

“There is no gene for the human spirit”
Genetic Engineering Case Studies

Context:

We're now on the last stretch of the quarter. We've spent the last week watching the film “Gattaca” which introduced us to several of the key issues that we'll be discussing for the rest of the quarter. The following cases are drawn (or inspired by) either the film itself or cases from future readings. The goal is to get your intuitions on these cases before we've begun the actual readings in order to see if your position changes as we go along.

Cases:

In groups of 3-4 please read the cases below and discuss the questions that follow:

Case 1: Why not the best?

In the film we saw Vincent's parents (and Vincent himself) argue that he would never be able to be hired by Gattaca because they would not want to expend their resources into training him when it was very highly likely that he would not live long enough to be a productive member of the Gattaca workforce. Similar arguments were made by various schools that Vincent's parents attempted to enroll him: their insurance would not cover someone like Vincent because he was very likely to hurt himself and require expensive treatments relative to the other children the school could choose to accept.

1. Assume your group is responsible for hiring employees at Gattaca. What would you base your hiring decisions on? Typically we think that these kinds of judgments should be based on the things we have been actually able to achieve. Things are slightly different in the world of Gattaca. How much would you weigh someone's genetic predispositions when looking at their applications (both positively and negatively)? If you were faced with two otherwise equal potential employees but one had a higher likelihood of developing heart issues which would you choose to hire?
2. Now assume your group is a legislature writing laws regarding genetic discrimination. You are being lobbied both by corporations like Gattaca which would like to be able to use genetic information to make hiring decisions and also by human rights activists who argue that genetic information should be private and that one should not be discriminated against based purely on genetic potential. When, if ever, would you allow genetic information to be used? Why? Assume, for the purposes of this question, that both lobbies are contributing equally to your future campaigns.

Case 2: He's still you...just the best of you

When Vincent's parents decide to have a second child they go to a genetic counselor in order to ensure that their second child, Anton, is free from potential genetic disabilities. They had originally intended to leave some aspects of Anton's birth to chance but they are talked out of doing this by the genetic counselor. He argues that in both cases (chance v. choice) the child would be a combination of both of their own genes and that they were, in essence, depriving Anton of the opportunity to be born with the best possible combination of their genes by leaving things to chance.

1. Is there anything morally or prudentially wrong with leaving some elements of a birth to chance? If the technology available in the world of Gattaca were available to you when you choose to have children (assuming you want to have children in the first place) would you be tempted to leave anything to chance? Imagine that your parents had had the option to genetically engineer you but chose not to.

Would you feel like *you* had been *harmed* by that choice? Why?

2. Conversely, can you think of anything potentially objectionable with choosing all or most of your future child's traits? What, if any, harm could this be doing to your future children? Sandel seems to think there would be some quite serious problems with choosing our genetic traits in this way. What were these problems? Do you agree with him?
3. In a deleted scene (available on the DVD if you'd like to watch it), the genetic counselor goes one step further and, for an increased fee, offers to add in genes to make Anton smarter, faster, etc. In other words Anton wouldn't be fully the genetic offspring of his parents but instead a combination of the genetic material of several donors. Is there anything morally different about this case versus the original case? If so what might that be?

Case 3: Autonomy and Choices

In the film genetic engineering is used primarily to choose children that are born with enhanced or otherwise exceptional traits (like having twelve fingers). If the justification for this practice is grounded on a conception of parents' rights to choose what their own children will be like (after all we allow parents to raise their children in just about any way they choose for just this reason...with exceptions of course) then it seems like parents can also choose to produce children with whatever genetic traits they choose. For example many blind parents go through IVF for the explicit purpose of attempting to have a blind child.

1. Those advocating for parental rights sometimes make arguments very similar to the one above. Do you believe there is anything morally problematic about choosing to have a blind or deaf child? What would that problem be? Assuming we make the right kinds of societal adaptations to reduce the degree to which being deaf is a disadvantage, do you still think there is something morally problematic with cases like this? Is a disability an objective fact about a person or a socially relative one?
2. Those opposed to allowing parents the choice to determine their child's traits argue that children have a right to what is sometimes called an 'open future' that is, a future that allows them as many possibilities or options as possible. Purposefully choosing to have a blind child would, according to these advocates, unfairly limit a child's future options in life and therefore violate this right to an open future. What do you make of this kind of argument? Do you believe that we have a right to an open future? Do you believe that an 'open future' advocate would be opposed to allowing parents to choose children with enhanced athletic abilities or twelve fingers? Why?
3. Autonomy is typically held up as one of the primary values of medical ethics. We respect the autonomy of agents and so do not force them to undergo procedures that would improve their health if they elect not to. Similarly, parental autonomy is, as the two questions above indicate, often taken to be a primary reason that justifies parents to choose their children's futures. How far can autonomy go? We recognize people's rights to do all manner of things to their own bodies (piercings, tattoos, etc) that may be harmful to them but are important to their self expression. We also, typically, respect people's autonomy in changing their bodies in more drastic ways (gender reassignment surgery for example). Can people do *whatever* they want with their own bodies? Are some modifications (repetitive "cosmetic" surgery, removal of healthy limbs, etc) so extreme they imply a lack of autonomy/rationality?