

Genetic Enhancement and Moral Attitudes Toward the Given

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Abstract:

Several authors, including Michael Sandel, distinguish between two different attitudes toward nature: mastery and giftedness. Giftedness is the superior attitude, Sandel argues, because it better accords with the values of humility, responsibility, and solidarity. And giftedness, in combination with these values, provides a rational basis for opposing the employment of genetic enhancement. Against this, I argue that talents and genetic endowment are more plausibly viewed as undeserved, that not everything undeserved is a gift, and that even if talents and endowment were gifts, this would not support a prohibition against pursuing genetic enhancement.

Keywords: philosophy | genetics | genetic enhancement | morality | moral attitudes | genetics and morality

Article:

1. Introduction

In *The Case Against Perfection*, Michael Sandel argues against the employment of various forms of biotechnology to enhance human traits.¹ The possibility of enhancement forces us to ask what the ‘proper stance of human beings toward the given world’ is (p. 9). Those who embrace enhancement adopt what Sandel calls the stance of mastery; those who oppose enhancement adopt the stance of giftedness. Those who favour mastery urge us to use our knowledge to bring about changes that will improve the lives of people. Proponents of giftedness counsel us to be happy with what we have and to honour nature. Sandel makes a sustained argument for the superiority of giftedness. Though many do express moral hesitation about enhancement, I shall argue that the choice is not always as stark as Sandel thinks, that giftedness does not generate the requirements that he claims, and that in some cases the very idea of giftedness makes sense only within a framework that is too narrow to shape social policy.

2. Mastery and Giftedness

Erik Parens describes two competing perspectives on the given: one he calls the ‘framework of gratitude’; the other, the ‘framework of creativity’.² These correspond to Sandel’s attitudes of giftedness and mastery. As Parens puts it, ‘One side emphasizes our obligation to remember that life is a gift and that we need to learn to let things be, the other emphasizes our obligation to transform that gift and to exhibit our creativity’.³ Proponents of creativity urge us to take whatever we have and to make the best use of it we can. The given is not merely to be admired passively; it is to be shaped to improve the lives of living beings. Proponents of the gratitude framework counsel us to have reverence for the given. Nature is not to be manipulated.

Those who embrace enhancement and genetic engineering are comfortable with the framework of creativity. But this is troubling, according to Sandel. ‘The deeper danger is that they represent a kind of hyper-agency, a Promethean aspiration to remake nature, including human nature, to serve our purposes and satisfy our desires’ (pp. 26–27). By contrast, ‘To acknowledge the giftedness of life is to recognize that our talents and powers are not wholly our own doing, nor even fully ours, despite the efforts we expend to develop and exercise them’ (p. 27).

But how is one to make the case for the attitude of giftedness? ‘What would be lost if biotechnology dissolved our sense of giftedness?’ (p. 85). Sandel acknowledges that one answer to this question—perhaps the most natural answer—comes from the perspective of religion. ‘From the standpoint of religion, the answer is clear: To believe that our talents and powers are wholly our own doing is to misunderstand our place in creation, to confuse our role with God’s’ (p. 85). If one could only make the argument for giftedness from the point of view of religion, however, that would severely limit the opportunities to use that attitude in formulating social policies in a democratic society. Sandel thinks that we need not worry about this. The moral stakes can also be described in secular terms. If the genetic revolution erodes our appreciation for the gifted character of human powers and achievements, it will transform three key features of our moral landscape—humility, responsibility, and solidarity (p. 86). Since most secular moral systems ascribe value to humility, responsibility, and solidarity, the case against mastery in general, and genetic enhancement in particular, can be made within the parameters of mainstream values. We shall examine each of these in turn.

3. Responsibility

The idea here is that with the availability of genetic enhancements, ‘responsibility expands to daunting proportions’ (p. 87). What was ‘once governed by fate has now become an arena of choice’ (p. 88); and with choices come responsibilities. ‘The more we become masters of our genetic endowments, the greater the burden we bear for the talents we have and the way we perform’ (p. 87). Readers will note the use of the term ‘we’ here. Sandel's argument asserts that with the advent of genetic engineering, individuals will be responsible for their own traits and parents will be responsible for the makeup of their children.

On the level of individuals, Sandel cites as an example athletes. He speculates, ‘Today when a basketball player misses a rebound, his coach will blame him for being out of position. Tomorrow the coach may blame him for being too short’ (p. 87). This assertion, however, is silly on at least two fronts. First, even in the world that Sandel is imagining, an individual's height will not be due to his own choice; rather, it will be the result of choices made by his parents. Once an individual becomes responsible for his own choices, he will already have matured physically and so it is unlikely that there will be interventions available to him that will increase his height. Second, isn't it the coach who is responsible for inserting the shorter player in the line-up?

It is true, as Sandel points out, that some performance-enhancing substances, such as steroids and amphetamines, may be effective over a relatively short period of time. In such a case, one who is a moral agent will have it within his power to gain an advantage, and he may be pressured to do so by teammates. But this is not genetic enhancement. And in any case the principal issues here concern the rules of the game and the point of the sport.

The ‘we’ occurs again when Sandel writes, ‘The more we become masters of our genetic endowments, the greater the burden we bear for the talents we have and the way we perform’ (p. 87). Even if expanded responsibility were clearly a bad thing, it just doesn't apply here. If individuals are bioengineered, they are not responsible for their own endowment; it is their makers who are responsible. Sandel might reply, however, that he does not endorse such an outlook. Rather, with the introduction of this technology, people will come to hold these views and that will have an adverse impact. But this is a weak foundation on which to base a prohibitive policy. It is doubly speculative. It imagines that people will come to embrace beliefs that are unreasonable and that their doing so will on balance have negative effects.

There is another part to this objection, however. With numerous (prenatal) genetic tests already available, and with more no doubt to come, and with the possible advent of germ-line gene therapy, the moral burden borne by parents will become unbearable. ‘Parents become responsible for choosing, or failing to choose, the right traits for their children’ (p. 87). Indeed, Sandel thinks that we already occupy such a world. He says, ‘Once, giving birth to a child with Down syndrome was considered a matter of chance; today many parents of children with Down syndrome or other genetic disabilities feel judged or blamed’ (p. 88). No doubt some parents of Down syndrome children do feel so judged; and some insensitive people give them cause for feeling this.⁴ But on no plausible account of responsibility can parents be blamed for the fact that this particular child has Down syndrome; the parents did not cause this. Unless someone says that the child would have been better off not to exist at all—a view that is surely false—then the parents cannot be accused of having wronged this child by bringing him or her into existence. Of course, some may criticize the parents' decision because of additional medical costs that society may incur in meeting the needs of their child. This version of the objection raises too many issues to engage with fully here. We might note, however, that in order for the objection to be both telling and fair it will have to be the case that the means to avoid having such children are reliable, readily available, not too costly to the prospective parents, and utilizing them in all cases will cost society less than treating individuals with the relevant malady.

Consider a related point. Phenylketonuria (PKU) is an hereditary metabolic disorder the presence of which can be detected with new-born screening. If undetected or untreated, PKU will result in neurological deficits and mental retardation. But if such infants are put on a special diet (essentially, for life), these consequences can be prevented. Screening for PKU has been available since the 1960s, and it now occurs in all fifty states (in the United States). This is a case where Sandel's complaint—‘A domain once governed by fate has now become an arena of choice’ (p. 88)—is not properly seen as justifiable. One can argue that it is a good thing that we can detect this condition and prevent its symptoms, and it is a good thing that we routinely perform the test at birth. The children themselves are beneficiaries. As John Harris points out, more responsibility is not necessarily a bad thing. New knowledge generates new options, and they in turn create responsibilities.⁵

Still, Sandel thinks that this sort of responsibility can get out of hand. ‘[G]iven the duty of parents to promote the well-being of their children (while respecting their right to an open future), such enhancement becomes not only permissible but obligatory. Just as the state can require parents to send their children to school, so it can require parents to use genetic technologies (provided they are safe) to boost their child's IQ’ (pp. 78–79). Whether the availability of genetic enhancement might be reasonably required by the state is not obvious. As many have pointed out, society does not literally require parents to do what is in the best interests

of their children.⁶ Parents often have to balance the conflicting interests of several children, and conflicts between their own interests and those of their children; generally, society requires parents not to let children fall below a certain threshold. And in the case envisioned by Sandel, other questions will have to be answered. As he himself notes, the intervention will have to be safe. It will also have to be reliable, within the financial means of ordinary people, and unquestionably advantageous. These will be difficult bars to clear. But if they are cleared—as we can say they have been in the case of screening for PKU—it is not obvious that the imposition of additional requirements is a bad thing.

4. Solidarity

Solidarity involves a certain kind of connection and empathy with our fellow human beings. But adoption of genetic engineering may ‘diminish our sense of solidarity with those less fortunate than ourselves’ (p. 89). If genetic enhancement is routinely practiced, Sandel says, it will ‘make it harder to foster the moral sentiments that social solidarity requires’ (p. 91). Absent deliberate engineering, a person's genetic endowment is a matter of luck. And this inclines us to view him in a certain way. ‘The more alive we are to the chanced nature of our lot, the more reason we have to share our fate with others’ (p. 89). But when humans can control or influence genetic endowment, they will be more likely to view each person as responsible for her own makeup.

If genetic engineering enabled us to override the results of the genetic lottery, to replace chance with choice, the gifted character of human powers and achievements would recede, and with it, perhaps, our capacity to see ourselves as sharing a common fate. The successful would become even more likely than they are now to view themselves as self-made and self-sufficient, and hence wholly responsible for their own success (pp. 91–92).

There are two problems with what Sandel says here. The first concerns moving from something that is within the control of humans (some human or other) to the claim that it is within the individual's control. If an individual regards himself as self-made because of genetic engineering, he is seriously confused. Whether one's constitution is a matter of the genetic lottery or of medical manipulation, the individual himself has nothing to do with that. Of course, Sandel does not say that people would be so responsible. Rather, he speculates that the well off will be even more likely than they are now to view it that way. But given that such beliefs are mistaken, it is hard to understand why Sandel is so confident that they will develop. The second problem concerns how the very well off view things now. As Ronald Green has pointed out, it seems that

the attitude feared by Sandel has existed even before any genetic tampering was possible. The well off often 'regard themselves as self-made', and 'they take credit for their genetic endowment'.⁷ Perhaps such attitudes will be even worse if genetic engineering becomes available. But it is hard to see what evidence can be garnered to support such speculation. More significantly, it seems ethically backward to prohibit the pursuit of technology that could help many because so doing might make the currently successful even more smug and less empathetic.

Sandel believes that medical insurance is another area in which something akin to solidarity will be lost if we utilize certain types of genetic technology. With medical insurance, people pool their resources and risks. Such markets mimic the practice of solidarity, Sandel says, only if people do not know their own risk status. But genetic testing will change that. 'Those confident of good health and long life would opt out of the pool, causing premiums to skyrocket for those destined for ill health' (p. 90). Thus, again, the worse off will be ill served by these new technologies.

This argument is unconvincing, however. First, no individual can rationally be so confident that she will have good health and live a long life. This assumes a greater role for genetics than is warranted. Many other factors come into play in determining one's health and life expectancy. Second, Sandel is not talking about exotic enhancement technologies here. All that is needed are simple genetic tests, some of which are already available. It is doubtful that Sandel wants to ban these. And third, such a problem will not arise in a society that has universal health care. It seems odd that citizens of the United States should have to forgo genetic testing because of the country's unusual way of allocating health care, but citizens from other countries need not do so. Indeed, with the enactment of the Genetic Information Nondiscrimination Act (GINA) by the United States Congress in 2008, no one can legally get lower health insurance premiums because of the results of a (negative) genetic test. But if Sandel's genetically healthy persons opt out of the market completely, they risk financial ruin when medical problems result from environmental factors or accidents. It is not reasonable to speculate that people will be so short-sighted.

5. Humility

The heart of Sandel's argument against genetic enhancement and bioengineering focuses on what he takes to be the proper attitudes of individuals toward their own traits and those of their

children. Approving of genetic enhancements and bioengineering either reflects or leads to attitudes that are undesirable. Humility is one of the values that will be undermined by embracing biotechnology. Thwarting social humility will be morally costly to society.

Though Sandel does not provide an account of humility, we can rely on the one developed in Norvin Richards's extensive study.⁸ Humility consists in having an accurate sense of oneself and being disinclined to exaggerate or overestimate one's own accomplishments, virtues, importance, and the like. Humility does not involve having an unduly low estimate of oneself. But the humble person recognizes her own limits, epistemic and otherwise, and the humble person does not ascribe special entitlements to herself (unless there is justification to do so). The humble person also recognizes that she cannot take complete credit for having turned out as she does, and others had a part in her good fortune.⁹ This account of humility seems to comport with Sandel's worries.

Sandel believes that if parents are permitted to engineer traits in their offspring, this will cultivate (or reflect) attitudes that will work to the detriment of children. If 'parents became accustomed to specifying the sex and genetic traits of their children', then what will develop is 'a world inhospitable to the unbidden' (p. 86). This might reasonably be thought to reflect a lack of humility if the idea is that parents will come to believe that they have a right that their children have traits that they (the parents) specify. As for being 'inhospitable to the unbidden', children who are unhealthy or lack some of the requested traits will be rejected.

Sandel also believes that access to genetic enhancement technology will alter for the worse how people view themselves. Prior to access to any such interventions, humility was the obvious attitude to have. 'The awareness that our talents and abilities are not wholly our own doing restrains our tendency toward hubris' (p. 86). But there is a concern that this will all change. 'If bioengineering made the myth of the 'self-made man' come true, it would be difficult to view our own talents as gifts for which we are indebted rather than achievements for which we are responsible' (pp. 86–87). Sandel apparently thinks that if a person's natural endowment is not due solely to the genetic lottery, then that person will automatically hold that he alone is to be credited for the talents he has.

Each of these points is weak. The point about rejecting unhealthy children—being inhospitable to the unbidden—is at odds with much of our experience. It is true that some parents reject

severely disabled new-borns.¹⁰ But that is hardly the norm. It is natural for prospective parents to hope that their children will be healthy. Ask any expectant couple what they want, and it is likely that they will utter what has become a cliché, namely, we just want our child to be healthy. When children turn out to have serious medical problems, however, parents usually love them and give them the care that they need. Frances Kamm makes this point by drawing a distinction between ‘caring to have’ and ‘caring about’.¹¹ The fact that parents hope for one outcome does not mean that they will react badly if things turn out quite different. Sandel is apt to reply that all of this will change once prospective parents have access to biotechnological interventions that allow them to select some of their children's traits. This will not be sufficient, however, to justify a legal prohibition of such technologies. Prospective parents can now use preimplantation genetic diagnosis (PGD) to avoid transmitting a genetic disease for which they are carriers. Is there any evidence that children, so conceived, are rejected by their parents if they have other unexpected medical problems? Sandel's point is much stronger, however, when thinking about the moral attitudes that consumers of such technologies might have.¹² Parents might grudgingly accept an ‘enhanced’ child with unexpected medical problems; their attitude might be, ‘We wanted better, but we'll settle for you’. This possibility is troubling, and awareness of it should lead society to put in place safeguards that will minimize such outcomes. Mandatory genetic counselling, for example, can inform prospective parents about the limited knowledge that practitioners have concerning many of a future child's traits.

The claim that bioengineering will lead people to regard themselves as self-made is even more puzzling. Nobody is self-made. Sandel himself obviously recognizes this. For immediately after the passage about the myth of the self-made man, he adds parenthetically, ‘Genetically enhanced children would of course remain indebted rather than responsible for their traits, though their debt would run more to their parents and less to nature, chance, or God’ (p. 87). This takes us back to the collective (‘we’) and the individual: even if humans are capable of engineering certain traits in their children, no individual can sensibly take credit for having been so made. Individual humility is still called for; indeed, such a child might feel grateful that her parents made the choices that they made. But this still does not address the allegedly gifted nature of traits, and I shall return to that central point soon.

6. The Aims of Enhancement

Perhaps merely undertaking the project of genetic enhancement is bad because that very act reflects a lack of humility.¹³ Whether this charge is true depends in part on what the aim of enhancement is. There are at least two possibilities here, one far more modest than the other.

We might think that those who favour pursuing genetic enhancement are in search of perfection. Critics often speak of parents' desires for the perfect child. John Harris, an otherwise vigorous critic, says that Sandel does not think that those who adopt the stance of mastery aim for perfection.¹⁴ But this is not entirely clear, given two of Sandel's comments. At one point, he says that 'the deepest moral objection to enhancement lies less in the perfection it seeks than in the human disposition it expresses and promotes' (p. 46, emphasis added). And again later he writes, 'This demand for performance and perfection animates the impulse to rail against the given' (p. 61). And then there is the book's title. Each of these assertions conversationally implies that Sandel believes that those utilizing some of the tools of biotechnology have as their goal the production of a perfect human. If that were their target, then they might meaningfully be charged with lacking humility.

But as an objection, this is problematic for at least two reasons. First, proponents of genetic enhancement certainly need not believe that perfection is possible. They may have the more modest goal of improvement. Something can be made better and still be far short of perfect. Second, the concept of perfection simply is inapplicable (if not incoherent) in this context. In order for something to be perfect, it must be that than which none greater can be conceived. It must have reached a level that is impossible to exceed. We can sensibly talk about a perfect score on a standardized examination (answering each question correctly) or achieving perfection in a shooting match (hitting all of the targets). But some things do not have an upper limit. How long would someone in perfect health live? How much good in the world would a perfect moral agent achieve? The mind boggles at even trying to list the traits of the perfect child. What would her heart rate be? How long would she live? What occupation would she pursue? Clearly the concept of perfection has no application here.¹⁵

There is at least one other way in which those who adopt the stance of mastery may be thought to lack humility. Perhaps merely thinking that they can achieve genetic enhancement is itself a display of hubris. If the proponents' aim were to enhance the whole species, then they would display arrogance. There are more than 6.5 billion humans on our planet. It is not even clear what would count as enhancing the whole species. If, on the other hand, the aim is to give parents the opportunity to produce healthier babies, it is less obvious that this displays a lack of humility. Indeed, one obvious response is to wait and see how it turns out. If scientists succeed in producing children with the sought-after traits, then they had the ability. If they do not reach the goal, perhaps they were unduly arrogant. But this terse response misses the real point. It is not genetic change that the critics doubt is achievable; rather, it is improvement. For those pursuing genetic enhancement believe that they will produce a better child and that belief is unwarranted.

Whether this criticism will stick depends on what one believes about the origins of human beings. If we think that the human species emerged from other living creatures as a result of a series of random events and the laws of evolution, then it is not at all clear that the belief that deliberate interventions can create improvements is preposterous. But suppose we hold that human beings were created by God. Then it might seem that any thought that we humans could do something to ensure that even better humans are produced is utterly arrogant. There is a problem, however. Presumably those who believe that God created human beings also believe that he created other creatures and the world. Yet for a long time farmers have used breeding techniques to produce better livestock. And Sandel himself acknowledges that not everything given is good; it is justifiable to treat illness, even though they are natural (pp. 46–47). So if humility demands that humans understand their proper place in the world and not try to go beyond that (pp. 85–86, 87, and 97), why are only some interventions in the natural world an indication of hubris?¹⁶

7. The Moral Import of Giftedness

It is the gifted nature of human traits on which Sandel puts the most weight. And, importantly, he states multiple times that ‘an appreciation for the giftedness of life can arise from either religious or secular sources’ (p. 93), and that ‘we can make sense of the notion of giftedness, and feel its moral weight, whether or not we trace the source of the gift to God’ (p. 95). Against this, I shall argue that a secular account of giftedness cannot have the particular moral import that Sandel assigns to it.

One question is whether natural talents are appropriately regarded as gifts. By ‘natural talents’ Sandel seems to have in mind those attributes of an individual that are due primarily to genetic factors. It is uncontroversial to say that such talents are not deserved; but that does not mean that they are gifts. Even if all gifts are undeserved (a point about which I am uncertain), it is not true that all things that are undeserved are gifts. And it seems that we would regard the natural attributes of a person as gifts only if we assumed that there were a giver of such gifts. We do speak of the ‘gifted athlete’. But even here it is not clear what part of his excellent performance is due to ‘natural talent’ and what part results from practice, understanding the game, studying film of his opponents, and dedication. We grossly underrate these latter factors when we carelessly say that an athlete’s excellence is due to natural talent. And in any case, when we say that such talents are gifts, we seem to be speaking metaphorically.

On the supposition that natural talents are gifts, what moral conclusions follow? One conclusion that Sandel draws is in the following. 'If our genetic endowments are gifts, rather than achievements for which we can claim credit, it is a mistake and a conceit to assume that we are entitled to the full measure of the bounty they reap in a market economy. We therefore have an obligation to share this bounty with those who, through no fault of their own, lack comparable gifts' (p. 91). There are several problems here. First, it is hardly an obvious truth to say that if something is a gift, then the recipient has an obligation to share it with others. If an author gives me a copy of her most recent book, it is surely not true that I have an obligation to share this book with others merely because it was given to me. Second, individuals may have an obligation to share things with others even when what these individuals have was not given to them by another. They may even have an obligation to share with others things for which they can claim credit. This directs us to a third point, namely, to assume that genetic endowments are either gifts or things for which their possessors can take credit is a false dichotomy. Something can be a matter of fortune and undeserved even if it is not a gift. In *A Theory of Justice*, John Rawls held that the 'natural distribution is neither just nor unjust', and that in justice as fairness people 'agree to share one another's fate' in part because of 'the arbitrariness of fortune'.¹⁷ He makes no supposition about giftedness.

The other, and most important, conclusion that Sandel draws from giftedness is that people are required to eschew genetic enhancement. An appropriate 'orientation to the world that we inhabit' (p. 96) will lead us to leave well enough alone. People should not pursue genetic engineering in part because their talents and abilities are not wholly their own doing; people are 'creatures of nature, God, or fortune' (p. 87). It is true that if I am given something, there may be moral constraints on how I may use that gift. Consider again the book given to me by the author. If I use the book's pages to ignite the wood in my fireplace, I am disrespectful and behaving wrongly. But it is hard to see why taking a gift and trying to improve it is wrong. Imagine that parents have given their child a piece of land. She plants crops and reaps a fertile harvest. She has improved the gift. Not only is that not wrong, but it seems to be especially respectful and worthy of praise.¹⁸ Or think of somebody who has the 'gift' of empathy striving to understand even better the feelings of others. So the giftedness of one's endowment is not enough to establish a prohibition on bioengineering.

The most important criticism of Sandel's argument, however, is that the moral conclusions that he hopes to draw based on giftedness cannot be sustained within the secular. Sandel uses terms like 'indebted' (p. 86, p. 87) and 'owe' (p. 91) to describe the moral position of the recipient. And he says that since a person's natural talent exceeds his own control, 'he has nature, fortune,

or God to thank for it' (p. 93). Sandel thinks that talents can definitely still be seen as gifts even if they result from nature or fortune, not God. I concede, of course, that they can be seen as gifts in a metaphorical sense. But gifts (and other benefits) generate obligations on recipients with respect to how they might be used only if the creation of or transference of those gifts is a morally significant act.¹⁹ God may be capable of performing morally significant acts, but neither nature, chance, nor fortune are agents. While it may be possible for people to owe 'gratitude to God' (p. 93), gratitude to nature or to chance makes no sense because neither can provide benefits intentionally. Gratitude in this case would be 'free-floating'. Eric Parens claims, '[O]ne can be "grateful" without claiming to have any knowledge of a "Giver"!' ²⁰ The scare quotes around 'grateful' are significant; in order for the sort of gratitude that creates requirements of reciprocation to be appropriate, we need to know at least (i) that there is a giver and (ii) what the giver's motives and intentions are.²¹ When the source of a person's talents is nature, chance, or the genetic lottery, there is no giver and no motives or intentions. Feeling happy or lucky about one's genetic makeup is appropriate; so too is being appreciative. But if one calls this gratitude, it is free-floating because there is no agent to whom one is indebted for such benefits; they just happened. That is why terms such as 'thanks', 'owe', and 'indebted' are misleading and that is why the secularized version of the argument does not succeed. It certainly does not generate an obligation not to seek improvement.

8. Not All That is Given is Good

Sandel thinks that those who adopt the stance of mastery mistakenly believe that they are liberating human beings. 'But changing our nature to fit the world, rather than the other way around, is actually the deepest form of disempowerment' (p. 97). What is puzzling here is why it is permissible to change the world but not human beings. The world is just as much of a gift to us as are our talents, abilities, and life itself. Recall that in a passage quoted near the beginning of this paper Sandel says that the case for giftedness is straightforward from the standpoint of religion; to engage in bioengineering 'is to misunderstand our place in creation, to confuse our role with God's' (p. 85). But within that same framework, God created the world too. Viruses and bacteria that cause disease are natural. Some diseases are products of the genetic lottery. Why should we accept the gifted nature of normalcy but not the gifted nature of disease?²² Sandel's answer is this: 'Although medical treatment intervenes in nature, it does so for the sake of health, and so does not represent a boundless bid for mastery and dominion' (pp. 46–47).

This answer is revealing. It is claimed that since treatment is for the sake of health, it does not indicate a bid for dominion. But this just seems to be mistaken. Many forms of treatment do appear to be a quest for mastery, an attempt to ward off death at all costs. Think of dialysis for

renal failure, feeding tubes for individuals in a persistent vegetative state, and transplants for persons whose vital organs are failing. Moreover, this response merely assumes that treating disease is permissible while enhancing normal traits is wrong.

The attitude of giftedness (or the framework of gratitude) toward impersonal nature is at best metaphorical. The sort of substantive moral conclusions that are supported by considerations of gratitude require at least that benefits be provided intentionally and from certain motives. This is not possible without agency. I have not discussed, however, another of Sandel's concerns, namely, that bioengineered children will be indebted to their parents in a way that is undesirable. Since parents are agents, this point cannot be dismissed as easily. Citing Jürgen Habermas approvingly, Sandel suggests that a 'genetically designed child is beholden and subordinate to another person (the designing parent) in a way that a child born of a contingent, impersonal beginning is not' (p. 82).²³ Later Sandel says that genetically enhanced children 'remain indebted . . . to their parents' (p. 87). But indebted for what? Here a complication arises.²⁴ One method used by prospective parents seeking enhanced offspring is selection.²⁵ Using PGD, for example, a couple may transfer to the woman only those fertilized eggs with the sought-after trait. Any resulting child will not owe a debt of gratitude to its parents for the trait because neither life itself nor genetic endowment are benefits that an agent can bestow on another. For there is no individual to whom to grant these benefits prior to conception; and once conception occurs, life and genetic endowment are in place.²⁶ A person may feel grateful for the fact that her parents chose to reproduce when and how they did; but that is not the same as owing gratitude to one's parents for so choosing.²⁷ A different method of seeking enhanced offspring is modification.²⁸ This involves altering the genetic makeup of a determinate individual. In some cases, such an 'enhanced' child may owe gratitude to her parents. But there will be complicating factors, such as whether the child regards the trait as a benefit and whether the parents can plausibly be said to have provided this individual with the benefit intentionally. In any case, however, there is no reason to think that such a child is more 'subordinate' to the designing parents than any other child is to her parents.

9. Conclusion

Having onerous responsibilities is something to fear, but there is no reason to think that a society that pursues genetic enhancement will be so burdened. New knowledge does often create additional obligations, but when these substantially promote the welfare of people they are to be welcomed. Solidarity too is an important social value. But unless one attributes implausible assumptions to people whose creation was due in part to advances in biotechnology, this value is not compromised by having genetic enhancement available. Bioengineering displays a lack of

humility only if we assume that the aim is perfection. But if the aim instead is merely to improve the wellbeing of humans, this in and of itself does not indicate arrogance.

Sandel engages in hyperbole when he attributes to defenders of genetic enhancement ‘the impulse to rail against the given’ (p. 61) and when he says that they are engaged in ‘a Promethean assault on the given’ (p. 47). Merely to seek to make lives better is no more to assail the given than is the treatment of diseases. Viewing people's natural talents as undeserved is justifiable. But claiming that these same talents are gifts that possessors may not seek to change is not warranted within a secular framework. Beneficiaries do sometimes have obligations to use or not to use gifts in certain ways. But seeking to improve gifts is seldom forbidden. Moreover, such obligations require that the benefits be created by acts of moral significance. Nature, however, is not a moral agent and so cannot perform such acts. If there are good reasons to be morally hesitant about pursuing genetic enhancement, we must look elsewhere for them.²⁹

NOTES

1 Michael Sandel, *The Case Against Perfection: Ethics in the Age of Genetic Engineering* (Cambridge, MA: Harvard University Press, 2007). Page references to this book will be given in the text. This book is an expanded version of an article by the same title published in *The Atlantic Monthly* 293,3 (2004): 51–62.

2 Erik Parens, ‘Creativity, gratitude, and the enhancement debate’ in Judy Illes (ed.) *Neuroethics: Defining the Issues in Theory, Practice, and Policy* (New York: Oxford University Press, 2006), pp. 75–86.

3 *Ibid.*, p. 77.

4 For an account of someone who has felt such judgments, see Martha Beck, *Expecting Adam* (New York: Berkley Books, 1999), pp. 217–219, 241, 245, and 312.

5 John Harris, *Enhancing Evolution: The Ethical Case for Making Better People* (Princeton, NJ: Princeton University Press, 2007), p. 118.

6 See, for example, Allen Buchanan and Dan Brock, *Deciding for Others: The Ethics of Surrogate Decision Making* (Cambridge: Cambridge University Press, 1989), pp. 235–237 and Lanie Friedman Ross, *Children, Families, and Health Care Decision Making* (New York: Oxford University Press, 1998), chapters 1 and 3.

7 Ronald M. Green, *Babies by Design* (New Haven, CT: Yale University Press, 2007), p. 156.

8 Norvin Richards, *Humility* (Philadelphia, PA: Temple University Press, 1992). The account of humility presented in this paragraph is set out in chapter 1 but developed throughout the book. Besides chapter 1, pp. 5–7, see especially pp. 86, 120, and 166.

9 Bernard Gert, *Morality: A New Justification of the Moral Rules* (New York: Oxford University Press, 1988), p. 257.

10 For an informative historical account, see Robert Weir, *Selective Nontreatment of Handicapped Newborns* (New York: Oxford University Press, 1984), chapter 1.

11 Frances M. Kamm, ‘Is there a problem with enhancement?’ *The American Journal of Bioethics* 5,3 (2005): 5–14, pp. 10–11. See also, Allen Buchanan, ‘Choosing who will be disabled: Genetic intervention and the morality of inclusion’, *Social Philosophy and Policy* 13,1 (1996): 33–34.

12 The need to clarify the difference between grounds for legal prohibition and concerns about moral attitudes was called to my attention by a referee for this journal.

13 Pursuing genetic enhancement might be wrong because it is too risky or poses a threat to human nature. These are different arguments from those advanced by Sandel, and they are addressed in Terrance McConnell, ‘Genetic enhancement, human nature, and rights’, *The Journal of Medicine and Philosophy* 35,3 (2010): 415–428.

14 Harris *op. cit.*, p. 109.

15 In making this point, we need not accuse Sandel of conceptual confusion. Rather, he may merely be attributing the aim of perfection to others. But when there is an alternative available—mere improvement rather than perfection—why opt for the less charitable interpretation?

16 Sandel makes the broader claim (that I do not discuss here) that the stance of mastery makes people not open to the ‘unbidden’. Guy Kahane, in ‘Mastery without mystery’, *Journal of Applied Philosophy* 28,4 (2011), pp. 355–368, argues (especially in section 2) that openness to the unbidden is not fully compatible with theism. This provides additional reasons for being suspicious of Sandel’s assumption that there is a morally significant difference between treatment and enhancement.

17 John Rawls, *A Theory of Justice* (Cambridge, MA: Harvard University Press, 1971), p. 102.

18 Note that Locke, in chapter 5, sections 26–28, of *The Second Treatise of Government*, holds that ‘the Earth and all inferior Creatures’ were given to people by God, but they were given ‘to make use of it to the best advantage of Life and convenience’. See John Locke, *Two Treatises of Government*, P. Laslett, ed. (Cambridge: Cambridge University Press, 1988/1690), pp. 286–288.

19 The argument to support this claim is developed in Terrance McConnell, *Gratitude* (Philadelphia, PA: Temple University Press, 1993), chapter 1, especially pp. 23–30 and 41–42.

20 Parens op. cit., p. 77.

21 McConnell 1993, op. cit., pp. 19–30.

22 Harris op. cit., p. 112. See also, Kahane op. cit., section 2.

23 Jurgen Habermas, *The Future of Human Nature* (Oxford: Polity Press, 2003), p. 75.

24 The need to address this complication was pointed out to me by a referee for this journal.

25 See Stephen Wilkinson, *Choosing Tomorrow's Children* (New York: Oxford University Press, 2010), p. 186.

26 Henry Sidgwick, *The Methods of Ethics*, 7th edn. (Indianapolis, IN: Hackett Publishing, 1981/1907), p. 248, note 1, says that life cannot be a benefit that generates a debt of gratitude because it cannot be bestowed for the regard of the recipient since there is none prior to conception. See also, McConnell 1993 op. cit., pp. 210–211.

27 I assume here that one person can owe another a debt of gratitude only if the latter has provided the former with a benefit and has done so intentionally. For the argument and for qualifications, see McConnell 1993, op. cit., chapter 1. This still allows that a person might reasonably feel grateful for the fact that one's parents chose to reproduce when and how they did, but leaves it an open question what the moral significance of that is.

28 See Wilkinson op. cit., pp. 186–187.

29 I thank members of an audience at Wake Forest University (February 2010), where an earlier version of this paper was presented, for their helpful feedback. I am also grateful to referees for this journal for their recommendations. I especially thank Heather Gert for extensive comments and suggestions.