

CAN GENETIC ENHANCEMENT BE OBLIGATORY? FOUR ARGUMENTS

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ABSTRACT: Surprisingly, some believe that it would be morally permissible to genetically un-enhance one's offspring (perhaps to share a trait of the parents or siblings). More common is the belief that it would be morally permissible to genetically enhance one's offspring, as the technology to do so becomes available. Parents believe that it would be good to provide their children with all of the usual opportunities to succeed in life (education, culture, sport). Why not provide them with enhanced traits of being bigger, faster, or smarter? However, would it be obligatory for us to avail ourselves and our future offspring of these techniques, as they become available? Are we wrong not to genetically engineer our kids to be bigger, faster, smarter? Mark Neunder argues for and defends the view that we are so obliged, as the new technology becomes available (as it clearly will).

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ome day in the future, science may give us the ability to genetically enhance our children—to confer upon them genetic traits or endowments above the normal, natural, or average human level. Many have argued this would be wrong to do, others have argued this would be permissible to do—but I shall here argue that it can even be *obligatory* to do. Like all arguments, mine make some assumptions. My assumptions are that genetic enhancement will one day be safely possible, that both genetic correction and genetic enhancement are at least morally permissible, and that genetic engineering at the embryonic stage is the most likely method of enhancement. I will now give four arguments for thinking that genetic enhancement can indeed be obligatory.

1. THE HEALTH ARGUMENT

- (A) We have an obligation to enhance our children's health, if we reasonably can.
- (B) Genetic enhancement is a way to enhance our children's health.

THEREFORE

- (C) We have an obligation to enhance genetically our children's health, if we reasonably can.
- (D) Many of us can reasonably enhance our children's health genetically.

THEREFORE

- (E) Many of us have an obligation to enhance our children's health genetically.

In Support of (A)

I consider premise (B) to be obvious: genetic engineering offers the future possibility of enhanced immune systems, lower risks of disease than average, extended youth, and much else. So, I here focus on premise (A). First, let me explain the conditional clause "if we reasonably can." An obligation is *not* reasonably performable if it is (i) impossible to perform, (ii) if performing the obligation would impose a burden the suffering of which would be a worse wrong than the non-performance of the obligation, or (iii) the performance of the obligation would conflict with the performance of a weightier obligation. When none of these conditions obtain, then the obligation can reasonably be done. Again, if the parents have sufficient resources, such that it would not be an unreasonable burden upon them to perform the obligation, and if they are subject to no weightier countervailing obligations, then the performance of the obligation is reasonable. For example, if fulfilling the duty would reduce the family to poverty, then the burden imposed by the obligation is too severe, and therefore unreasonable. If, however, performance of the duty would entail only a sacrifice of a family excursion to Disneyland, then the burden imposed is not unreasonable.

This having been made clear, I hope it is readily apparent that we do indeed have an obligation to enhance our children's health if we reasonably can. Health is considered by most of us as an uncontroversial good. Indeed, John Rawls, in *A Theory of Justice*, lists it as one of the primary natural goods, along with vigor. He defines a primary good as a good that everyone can be expected to want, regardless of whatever else they want.¹ This certainly seems to be the case with health. Indeed, a platitude characteristically uttered by the elderly upon hearing of someone's misfortune is the observation that "well, at least you have your health." The sense here is that as long as you have your health you should rejoice, no matter what other misfortune befalls you, so important and central is its goodness. Health is also one of the great instrumental goods. Sextus Empiricus reports that Herophilus, the ancient physician, in his *Regimen*, said that "wisdom cannot manifest itself and skill is non-evident and strength cannot compete and wealth is useless and reason is powerless if health is missing."²

Since health is such an obvious good, we must also infer that, all other things being equal, the healthier one is, the better off one is. Health keeps away death, disease, pain, and disability, some of the worst evils that beset the human condition. But the healthier one is, the more likely one will not suffer these evils. Even more, health is not only a negative good. Health is also a positive good in that it can confer a sense of well-being and joy in simply being alive. Such is its value.

It must be because health has such high value, intrinsically, and even more so instrumentally, for our children's well being and life prospects, that we already recognize obligations to enhance our children's health, above normal or average levels, when we reasonably can. Consider first vaccination. Vaccination confers upon a child either an immunity that does not naturally exist in human beings or it confers a greater resistance than is normal or typical or natural in human beings to a disease. Surely, this must count as an enhancement of a person's health above natural levels. But we consider vaccine enhancements of our children's health to be morally obligatory, and some are indeed mandated by the state. A parent is judged morally delinquent if they neglect to vaccinate their children. This is a clear example of an obligatory health enhancement, and the vast majority of parents most certainly can reasonably confer it. The burden it imposes on the family is small, and the risk of side effects to the child is very low.

But our health-enhancing obligations do not end with vaccination. If parents can reasonably afford better or superior medical care, or better hospitals, or better doctors, or better surgeons, or better dental care or dentists, then we think parents have an obligation to provide these to their children. Preventive medicine is another resource through which parents can reduce the incidence of health problems in their children, and we see this as a duty that parents have, if they reasonably can provide it. In sum, it is clear we have obligations to enhance health.

2. THE EASY BENEFIT ARGUMENT

- (A) If we can *easily* confer a *great benefit* upon our child, we ought to do so.
- (B) Genetic enhancement can confer a great benefit upon our child.

THEREFORE

- (C) If we can easily confer genetic enhancement upon our child, we ought to do so.
- (D) Many of us can easily confer genetic enhancement upon our child.

THEREFORE

- (E) Many of us ought to confer genetic enhancement upon our children.

In Support of (A)

First, let me explain what I mean by "easily confer." Perhaps this is best seen in a comparison between what we are *reasonably* able to do and what we are *easily* able to do. A person may be reasonably able to do something, but not easily able

to do that very same thing. For example, a debtor may be reasonably able to repay his loan over a series of twelve months, but it may not be *easy* for him to do so. It may not be easy, since he has to change his lifestyle in certain significant ways, slashing his entertainment expenses, not indulging himself in several of the material luxuries he has enjoyed in the past, such as dinners out, new suits, dating. But while none of this may be easy for him to do, he can reasonably be expected to do so in order to pay off his debt. On the other hand, if something is indeed easy for you to do, it follows that you are reasonably able to do it. If giving five dollars a month is easy for you to do, given your monthly salary, then you are certainly reasonably able to do it. We can conclude, then, that something is easy for you to do if it involves little or no burden, little or no difficulty, exertion, hardship, or discomfort, in its performance.

Now, something can be easily done for either of two reasons. First, if the task itself is minor or trifling. Second, if our resources or abilities are great relative to the task to be performed. An example of the first would be telling the time to somebody who asked what time it was. An example of the second would be the purchase of a Lexus by Bill Gates, or the lifting of a hundred pounds by an Olympic weight lifter. Many other things can be relatively easy to certain people because of their wealth, their power, their fame or celebrity, their special circumstances, or their particular talents. It is clearly obvious that there are many actions which parents can perform easily for their children, either because the task itself is trivial, or because the resources or abilities of the parents are great. Of course, this last possibility suggests that some of the same tasks will be easily performed by some parents, but not easily performed by others.

Of some benefits that parents can confer upon their children, some are great benefits. If something is reasonably judged to be a great benefit, and if the parents can easily confer this upon their child, then the parents have an obligation to do so. For example, Bill Gates and Donald Trump can easily afford to send their children to the very best private colleges. It is reasonable to think that sending your children to such a school is to confer upon them a great benefit. Therefore, if the children of Bill Gates and Donald Trump meet the criteria of admission to Harvard, and if they desire to go, then Gates and Trump have an obligation to send them.

Besides college, or sending your kid to the very best college you can, other examples of great benefits which could be conferred on your children might include tutors, instruction or training in special talents, such as athletics, music, art, science, or mathematics. We must also include gifts of wealth or inheritance, or a position in the family company, if the parent owns one. Or perhaps also the resources for the grown child to start his own business, or the resources required for the pursuit of your child's well-considered life-plan or his life-long dream, or any important component of your child's happiness. But we must also remember that *not* all benefits are *great*: for example, dinners at expensive restaurants or an extensive collection of shoes. Things such as these we are not obliged to confer.

Another confirmation of premise (A) is the laws concerning child support, laws that are supported by our moral intuitions. The greater their wealth, income, and resources, the more parents *owe* to their children. Child support payments are greater, the greater the parent's income. This we consider to be both a legal and a moral *obligation*. This means that what we are obliged to provide for our children, and the amount and quality of this support is relative to our resources. For example, Mick Jagger and Boris Becker were both judged to owe millions of dollars in future child support payments to their illegitimate children. Parents therefore can owe to their children benefits over and above what is customary for an average middle-class life, provided that they have the resources to supply them. We must then conclude that, just as parents with the sufficient resources are obliged to provide their children with above average levels of financial support, so also parents with the sufficient resources are obliged to provide their children with above average levels of genetic endowment.

In Support of (B)

Can genetic enhancement be judged to confer great benefits? The possibility of genetic enhancement includes the possibility of intelligence, memory, creativity, special talents and abilities, and beauty, at levels over and above those considered typical for human beings. If you believe that there is a genetic component to these traits, and if you believe the conferral of these outstanding traits is a great benefit, then you must believe, in principle, that genetic science can manipulate, select, enhance and confer things of great benefit. As for premise (D), many of the wealthy will easily be able to afford genetic enhancement, and will thus be obliged to confer it.

3. THE COMPARATIVE DISADVANTAGE ARGUMENT

- (A) We have an obligation, if we reasonably can, to confer a benefit upon our children if *not* conferring it means an important comparative disadvantage for them.
- (B) If genetic enhancement becomes sufficiently common, then *not* conferring genetic enhancement upon our children would mean an important comparative disadvantage for them.

THEREFORE

- (C) If genetic enhancement becomes sufficiently common, we would have an obligation, if we reasonably can, to confer genetic enhancement upon them.

In Support of (A)

First, I must explain what I mean by "important comparative disadvantage." My meaning will best be illustrated by an example. Over half of high school seniors now continue their education in college.³ In the 1920s, when only a small percentage

ever went to college, no one would have considered sending their children to college something obligatory. But at sometime in the relatively near future, this percentage of students going to college will rise to the level of a preponderant majority. In such a society, *not* going to college will be an “important comparative disadvantage.” And the greater the percentage of people going to college, the greater the important comparative disadvantage of *not* going, and the greater the obligation there will be to send your children to college.

I just said that in a college-norm society, *not* going to college will be an important comparative disadvantage. By “important” I mean, first, that the *degree* of comparative disadvantage will be significant. For example, it is common knowledge that a great difference exists between the average yearly income of those who have a college degree and those who do not. This differential between them will only increase as the percentage of college graduates increases. Therefore, the comparative disadvantage of *not* having a college degree will be significant.

Secondly, I mean by “important” that the *domain* wherein the comparative disadvantage exists is itself a significant or important one. To be precise, the domain to which I refer is that of “life prospects.” For example, suppose that children who do *not* go to tennis camp are at a great disadvantage in recreational tennis games compared to those who do go to tennis camp. The degree of disadvantage is high, and therefore, the disadvantage is significant. But the *domain* where this disadvantage exists is *not* in itself a significant one—that is, it has no significance in terms of life prospects. Someone who does not go to tennis camp is at a disadvantage in the domain of tennis, but certainly not in the domain of life prospects. But it is the domain of life prospects that is properly the focus of parental concern and obligation, and not any particular or relatively trivial activity or domain. In short, then, an “important comparative disadvantage” exists when the degree of disadvantage in life prospects is significant. I think it clear that lacking a college degree, if not now, soon shall be an important comparative disadvantage. If so, then it is clear that sending your child to college would then be obligatory. This obligation derives from the parents’ general duty to equip their children for success in their life prospects. This very same duty, I believe, already accounts for our clear sense of obligation in making sure our children have at least a grammar and high school level education.

In Support of (B)

Consider the likely prospects for those who are *not* genetically enhanced in a future society where most or a majority *are* enhanced. It is obvious that having enhanced levels of health, intelligence, creativity, looks, and a winning personality would significantly improve your life prospects. It is also obvious that in a society where so many people are enhanced, those who are not enhanced will be at an important comparative disadvantage. In such a society, parents would have a moral obligation to genetically enhance their children.

How likely is such a society? Given the advance of genetic science, given the demand that will exist for genetic enhancement, given the competition in the

free-market which tends to reduce prices as efficiency increases, I think it more likely than not, that the genetic enhancement of our children will one day be as common as sending them to college.

4. THE TALENT DEVELOPMENT ARGUMENT

- (A) We have a duty to develop our child's worthwhile native talents, if we reasonably can.
- (B) If we have a duty to *develop* our child's worthwhile native talents, then we have a duty to *confer* upon our child worthwhile native talents.

THEREFORE

- (C) We have a duty to confer upon our child worthwhile native talents, if we reasonably can.

In Support of (A)

Let me first illustrate and confirm this first premise by an example. Mozart was a child prodigy who displayed amazing musical talent even before the age of five. His father, also a musician, had the resources and training necessary to foster and develop his son's native musical genius. Given Mozart's outstanding native talent, and given his father's capacity to develop that talent, his father had an obligation to his son to foster his natural genius. Mozart's father would have been morally negligent had he not done so, and he would have done his son a serious wrong. I think this example demonstrates the truth of (A). It is then intuitively obvious that we have a *prima facie* obligation to develop our child's worthwhile native talents and that the greater the native talent of our child, the greater our obligation to develop or foster that talent.

But let me now explain what I mean by a "worthwhile native talent." I mean three things. First, the native talent in question must be significant in degree. In Mozart's case, the degree of talent was extraordinary. Of course, the degree of talent does not have to be as remarkable as Mozart's in order for it to be significant. On the other hand, the degree of a natural talent in some children may *not* be significant. For example, suppose a child's natural talent for music is only *slightly* better than the average child's. Such a small degree will not be significant.

Second, for a native talent to count as worthwhile, the talent itself must lie in a domain that is significant or promises a better life or life prospects. I think we would agree that Mozart's talent was of an important kind. But we can imagine examples of native talents of very great *degree*, but which are *not* of a significant *kind*. Imagine, for example, a child born with remarkably prehensile toes, and who can perform a variety of household tasks with his feet, tasks that most people can only perform with their hands. But this type of talent seems trivial and insignificant. It is not of an important kind.

Third, to be worthwhile, the natural talent must be intrinsically good. It must be good in itself to have or to develop. I intend also by this condition to exclude talents the exercise of which is inherently immoral. For example, we would have no duty to develop a child's native criminal talent or his prodigious talents for sadistic cruelty. However, we do think that Mozart's talent was indeed intrinsically good, and it certainly was not inherently immoral when exercised. So much for what I mean by "worthwhile native talent."

In Support of (B)

I have two arguments to give in support of the second premise.

First, an argument from contraries. The following two statements are what Aristotle would call contrary statements, or contraries:⁴

- (P) If we have an obligation to attenuate trait X when X is present, then we have an obligation to prevent the presence of trait X.
- (Q) If we have an obligation to promote trait X when X is present, then we have an obligation to produce trait X.

Every argument from contraries infers that if one contrary is true, then so is the other. For example: Courage is a virtue, so cowardice is a vice. Since the first clause is true, so is the second. Likewise, then, if (P) is the contrary of (Q), and if (P) is true, then the truth of (Q) will follow. I will now give an example to confirm the truth of (P). Consider a significant genetic disease. If a significant genetic disease were present in our child, then we would have a duty to attenuate, or to cure, this genetic disease. But it is also true that if we had the ability to prevent the genetic disease from ever afflicting our child in the first place, to prevent its very presence to begin with, then we would have an obligation to do so. Thus, if we have an obligation to attenuate a genetic disease when present, then we also have an obligation to prevent its very presence in the first place. This example confirms (P).

But if the first contrary (P) is true, then the second contrary (Q) is true. Therefore, if we have an obligation to promote a worthwhile native talent when it is present—and we do, by premise (A)—then we also have an obligation to produce the very presence of that native talent from the start whenever we can. But this is precisely what genetic enhancement promises to do. Therefore, we have a moral obligation to genetically enhance our child in worthwhile ways whenever we reasonably can. I conclude, then, that the second premise (B) of the Talent Development Argument has been justified.

My second argument for (B) begins with a question: *Why* do we think we have an obligation to develop our child's worthwhile native talents? The only answer can be that this development is likely to lead to an intrinsically much better life or much better life prospects for our child. But if *this* is the rationale that justifies our duty to *develop* our child's natural talents, then this very same rationale will also justify the duty to *confer* upon our child worthwhile natural talents and advantages—through

genetic enhancement. The conferral or enhancement of natural talents and advantages by means of genetic engineering is *also* likely to lead to an intrinsically much better life or much better life prospects. Therefore, the inferential move in premise (B) from development to conferral is justified.

Normally, we think it is a duty to develop our child's natural talents only if the child enjoys exercising them or desires to develop them. Obviously, there is no such analogy when we are considering the conferral of natural talents, such as in the genetic enhancement of embryos. Instead, we must consider it a presumption that a person would want to have such natural talents and native abilities, regardless of whether he or she ultimately decides to develop them. Just as with the genetic enhancement of the health of our child, we will be obliged to confer these other worthwhile advantages and talents upon our child, or child-to-be (the embryo), for which there is a presumption that everybody would want them. We ought to confer those goods that everybody is presumed to want, whatever else they want. But everybody wants to be naturally gifted.

Can genetic enhancement confer such goods, such gifts, upon our children? I have suggested throughout this paper that it can. It can confer superior levels of beauty, intelligence, memory, creativity, athletic ability, health, and of all the special abilities such as musical, artistic, and mathematical talent. John Rawls himself lists health, intelligence, and imagination as primary natural goods in *A Theory of Justice*.⁵ But I submit that all these traits that I have referred to are things everybody is presumed to want, and therefore even more so when enhanced to superior levels. Even if it turns out that a child does not want to develop some of these native advantages, we can presume that the child would still have wanted the *opportunity* of being able to develop them. Greater opportunity itself can be a great value even if some of the opportunities available to one are never explored. Greater opportunity means a greater range of options and possibilities, and a greater range of options means greater freedom—and greater freedom itself is a good we can presume all people want.⁶ Enhancing people's native talents gives them a greater range of options—and therefore greater freedom. If parents have some obligation to increase their children's important opportunities in life, then I conclude that parents *do* have a duty to confer, through genetic enhancement, worthwhile natural advantages upon their children, if they reasonably can. Therefore, despite common opinion to the contrary, genetic enhancement *can* be morally obligatory.

ENDNOTES

1. Rawls, John. *A Theory of Justice: Revised Edition* (Cambridge: Harvard University Press, 1999), pp. 54, 79.
2. Sextus Empiricus. *Against the Ethicists* (New York: Oxford University Press, 1997), p. 11.

3. Andrew Hacker. "The Case Against Kids." In *The New York Review of Books*, 30 November 2000, p. 16.
4. Aristotle. *The Art of Rhetoric* (New York: Penguin Books, 1991), p. 198 [1397a].
5. Rawls, *A Theory of Justice*, p. 54.
6. For arguments relating genetic enhancement to opportunity, see Nicholas Agar, "Liberal Eugenics," in *Bioethics: An Anthology*, edited by Helga Kuhse and Peter Singer (New York: Blackwell, 1999), pp. 171–181.