

The most recent meetings of this class have been concerned with the topic of genetic engineering, specifically the practice of pre-implementation genetic diagnosis (PGD). We watched the film *Gattaca*, which strongly opposed the use of PGD as a type of discrimination. We were also asked to read Colin Gavaghan's "Off-The-Peg Offspring in the Genetic Supermarket", which attempted to moderate the oppositional stance of *Gattaca* by presenting various arguments that both counter and defend PGD. I propose this argument:

P1: PGD unfairly disadvantages and unfairly gives advantages to individuals.

P1: We should not unfairly disadvantage or unfairly give advantages to as many individuals as we can.

C: We should not practice PGD.

By showing how PGD unfairly gives advantages and disadvantages people, I will attempt to show that PGD is unethical and therefore should not be practiced.

Both *Gattaca* and Gavaghan's article discuss the inequality created by PGD; one might say PGD is to the human race what steroids are to sports. In the different stadiums and playing fields of life—job competition, dating, etc—everyone plays the same game by the same rules (presumably). PGD gives a biological boost to the players who use it; it improves their statistics or "stats"—the probability they'll live longer, more productive lives are increased by choosing the right, genetically quantifiable variables. Less quantifiable "variables" may not be guaranteed, like happiness or the probability of being a "good" person; but the probability of success in all endeavors may become unjustly favorable. That means players without PGD have less favorable stats; they are less likely to perform as well as other PGD players and would be considered inferior if PGD-standard performance became the norm. PGD in the real world is also quite expensive, not unlike steroids, which means that it is mostly available to a specific

socioeconomic level of society. But the performance-enhancing effects of steroids can be stopped when usage has stopped; PGD is permanent. So what would happen if we decided that PGD was available to everyone, and everyone used it? Now the playing field is leveled, and all of the players have an equal chance at health, productivity, and maybe even success. So are we in the ethical clear (and yes, pun intended)? That question is answered when we examine what we mean by the words *unfair* and *advantage* in the original wording of the proposed premises. When everyone has the same “unfair” advantage, is it still unfair? When everyone has been PGD’d to their genetic best, is it unfair to any one individual? Well, by being unfair to all individuals, we’re still being unfair to each singular individual. If everyone has the same advantage, is anyone disadvantaged? In the subject of PGD, yes. Because in genetics, some couples have a better pool of overall selection than others. Which means that some couples have better genes than others, and would produce even more genetically superior children amongst already genetically superior children. The inequality still exists.

If you cannot conclude by this reasoning that PGD is a largely unethical practice, consider this example: on January 8, 1942, Stephen was born to research biologist Frank and his wife Isobel, a healthy baby boy. It was not until Stephen had graduated from Oxford University and enrolled at Cambridge to further study theoretical physics, that Mr. Hawking was diagnosed with amyotrophic lateral sclerosis. I can’t say that without Stephen Hawking, black holes would go undiscovered and the realm of physics would not be the one we are familiar with today; but I can say that if PGD was available in the 1940’s the way it is today, he may have never been born.