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Beyond Human Nature: Human-Racism in the Debate Over Genetic and Nanotechnological Enhancement

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Abstract

The alleged threats to human nature are at the root of many concerns about the use of nanotechnology to extend human health and capabilities. But the concept of human nature is illusory, selectively deployed, and does not impose any ethical constraint on human enhancement. Human nature is not only a meaningless concept, a product of our imperfect human cognition and a relic of the idea of a "soul," but, as it is deployed today against human enhancement technologies, it is also a morally offensive, racist concept. The "human-racists" who deploy the concept of human nature are more inclusive than their forebears, but they make the same mistake of tying citizenship and value to biology. By setting aside the concept of human nature, we can affirm the value of the myriad aspects of human existence that we wish to preserve and extend using human enhancement technologies, including whatever genetic capacities and limits we may discover. Human enhancement technologies, such as those that may be enabled by nanotechnology and genetic engineering, enable us to define a new and more dynamic set of human capabilities, and to better achieve many moral virtues, regardless of whether they are part of "human nature" or not.

Nanotechnology Threatens Humanness?

Critics of the speculative future uses of nanotechnology sometimes suggest that there is some kind of "humanness" or "human dignity" threatened by nanotechnological enhancement. For instance in his theologically-informed review of nanotechnology's promise C. Christopher Hook notes:

It is one thing to use technology to repair an injury or to treat or heal an affliction, but it is quite another thing to use technology to engineer "better" human beings. Many who are healthy will likely be tempted to "enhance" themselves in various ways via cybernetics or to increase their longevity via nanotechnology. (Hook, 2002)

The British Christian thinktank opines

(Nanotechnology) has potentially dark sides to it. Repairing an injury or treating an illness is one thing, enhancing or engineering a 'better' human being is another...

Unethical restoration is that which seeks to enhance, alter or improve the original design. The underlying question here could simply be: 'what is this technology doing to human dignity?' (Taylor, 2003)

Where does this anxiety about protecting humanness from nanotechnology comes from?

Unhelpful Ontological Concreteness in Human Cognition

One of the few things that may be unique to homo sapiens sapiens among all animals is our facility for creating abstract concepts, and one of the earliest abstract concepts was probably the idea that there are spirits in the human body, in animals and in things. This hypothesis of the abstract ontological unity and continuity of beariness, mountainness, or the human soul was a natural extension of the human self-awareness, the illusion of a unity and continuity in self-identity (Dennett, 1992; Boyer, 2001; Dennett, 1992). This attribution of an abstract ontology to things has its uses, as it allows us to make predictions about how creatures and things of a kind will behave (Dennett, 1987). The belief that others have an inner self similar to our inner self is the root of empathy. But these vitalist illusions can also trap us into positing identities that do not exist, of making inaccurate predictions, and persisting with dysfunctional and limiting beliefs.

Human nature is one such limiting, dysfunctional, illusory and inaccurate belief, the inadequacy of which is revealed in the debates over the moral uses of human enhancement technologies. Take for instance Leon Kass's grounding of his opposition to human enhancement in the existence of Platonic ideal types, including a unitary and inviolate human nature:

"(Creatures) have their given species-specified natures: they are each and all of a given sort. Cockroaches and humans are equally bestowed but differently natured. To turn a man into a cockroach...would be dehumanizing. To try to turn a man into more than a man might be so as well....We need a particular regard and respect for the special gift that is our own given nature." (Kass, 2003)

Without ever clearly defining what this human nature is, Kass deploys the concept to both separate us from our continuity with other animals, and bar any improvement in our condition. When exactly does a man's evolution into cockroach violate his human nature? Is it the loss of a skeleton, the growth of the carapace, the hairy legs, or the compound eyes? Can I have tiny antennae, but not big ones? Are is it simply the obsessive compulsive fixation on the scent of food and avoiding light? When does man become dehumanized in becoming more than man?

Few proponents of a distinctive and unitary human nature or soul attempt to answer these questions because they do not have a clear definition of human nature to begin with. They can't specify when hominids got human nature or a soul, or which specific transhuman modifications would rob us of this vitalist essence. They can't agree which aspects of the mind and behavior are part of the soul or human nature, and which are unnatural, or how parts of human nature might also be shared by other animals. Only after we have deconstructed their illusory theory of a human nature, can we begin a serious discussion of the qualities of the human condition worth preserving.

Human Nature has no Clear Definition

One clear problem with the idea of human nature is that, despite thousands of years of investigation, and intimate access to the subject of investigation, there is no agreement about what human nature is. Are we innately good, compassionate, altruistic, or evil, sinful, and selfish? Is

moral striving a liberation of our true human nature from sinful influences or capitalism, or is moral behavior a persistent struggle of the good in human nature against its dark side? Or are we a blank slate, morally and behaviorally, or inscribed with all our personality traits, and even beliefs, at birth? Some writers identify human nature with the apparently distinctive human capacities for cognition, language, tool-use, and the creation of meaning and categories, while others include physiology that we share with other species, such as mortality, limbically-mediated emotions, and our genetic predispositions for altruism and aggression.

Cognitive neuroscience, ethology and evolutionary psychology are attempting to specify the exact structure and epidemiology of human cognitive traits, and clarify which capacities and impulses are genetically innate and which are plastic or learned. These efforts continue to generate enormous insight, but they have also given some succor to advocates of human nature and natural law, even though these sciences simultaneously challenge the traditional understandings of free will, personal identity, and human exceptionalism. Nonetheless, the re-reification of human nature by some evolutionary psychologists has led them to echo Kass' pessimism about human enhancement. Leading evolutionary psychologist Stephen Pinker says for instance:

"After decades of exile, the concept of human nature is back. It has been rehabilitated both by scientific findings that the mind has a universal, genetically shaped organization, and by philosophical analyses that have dispelled the fear that the concept is morally and politically tainted. So if human nature exists, can it be changed? Attempts to redesign human nature ... are generally recognized as futile, dangerous, and unnecessary to achieve moral and political progress." (Pinker, 2003)

This powerful desire to re-construct the Ought on the genetic Is gives us reason to question the claim that evolutionary psychology has revealed a unitary and universal human nature. In *Adapting Minds*, David Buller's (2005) careful deconstruction of evolutionary psychology, he argues that the field has generated little evidence that human beings have specific genetically driven modules adapted for Pleistocene existence. Rather, Buller believes the distinctive achievement of human evolution was the development of general cognitive plasticity, a dynamic adaptive intelligence which has allowed humans to invent, and re-invent ourselves.

Of course it is true that there are myriad genetic, hormonal and physiological features that shape our desires, thoughts and behavior, and some of which we share with most other human beings. But this constellation of influences fails as a theory of human nature on both analytical and normative grounds. It fails analytically because it posits a vague constellation of species-typical traits which had no clear beginning, are not actually species-specific, and are not clearly threatened by any specific enhancement. Normatively the argument fails because we are not morally bound by our genes.

Human Nature No Clear Beginning and No Clear Boundary With Other Species

There is no clear beginning for human nature or the human species. There was, we can assume, no day when all our hominid precursors gave birth to modern humans with opposable thumbs, hidden estrus, upright posture, language ability, abstract cognition and tool-use. These traits may have emerged abruptly in evolutionary time, but the periods were still tens or hundreds of thousand of years. Which of grandmothers or grandfathers would the defenders of human nature determine finally had "it", and were not just savage beasts like their parents? Our branch of the evolutionary tree shows continuous change, right up through the last fifteen thousand years (Philips, 2006; Voight, 2006). Without specifying which traits confer membership in humanity it

is not clear whether our genetic differences from Pleistocene humans mean we share human nature with them or not. Did the recently discovered tool-using "hobbits" of Indonesia, *homo floresis*, have human nature?

Similarly, we share with primates almost all the qualities that allegedly make us special: self-awareness, culture, language, and tool-use. No, they aren't good at abstract reasoning or grammar, but then neither are small children, the demented or the developmentally delayed, and yet they apparently have human nature.

Accepting that the things we value and attribute to human nature are actually shared continuously with non-human ancestors and contemporaneous species is not a devaluation of those traits, or of humanity. In fact it is only by affirming the value of reason, language, compassion and culture-making that we can build an ethical framework to guide human enhancement technologies.

Human Nature Has No Clear Ending

Without a clear definition of human nature, or specification of the things of value, the opponents of human enhancement technology flounder in defining which enhancements cross the line. Francis Fukuyama and the President's Council on Bioethics see the line being crossed with Ritalin, anti-depressants, anti-trauma drugs and preimplantation genetic diagnosis, while others focus further along on the advent of superintelligent immortals and human-animal hybrids. As David Reardon, an anti-abortion activist who is promoting an amendment to the Missouri constitution to forbid human genetic engineering, cloning and transhumanism, has said:

"Any ethic that fails to (1) define human nature, and (2) assign some value to protecting human nature, inherently lacks the ability to find any limits on the justifications that can be offered to alter or destroy human nature, human beings, or humanity." (Reardon, 2005)

Reardon is, of course, completely wrong. Although human nature is being deployed to stop enhancement, the vague and chimerical concept provides no clear lines and policy conclusions. It is only when we let go of the notion of a unitary and inviolate human nature that we can turn to the challenge of delineating which features of embodied human existence are so important that we want to preserve them from technological modification, and which are so central that we want to encourage their enhancement and further evolution.

Human Nature is not Normative

Even if we do have some clear set of evolved traits that were distinctively human, they are not normatively binding on us (Bayertz, 2003). To the extent that we are born with impulses for aggression, racism or selfishness, or limits on our capacity for wisdom, awe or compassionate action, we may in fact be morally obliged to modify human nature (Savulescu, 2005).

The boldest and most interesting defense of the naturalistic fallacy of a moral imperative of human nature comes from Francis Fukuyama. Fukuyama argues that human rights and social solidarity are grounded in a shared human nature. Any effort to tinker with human nature will erode social solidarity and lead to totalitarianism. But he explicitly refuses to define human nature, calling it simply "Factor X."

"Factor X cannot be reduced to the possession of moral choice, or reason, or language, or sociability, or sentience, or emotions, or consciousness, or any other quality that has been put forth as a ground for human dignity. It is all these qualities coming together in a human whole that make up factor X."

This argument for human nature as an ineffable gestalt is very convenient. If human nature were the sum of these features rather than their irreducible whole, then they might be individually improved, and human nature with them. If human nature was self-awareness, empathy and the ability for abstract thought, for instance, then a green-skinned, four-armed transgenic could still be part of the Jeffersonian polity, and a superior citizen if she was smarter and more empathic.

But Fukuyama's Factor X is also a unique argument that the diversity of humanity must stay within its existing standard deviations from the mean of human traits. This allows Fukuyama to answer the challenge that a normative human nature excludes some existing humans who don't fit this ideal typical model, such as the disabled. Variation in intelligence, longevity or morphology are OK, so long as we stay within our existing parameters of variation. Although our social unity can apparently still encompass conjoined twins, amputees, people born with fur or tails, and the developmentally delayed, mentally ill and extremely smart, too many kids on Ritalin or too many 130 year-olds would apparently break the bell curved social contract.

But if people four feet tall can feel solidarity with people seven feet tall, why can't the average person be six feet tall instead of five and a half? Why would everyone enjoying the happiness or intelligence experienced by the luckiest 1% of the population fracture humanity into racial subgroups? Certainly, the sudden adoption by a minority of superintelligence, immortality and uploading would challenge existing understandings of shared citizenship, just as shared citizenship had to be forged across racial differences in the past. But human enhancement technologies pose no challenge to Fukuyama's normative standard deviation if all members of a society become more intelligent, long-lived and beautiful, and gradually move the bell curve to the right.

For Fukuyama and the other bioconservatives this blurring of the line between ur-humans and post-humans is even more horrifying than the emergence of an entirely separate posthuman species. Since all good flows from the people of our race having pure Factor X, and race pride in the goodness of our shared Factor X, it must be protected from the complexities of a multi-racial society and even more from race-mixing contamination.

The Inescapable Racism of the Human Nature Concept

The use of the concept of human nature today is, we see, inescapably racist, *human-racist*, with the same consequences for tyranny, violence and suppression of human diversity as the ideology of European racism before it. The human-racists are more inclusive racists than their forebears, but racists nonetheless in their effort to ground solidarity in biological characteristics instead of shared recognition that another being has self-awareness, feelings and thoughts like our own. We hear in the panicked demands to ban the mixing of human and animal DNA striking echoes of the demands to protect the purity of the white race from mongrelization. The root of this racist anxiety was laid bare in Mary Douglas' work (1966); it is the taboo on the violation of categories, the ritual taboos against blurring of lines between male and female, white and black, animal and man, and man and the gods.

In fact, Yuval Levin, a staffer on President's Council on Bioethics, explicitly embraced Douglas' analysis as the mission of "conservative bioethics" in the inaugural issue of the bioconservative journal *New Atlantis*. The goal of conservative bioethics, he says, is to defend the taboos which

....stand guard at the border crossings between the realm of the properly human and those of the beasts and the gods. When the boundaries are breached, when degradation or hubris is given expression, our stomachs recoil. (Levin, 2003)

This alleged self-evident repugnance is the same rationale for bans on race-mixing given by all racialists.

The irony is that human-racism is being promoted by some progressives precisely as a means to unify humanity through "species consciousness," just as white American identity was used to meld together Poles, Irish and Italians, and pan-Arabism and pan-Africanism was promoted to transcend nationalism and tribalism.

The doctrine of a unifying human nature has also become an unquestioned assumption in human rights discourse. For instance the United Nations *Universal Declaration on the Human Genome and Human Rights* (UN General Assembly, 1998) says

“The human genome underlies the fundamental unity of all members of the human family, as well as the recognition of their inherent dignity and diversity.”

As with bans on miscegenation, human-racists demand bans on human enhancement technologies in order to protect the purity of the human race. President Bush called for a ban on human-animal hybrids in his 2006 State of the Union message, and Missouri has become the first US state to consider a ban on human-animal hybrids, cloning, human-genetic modification and transhumanism. Bioethicists George Annas and Lori Andrews have been working with an international network of opponents of human enhancement towards an international treaty to make human genetic modification a “crime against humanity.” Genetic enhancement, they say,

“can alter the essence of humanity itself (and thus threaten to change the foundation of human rights) by taking human evolution into our own hands and directing it toward the development of a new species, sometimes termed the ‘posthuman.’...Membership in the human species is central to the meaning and enforcement of human rights.” (Annas, Andres and Isasi, 2002).

Again, like the white supremacists, Annas justifies the suppression of posthumanity on the grounds that they are destined to engage in race war to enslave or exterminate the pure humans:

"The posthuman will come to see us (the garden variety human) as an inferior subspecies without human rights to be enslaved or slaughtered preemptively. It is this potential for genocide based on genetic difference, that I have termed "genetic genocide," that makes species-altering genetic engineering a potential weapon of mass destruction." (Annas, 2001)

The Violent Potential of the Human Racists

Is it mere hyperbole to point to the similarity between the race war apocalypticism of the white supremacists and the species-extermination apocalypticism the bioconservatives? Unfortunately not. Beyond the violence that would be done to human life, longevity and well-being by attempts to ban any modification of our chimerical human nature, there is the actual violence that apocalyptic human-racism has already generated, and will generate. Theodore Kaczynski, aka "the Unabomber," waged a bombing campaign for *eighteen years* in the United States against scientists engaged in projects that he thought threatened human nature, principally through cybernetics and genetic engineering.

"Human nature has in the past put certain limits on the development of societies. People could be pushed only so far and no farther. But today this may be changing, because modern technology is developing way of modifying human beings.... getting rid of industrial society will accomplish a great deal. It will relieve the worst of the pressure on nature so that the scars can begin to heal. It will remove the capacity of organized society to keep increasing its control over nature (including human nature)" (Kaczynski, 1995)

Bombers of abortion clinics are also soldiers in the human-racist effort. In the embryo rights belief system *all* bearers of the human genome have equal moral worth, just as *only* bearers of this human genome have worth. The Christian Right's "Manifesto on Biotechnology and Human Dignity," which calls for a ban on human genetic modification, makes clear the link they see between defense of the unborn and bans on human enhancement.

"The uniqueness of human nature is at stake. Human dignity is indivisible: the aged, the sick, the very young, those with genetic diseases—every human being is possessed of an equal dignity; any threat to the dignity of one is a threat to us all...at every stage of life and in every condition of dependency they are intrinsically valuable and deserving of full moral respect. "

- "Manifesto on Biotechnology and Human Dignity"

It is therefore no surprise to see common cause being made between pro-choice leftist opponents of human enhancement and anti-abortion activists around their common ideology of human-racism.

Beyond Human Nature: The Need a Broad Normative Range for Acceptable Human Enhancement

In conclusion, I am *not* arguing for a laissez-faire approach to nanotechnology or human enhancement, unfettered by moral analysis and political regulation. It would be immoral, and perhaps suicidal, for liberal democracies to be indifferent to the directions in which human beings might evolve using human enhancement technologies. But the concept of a unitary and inviolate

human nature is fundamentally the wrong place to start in the analysis of which aspects of human life we want to preserve, suppress or extend. Rather we need to make clear that it is our capacities for consciousness, feeling, reason, communication, growth, and empathy, all of which we share to a greater or lesser extent with other animals, which we are willing to use our technologies and the agencies of our collective suasion – legislation, regulation, social norms and economic incentives – to encourage. It is greed, hatred, ignorance, violence, sickness and death which we wish to discourage, whether part of human nature or not.

Yes, as a part of that project, we must take account of the insights of neuroscience and evolutionary psychology, even if the efforts to mold them into a natural law is wrong-headed and flawed. Understanding the way our genetic constitution shapes our thought and behavior is essential if we want to use human enhancement technology to improve the human condition, and pursue moral goals that were impossible before human enhancement. So I will close with Peter Singer's closing thought in his essay *A Darwinian Left* (2000), which argues that the Left must accept that utopian projects have indeed crashed on the shoals of intractable innate human characteristics. But, he says, "there may be a prospect for restoring more far-reaching ambitions of change. We do not know to what extent our capacity to reason can, in the long run, take us beyond the conventional Darwinian constraints on the degree of altruism that a society may be able to foster" (Singer, 2000). I hope, with universal access to human enhancement technologies, we will soon find out.

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