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She wrote this essay for Andrea Fryling’s English 104 class.
Designer Genes: Our Future in Bioengineering

APA Format

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Bill McKibben, in his article “Designer Genes,” discusses the developing science of genetic engineering. He explores the consequences of this science and the moral questions surrounding it, while using crafty rhetoric and curiosity-inspiring examples to catch his readers’ attention.

McKibben gives the reader a basic understanding of how this new science works: Germline genetic engineering is a method of genetic alteration. The term “germ” here denotes egg and sperm cells. Genetic engineering entails splitting the cells of an embryo and then adding, removing, or modifying genes based on the desired design. Manufactured genes can also be added at this point. McKibben describes the procedure in a simple way that the average reader can understand while also maintaining its scientific integrity. While McKibben presents this information clearly, the rest of the passage does not make his position on the issue clear. Rather, he writes from both perspectives, leaving the reader confused about whether McKibben is for or against genetic engineering. This ambiguity reflects the uncertain morality and future of genetic engineering.

Another issue that McKibben addresses is the pace of technology. McKibben uses his own daughter as a hypothetical example:

So let’s say baby Sophie has a state-of-the-art gene job: her parents paid for the proteins discovered by, say 2005, that on average yield ten extra IQ points. By the time Sophie is five, though, scientists will doubtless have discovered ten more genes linked to intelligence. Now anyone with a platinum card can get twenty IQ points, not to mention a memory boost and a permanent wrinkle-free brow. So by the time Sophie is 25 and in the job market, she’s already more or less obsolete—the kids coming out of college plainly have better hardware (p. 418).

McKibben’s description of his own child as obsolete seems cold-hearted. His rhetoric is plainspoken and relatable to the average reader, but with a volatile topic. The author’s casual attitude here almost sounds like friendly conversation at a neighborhood barbecue, thus making genetic
engineering seem like an attainable idea. This idea of “everyone else is doing it” never carried such importance as now, where a child's future is at stake. His portrayal of this dilemma makes parents question whether they would do it for their child.

He details another scenario: If all parents were capable of adding IQ points to their child, and all did, then everyone would need to alter their children simply to keep up. If all children are enhanced, then the one who is not will fall behind, through no fault of their own. Again taking an extreme approach, McKibben equates the prospect of leaving a child's genetics to chance, rather than hand-picking them, as “child abuse.” While outrageous, he addresses a legitimate point: How would the one natural, and thus, “stupid,” child in the class feel?

McKibben identifies several other ethical issues with parents planning their children’s destiny prior to conception. Every parent tries to steer their children in some manner. Some parents leave as much to their children as possible, while others lay out a concrete path their children must follow. McKibben uses a harsh but accurate analogy: “No dictator anywhere has ever tried to rule his subjects with as much attention to detail as the average modern parent” (2003, p. 419). By comparing the “average modern parent,” a label that applies to many readers, to a dictator, he alienates those who may agree with the idea of genetic engineering, and implicitly takes a stance against it.

What if something goes wrong and whatever enhancements that were paid for do not appear in the child? McKibben addresses this with another shocking comparison: “In the present world, you just tell yourself that that’s who he is. But in the coming world, he’ll be, in essence, a defective product” (2003, p. 421). “Defective product” echoes in the ears of readers. No human being, much less an innocent child, deserves to be labelled with this harsh, industrial term. The boldness of this statement incites parents’ instincts to defend and protect their children. Although no parents wish to hear their child referred to as a defective product, McKibben brings up a point: if one bought a car that did not get the mileage it was designed to, you would take it back (2003, p. 421).

McKibben offers a serious examination of the moral dilemma surrounding genetic engineering, recognizing the grave implications of this new science: “This is arguably the biggest decision humans will ever make” (2003, p. 415). His slightly ambiguous position magnifies the murky future of genetic engineering, while his daring prose and extreme examples leave readers no choice but to consider the effects and morality of humanity’s latest dilemma.
References