectrum of enhancement stances. Representing devotees of vigorous enhancement, Silver assures us that “it is individuals and couples...*not governments*...who will seize control of these new technologies” (2007: 10; italics in original); thus, recourse to reproductive technologies such as embryo selection “would not be associated with any restrictions on reproductive liberty” (261, cf. 255). Caplan et al. (1999) and Wikler (1999)—who, though not transhumanists, are generally sympathetic to enhancement—cordon off the voluntaristic focus of procreative choices now from past instances of force and coercion (Caplan et al. 1999: 1284; Wikler 1999: 191). And Bill McKibben, a bioconservative, takes for granted that, going forward, enhancement will be a matter of “mere consumer decisions” (2003: 37). Even Daniel Kevles, well known for his classic history of earlier eugenics (Kevles 1995), fails to see the aforementioned socio-political danger. What concerns him instead is that “eugenics...could come back, only in a new, private form shaped by the dynamics of democratic consumer culture. What could happen now is likely to be far more bottom-up than top-down...individuals and families choosing to edit their genes...and finding themselves encouraged to do so by what was absent in the era of eugenics: the biotechnology industry” (Kevles 2015).

As one might expect, today’s critics of radical enhancement also voice worries about the continuance of liberal democracy (see, e.g., Sparrow 2014a, 2014b; Vallor 2011: 148). Strikingly, however, the credibility of transhumanists’ insistence that democracy as we know it will remain intact is increasingly challenged from within the discourse of enhancement supporters themselves. There are two camps here: one recognizes that the pursuit of vigorous enhancement will involve movement away from liberal democracy as we know it, while the other sees the enhancement enterprise—including state implementation—as an engine of democracy’s preservation. Concerning the first, like prior eugenicists Haldane and Huxley, Persson and Savulescu (2012: 102) would like to see the framework of nation-states yield primacy to “a *global*(ly responsible) liberalism,” while Stock (1993: 22–23, 96) lauds supranational Metaman as nation-states’ civilizational successor (cf. Ascott 2013: 444). According to David Wood, “we’ll need to accelerate a reformation of the political and economic environment, so that the outcomes that are rationally best are pursued” (2013; see also the “Transhumanist Declaration” [More and Vita-More 2013: 54]). James Hughes submits that “radical longevity and cognitive enhancement will push liberal democratic society to adopt post-liberal individualist moral, legal, and political frameworks that do not assume personal identity...The erosion [of personal identity] *may* come about without any coercion” (2013: 231; emphasis added). Sociopolitically, “global governance is the next step” (Hughes 2004: 264). Harris, in turn, foresees legal requirements on immortality pursuers, possibly including not merely taxation but sterilization (2003: 75) and “generational cleansing,” if generational succession “prove[s] too slow for regeneration of youth and ideas” (77).

Representing the second camp, Jefferson et al. argue that “[w]e should...*re-frame* the debate about biomedical enhancement by giving serious consideration

to the social benefits that enhancement might have” (2014: 503, italics in original). While Buchanan (2008) concentrates on societal boons from elevated productivity, Jefferson et al. advocate for using enhancements to “improve the functioning of our political communities” (2014: 502). In particular, reinvigorating liberal democracy for the sake of its long-term endurance requires a heightening of civic virtue (503); note the similarity here to Osborn’s view that eugenics and democracy “are significantly interrelated” such that “[a] eugenic form of society...seems essential to the perpetuation of democracy [itself]” (Osborn 1940: 297, 299).

For Jefferson et al., individuals have a utilitarian basis for “engag[ing] in (or provid[ing] to their children)...enhancements...that...contribute to civic virtue” (2014: 525). As civic virtue is above all a function of cognitive ability (521), opting against cognitive enhancement would be not only irrational but subject to moral critique (523-524n72). What is more, the fact that “increased civic virtue is a social good...that is needed in modern liberal democracies” (526) can “alter the moral status of undertaking [pertinent] enhancements...from being merely permissible to obligatory” (525). In further keeping with utilitarian thought, Jefferson et al. give prominence to science as the arbiter of what specific measures may be morally required (525; on this feature of utilitarianism, see Smart 1973: 47; Williams 1973: 139).

Jefferson et al.’s (2014) notion that the state may override autonomy, even where individuals pose no danger that, under liberal democracy, warrants intervention (e.g., not voting or attending city council meetings), is relevantly similar to Persson and Savulescu’s warrant for requiring moral bioenhancement of everyone, including—to avoid humanity’s destruction due to climate change—those whose “crime” may be nothing more than, say, refusing to carpool or declining to install solar panels (2008, 2012, 2013; Savulescu and Persson 2012). Implementing mandatory enhancement measures per Jefferson et al. and Persson and Savulescu would necessitate a suspension of freedom, allegedly to secure democratic freedom itself down the line. As Harris points out (2011, 2016), we are rightly alarmed, not sanguine, in the face of this anti-democratic prospect, notwithstanding the fact that the proffered justification is democracy’s own ultimate preservation.

Although only the former camp of enhancement supporters treated above departs overtly from liberal democracy, the two groups are united by a direct recognition that significant sociopolitical impacts are built into the implementation of their visions. Further, the approach of the latter camp is potentially more damaging for the temptation it represents to act on the visceral appeal of a no-holds-barred commitment to the long-term preservation of liberal democracy without proper attention to the fact that a supposed moratorium on hard-won freedoms is likely never to be just that. In sum, although the improbability of one’s both giving top priority to a scientific vision of the good and steadfastly embracing liberal democracy was more starkly evident in Anglo-American eugenics, it is also manifest in transhumanist thought.

Conclusion

Nathaniel Comfort argues that “the eugenic impulse...is timeless,” not historically localizable in our American past (2012: xi). In particular, this impulse “arises whenever the humanitarian desire for happiness and social improvement combines with an emphasis on heredity as the essence of human nature. It is the dream of control, of engineering ourselves, of not leaving our future up to cruel fate” (246).

Though I concur that, seen through the lens of their shared “eugenic impulse,” current eugenics is “less benign than the public relations campaigns would have us believe” (2012: xii), I cannot agree that, due to this common terrain, earlier American eugenics (Comfort’s own focus) should come off less badly than it otherwise would (xii). The fact that we find a number of important parallels is concerning, whichever direction we approach them from. By featuring this common ground, the present inquiry underscores the endurance of contentious and problematic views about human nature, aspiration, and our flourishing that many parties in today’s debate over enhancement—whatever their stance on the radical variety—assume we have left behind. What is more, knowing these links casts new, unsettling light on transhumanists’ alleged yearning to realize perennial human ideals (Bostrom 2003b: 38; 2005b; Stock 2003: 2; Vita-More 2013b: 78). Not only do the shared commitments of transhumanism and earlier eugenics converge in Savulescu and Kahane’s Principle of Procreative Beneficence, but its powerful implications for decision-making and resource allocation in the reproductive sphere are glimpsed most clearly when one views PB as the product of a shared “eugenic impulse” reaching back to Francis Galton.

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