"After Doping, What?: The morality of the genetic engineering of athletes"

Tamburrini

Strategy

- Tamburrini argues that general and sport-specific objections to genetic engineering of athletes fail
- Instead, he thinks the IOC and other sports organizations should embrace genetic engineering as well as change their rules against PEDs
Types of Genetic Engineering

1. Genetic selection of individuals
2. Somatic genetic modification
3. Germ-line genetic modification - two types
   a. IVF modifications changing the germ-line of the future individual
   b. Cloning - DNA is inserted into an embryo that develops into a new individual

What's Wrong with Genetic Engineering?

1. Harm Argument
2. Fairness Argument
3. Utilitarian Argument
4. Human Freedom Argument
5. Elitist Argument
Harm Argument

- Argument: Genetic modifications are harmful.
- Response: There are lots of things that individuals do that are harmful. But, that does not mean the state or others are justified in limiting their autonomy. Professionals should be free to decide what is in their best professional interest, especially with respect to somatic genetic modification.
- The only justification for limiting another's actions is to prevent harm to others.

Harm Argument and GL-GM

- Argument: GL-GM might harm the individual created using this type of genetic engineering.
- Response: The individual created using GL-GM is a different person than the one who would have existed had there been no GL-GM. Minimal harms to the individual would be no worse than the minimal harms resulting from a non-engineered birth. A life with some harms is preferable to no life at all.
Utilitarian Argument

- Argument: A technology that produces some harms does not maximize human welfare
- Response (i): Maximizing welfare entails that we should give birth to more and more humans. Such a strategy will result in too many humans and lead to suffering. That runs counter to utilitarianism.
- Response (ii): It seems that GL-GM may maximize welfare by developing technologies that prevent and cure diseases.

Fairness Argument

- Argument: Genetic modifications are unfair
- Response: If one is an autonomous agent, then one can decide whether to have genetic modifications.
  - "They are of course entitled to decide not to sacrifice themselves for an Olympic gold medal. But then they should not get it either! Those who sacrifice the most should get the most rewards." (287)
  - This reasoning is often used when determining merit and reward in many professional pursuits. Why not in sports?
Human Freedom Argument

- Argument: A world in which people are genetically "pre-programmed" to become a certain type of being robs people of their freedom and autonomy.

- Response (i): People already lack the freedom to determine their destinies to the extent that they are subject to the genetic lottery. At least with genetic engineering, individuals will have the ability to decide their genetic destinies.

- Response (ii): Like education, genetic engineering would give children from the beginning knowledge about what they would likely excel in, if they choose to participate in that activity.

Asymmetrical Preferences

- For many, the thought of altering one's genetic structure fills one with fear
  - The fear seems to be that we ought not interfere with nature
- We think it is perfectly alright to interfere with nature to alleviate pain, depression, and other diseases
  - At the same time, we do not think it is alright to interfere with nature to genetically enhance our skills, genetically protect from disease, or genetically select for certain traits
- There's an asymmetry in our preferences
  - Tamburrini thinks it is difficult to distinguish between reducing suffering and enhancing human capacities
Elitist Argument

- Argument: Genetic engineering technologies will produce an elitist society where "only the best human specimens will be respected and admired" (291)

- Response (i): Tamburrini thinks that genetic technologies will reduce gaps in skills and inherited traits. This will result in an equalizing effect between individuals.

- Response (ii): It might turn out that those individuals who decide not to have genetic enhancements are more revered by society than those who do

Genetic Engineering as Political Action

- "When fully developed, these new techniques might give us the possibility of (perhaps once and for all) overcoming the injustices of the genetic lottery…. Seen from this perspective, genetic technology might be seen as a complement to political action. Through political changes, we try to equalize social and economic conditions for people. Through genetic technology, perhaps we could get rid of the most profound inequality of them all, namely the one that originates in that some people are (probably by birth) smarter, healthier, more intelligent, and more beautiful than others." (292).
Sport-Related Objections to Genetic Engineering

- Lazy Bum Argument
- Unfair Competition Argument
- Economic Inequality Argument
- Spoil Good Competition Argument
- Declining Popularity of Sports Argument

Lazy Bum Argument

- Argument: Genetically enhanced individuals will not have to work as hard or sacrifice themselves to their sport in order to excel
- Response: If many athletes are genetically enhanced, then differences will disappear. When there's little physical difference between athletes, then hard work and sacrifice is all the more important in determining the superior athlete.
Unfair Competition Argument

- Argument: Genetic technologies will result in competitions where the winner is not necessarily the best athlete but the most genetically enhanced
- Response: How does this differ from the current situation in which those who win the genetic lottery are superior athletes? How is this fair?

Genetic Enhancements and Economic Inequality Argument

- Argument: If gene technology takes hold in sports, then those teams/players with more economic resources will be able to disproportionally benefit, thus making competitions unfair
- Response: It is unrealistic to think that sport officials will be able to enforce a scenario that is both fair and harmless. As Tamburrini notes, the chance for having sporting competitions be both fair and harmless disappeared when sponsorship and business interests ruled the world of sports.
Spoil Good Competition Argument

- Argument: Genetic engineering will spoil the game.
- Response: Whether this argument works depends on what makes for a "good game." Tamburrini considers six elements of a good game
  - None of these elements are necessarily undermined by genetic engineering
  - In fact, genetic engineering might intensify some of these elements and make the game even better

Declining Popularity of Sports Argument

- Argument: Sports might become less popular because people will no longer have the illusion that athletes are exceptional
- Response: Tamburrini does not think this will be the case, although he has no definitive argument
  - Nonetheless, other sports that have undergone technological innovations (e.g., Formula 1 racing) have not seen diminished popularity
  - Even so, what would be so bad if sports were less popular and people had a more balanced stance toward sports?
Character Excellence Rules

- "As everyone will be genetically designed, physiological excellence will probably cease to be the basis of our fascination with elite athletes. Character excellence will take its place instead. Our admiration for sport heroes will, to a much higher degree than today, concentrate on their dedication and efforts, rather than on a fortuitous physiological predisposition." (295)

Tamburrini's Conclusions

- Given the conclusions reached, Tamburrini thinks sport officials "should adopt an open stance towards new developments in sport medicine" (295)
  - Any harms incurred are the responsibility of the athlete
  - Gene technologies will be undetectable and at the same time likely safer than other performance enhancing technologies
  - Genetic technologies might lead to more entertaining sports and a more realistic assessment of human traits
  - Tamburrini's fear is that sporting officials will succumb to the irrational fears and moral panic of the public and prohibit certain technologies in the name of giving the people what they want