

Film Critique
Future of Technological Society
GATTACA
Zachary Greenberg
zng@andrew.cmu.edu

GATTACA is about one man's quest to go into space. Vincent is one of the last people to be born "naturally" and thus has imperfect DNA. In the future society of this film, this prevents him from many jobs, including being an astronaut. So he hires an illegal company to disguise him. They put Vincent in contact with Jerome, who has perfect DNA. Jerome supplies Vincent with DNA samples so that he can fool the *GATTACA* space program. As the launch approaches two major complications arise. The first is that the assistant manager of the program is murdered. This investigation threatens to reveal Vincent and almost does. Fortunately the investigating officer turns out to be Vincent's brother who he negotiates with. The other complication is that Vincent falls in love with his coworker, Uma. She comes close to learning his secret, but ends up fooled by all of Vincent's hard work. The day of the launch, Vincent has to go through one last examination, which he fails. Amazingly the doctor reveals he knew Vincent was a fraud the entire time. He had been covering for Vincent the whole time because the doctor had a son with invalid DNA. The film ends with Vincent blasting off into space.

GATTACA presents one possible future society. The main technological advantage they have that we do not, is the ability to instantaneously sequence DNA. When babies are born, they are immediately tested and they learn how likely it is the baby will suffer from various diseases. Even though discriminating by DNA is illegal, sequencing DNA is so easy companies do anyway. Currently DNA sequencing takes about a day and we have some laws preventing genetic discrimination. As the technology improves, it is possible we end up with a *GATTACA* like society, although the film takes everything to an extreme. Both Vincent and Jerome struggle with this new society. Vincent is denied access to his dreams because his DNA isn't "good enough". On the flip side, Jerome has perfect DNA, but buckles under the pressure this put upon him to be the best.

The other technology in *GATTACA* is pretty reasonable. The space program in *GATTACA* was more advanced than our current program. Currently there are private companies, like GATACCA, who are making manned missions to space. In the film, the rockets they use are very similar to the rockets we use today.

Most of the tools used to disguise Vincent as Jerome are feasible as well. We can perform surgery to insert fake veins to be filled with someone else blood. We do not, however, have the technology to surgically increase someone's height. There is no physical reason why this technology might not exist someday.

Another technology in *GATTACA* that is ahead of our current technology is the way people in *GATTACA* sculpt their children. We can artificially inseminate eggs, but we don't make lots of fertilized eggs and then cull down to our ideal child. DNA sequencing has to improve to make this possible. In addition attitudes about what constitutes a life would have to change. Currently there are groups of people who believe life starts at conception and thus would have to oppose this practice on moral grounds.

In this movie, science is treated with respect. Becoming an astronaut, and thus a scientist is an extremely prestigious position. The movie has no complaints about the status of scientists. Instead the movie's complaint is with human nature and the potential to abuse science. This future presented is extremely bleak and unappealing. But the solutions the movie offers are all about social awareness and better laws, not to never advance DNA sequencing to this point. The movie also highlights the human desire to take uncertain predictions as fact. This use of DNA to supposedly predict a person's entire life is the issue, and this is everyone's problem, not just scientists.

Overall *GATTACA* is a good science fiction film. It takes a possible advance technology and explores the outermost implications of such a technology. While the most exaggerated version of events is the one presented, the film does stay logical and within the realm of possible science. It is cute that the film believed Esperanto would catch on and become the language of the future, but currently this seems extremely unlikely.