Mr. Slater

W131

27 November, 2012

Argumentative Essay

Audience: Scientists and other undecided medical professionals concerned about the consequence that human genetic engineering could have on society.

The Immorality of Human Genetic Modification

Imagine a world filled with highly skilled, perfect human beings that excelled at every sport, aced every subject, and defied all beauty. These humans are comprised of dull personalities, lack creativity, and encompass no unique characteristics. These humans are fabricated, like simple objects to subsist the way they were created. This world is the result of human genetic engineering. Human Genetic engineering is a controversial topic that was first realized when Robert Stillman and Jerry Hall first split human embryos in 1993 (Harris 353). Thus, in 1997, a new scientific breakthrough materialized via Dolly the cloned sheep. The realization that cloning was closer than it appeared caused scientists to begin approaching a realm that was morally untouched: humans. Lobbying efforts targeted humans for genetic modification. They not only realized that cloning could be achieved, but the complete human genetic makeup could be changed and modified. It caused questions to be asked such as "To what extreme would science take the human race?", "Is this morally acceptable?", and "How will this affect life as we know it?" The answers to these questions all point to two answers: the genetic engineering of humans defies the natural makeup of life and will cause harm to those involved in it. "[Genetic Engineering has] not been developed to eradicate poverty or to cure

Table 1
Discourses of Concern in Relation to Genetic Technology

Main Concern	Central Issues	Keywords
Social	Environment and health	Risk, uncertainty
Economic	Profitability and production	Cost/benefits, responsibility, power
Cultural	Religious and/or moral aspects	Ethics, rights, integrity
Lassen, Jesper, Andrew Jamic	on. "Genetic Technologies Meet the Public: The Discourse of	of Concern." Science, Technology & Human

diseases, even though such claims are often made on their behalf. Rather, they have been developed to test, or apply, certain technical processes having to do with the

Values. 31.1 (2006): 11. Sage Publications, Inc. Web. 1 Nov. 2012.

transfer of genetic material from one organism to another" (Lassen 8). Table1 shows the main concerns with genetic modifications on humans throughout the world. These concerns have drastic effects, and are proof that human genetic engineering is immoral; not only does it pose risks involving the creation of humans, but also has negative effects on the individuality and personality of the individual.

Risks associated with genetic manipulation are too high, and too dangerous to be humane. Although many fictional pieces of writing discuss disasters of tampering with genetics (Nelkin 143), the risks of genetic engineering are all too real. What can happen to any genetically modified plant or animal can also occur in humans. The process could result in mutations, abnormal psychological diseases, growth problems, irregular brain patterns, the possibility of becoming infertile, and even the loss of life."There are 'perils' in 'uncontrolled tampering,' wrote a *Time* reporter. 'Lurking behind every genetic dream come true is a possible *Brave New* World nightmare.... To unlock the secrets hidden in the chromosomes is to open up the question of who should play God with man's genes' (Devitt 1989, 70)" (Nelkin 143). The future holds many possibilities of horrendous outcomes. If the process becomes popular, inexperienced scientists would have the option to market themselves, creating a chaos of selfish actions that would ruin many lives. The issue puts forth many other deceitful events that will scar humanity forever. The process is far too dangerous and too complicated to be acted upon properly. "The

new technologies are seen as highly uncertain, in terms of their implications or consequences for individual health and for the various natural environments on which social life is dependent" (Lassen 10). There numerous amounts of unknown factors revolving around genetic engineering in general, so the consideration of human testing is almost impossible; the question still remains, what about the future? Will the technology grow so modifications will possibly be successful? It is extremely dangerous to contemplate testing on humans, and should not be pondered. The process is completely inhumane and contorts the fibers of human life. The marginal costs are much higher than the marginal benefits.

Not only is there a high margin for error emanating from human control, but also a diminished value of the human life in general. Life becomes something paid for and treated as such and not a gift from one person to the next. "Reducing the body to a commercial entity, defining gene sequences and cell lines as private property—is to some a violation of the intrinsic value of human life"(Nelkin 143-144). This becomes a control mechanism. The life, from the beginning, has been managed on how it is supposed to look, act, and overall, be. Value of the life has diminished because of the surrounding dictation. The person is simply created, almost as a burden instead of an exceptional gift. New lives are even patented, "and the very potential for patents generates concerns about the moral dilemmas that arise when the possibility for profit conflicts with ethical considerations" (Nelkin144). This again puts ownership where ownership is not due. It not only takes away a person's value, but places it in the hands of the scientists who create the being.

Genetic engineering will put humans in charge of the creation and production of other humans, which can be extremely disturbing considering the failures of technologies and human desires. Humans cannot be trusted with a task as fundamental as this. "How, ask critics, can we

3

trust scientists who are driven by profit?"(Nelkin144). Humans are modified by humans, which some believe is entirely justifiable. That is nonsense. Looking on past histories humans have and are continuously making mistakes. Do some believe that this will change just because humans are creating humans? The answer is no! The impact one mistake has on a human life can be detrimental. A life is a life and some may argue that one lost life is perfectly acceptable and something to be learned from, but it is not. Those believing such things should look at their sons, daughters, sisters, brothers, parents, grandparents and even themselves! One life can affect many others, and tampering that life can result in a catastrophe of the human race!

The societal standards that are currently prevalent would be drastically altered, changing the moral and societal view of humanity. The gradual change in society has always been prevalent with the changing of technology, but there has always been a moral fiber that has hung in the balance. This fiber will be cut by the immoral strains of human genetic engineering. Michael Tennison states, "An increasingly stratified and in egalitarian society, now with purchased biological enhancements, with enlarged gaps between the over-privileged few and the under-privileged many; a society of narcissists focused on personal satisfaction and self-regard, with little concern for the next generation or the common good; a society of social conformists but with shallow attachments, given over to cosmetic fashions and trivial pursuits; or a society of fiercely competitive individuals, caught up in an ever spiraling struggle to get ahead, using the latest biotechnical assistance both to perform better and to deal with the added psychic stress (PCB, 2003, 302)" (408-409). The societal mindset would change, acknowledging a new "normal," where everyone in the higher class looks the same and has the same talents. This is very similar to Adolf Hitler's plan to create a perfect world where everyone looked, acted, and was physically conditioned to his standards. This would create a large gap in social class because

those who are unable to afford genetic modification for themselves or their children would either be discriminated against or even acted toward in a violent manner. The engineered individual would feel separated from their natural counterparts because of their modifications. With the knowledge of being genetically modified, the subject would be forced to deal with those living natural normal lives around them. Their peers would contain traits that they inherited from their mother, father, or even a grandparent, while the modified individual would have specialized traits. The natural will be unacceptable and pushed into the societal sewers. Society would become overwhelmingly materialistic; morals and their ramifications would cease to exist. Even the small entertainment and recreation that today humans enjoy, including sports, movies, art, and music would cease to exist because everyone is of the same creative and physical level. Those modified would have no unique attributes and all new technologies will already have been invented. The purpose of life will be no more.

Those enhanced can contain unnatural advantages both physically and mentally that let them achieve higher merits than of normal humans. Humans who underwent genetic engineering would potentially contain an unfair advantage in certain activities. Michael Tennison addresses the problem, stating that, "enhancement could undermine the natural relationship between deed and accomplishment (2003, 292)" (408). The definition of an achievement would drastically change if human genetic engineering were to become popular. There would be a higher standard for nearly every activity, and the accustomed standard would be no more. Robert Sparrow refers to Julian Savulescu's ignorant comment that "we are *morally obligated* to use genetic (and other) technologies to produce *the best children possible*—a strong claim indeed! (32-33)." What Savulescu does not realize is that if all had the "best children possible," then everyone would be exactly the same. Achievements and gifts surrounding human life are not natural due to human genetic engineering, but man-made and tailored to an individual's wants. Those with modifications are more likely to excel in many subjects, especially in that of athletics (Wells 63). Athletics pose an excellent example of genetically modified characteristics that improve superficial life performance. Professor Dominic Wells states that, "Impressive studies in genetically modified



phenotype in cattle. Grobet, L. *et al.* "A deletion in the bovine myostatin gene causes the double-muscled phenotype in cattle." Photograph Source: *Nature Genetics*. 17.7: (1997). Web. 13 Nov. 2012. rodents where manipulation of individual genes has increased muscle mass, muscle strength or running endurance, depending on the gene that was manipulated. Reviews of these animal studies conclude that such genetic manipulations could also improve human athletic performance" (63). This is the future of athletics. The struggle to win in a sport for either personal satisfaction or otherwise will cease to exist. Only the modified will reign,

ever getting faster and stronger. Figure1 gives an example of the modifications that would occur in an athlete. This modified bovine contains abnormal bulges of muscle that appears incredibly unnatural and almost painful. This cow was not meant to harbor such abnormalities, and will most likely harm the functions of the physical state. The knowledge that many are considering this physical modification in humans is horrific and truly disturbing. The results, after tested on humans, would be awful. Once the idea is present, it will become a race to continue the modification and to contort one's body further and further until the athletes are dying from far too much muscle mass. Athletics are not only the areas that modification affects in terms of human desires. Any physical or knowledgeable traits are given due to selfishness. Any person who would modify a human embryo is not acknowledging the newly growing child, but fulfilling their own selfish desires. The child, if modified because of these reasons, will feel they are being owned because they were created to fulfill another's desires. The value of that life diminishes, and the self worth of the child reduces. They are not loved for their natural traits, but those they do not naturally own and were created to be.

Human individuality is threatened in the altered individual because of modifications that take away their unique characteristics. Every trait that a human possesses is a unique characteristic that they inherited from their mother and father. Some look at natural characteristics as blessings, while others curses, but no matter how you look at it, unique characteristics are something to be proud of and genetically modifying those traits is immoral, and should be looked down upon. Unnaturally engineered personality and physical traits are no longer unique or perceived as special. In the beginning stages of genetic engineering, some altered traits could easily go unnoticed, and the rarity of modification will have almost no affect. Those valuable natural characteristics will be lost and not be spread to the modified's offspring, but the severity will be ignored. "This potential for the disruption of the natural process of achievement also threatens our individuality and authentic identities, according to the PCB (2003, 293)" (Tennison 408). Michael Tennison clarifies that not only will individuality be lost, but also the identity of the individual. What will occur after the popularity of human genetic engineering spreads throughout the world? The masses will offer nothing new to society, and individuality will be no more.

Knowing that they have been either altered or cloned, modified individuals will be affected on an emotional basis because of the change. Many times, an altered individual will be changed on a higher level than those around him or her. These noticeable attributes will cause the individual to be excluded or discriminated against. Having complete knowledge of the modifications can have many side effects, with feelings of "emotional distress, chronic anxiety, and anticipation (Powers 1994, 84)" (Rabino 370). The outlook of oneself will drastically change their viewpoints and how they previously perceived themselves. Suddenly, the connection with their family members and those around them is lost. Instead of inheriting traits, their characteristics were dictated by a scientist being paid to alter them. They then realize that their hair color, eye color, or any other trait for that matter, did not come from a past relative or skip a generation, but from a laboratory. Abruptly they become conscious that they do not have complete liberties over their body. Dr. Isaac Rabino states, "A patient's inherent rights over his or her personal genetic information would include, then, the right to consider the risk of 'psychological harm from learning information...which may never develop or may occur with only moderate severity (Powers 1994, 85)" (370). The knowledge that a person is not natural but has been genetically modified to fit the wants of their parents can be extremely harmful and can pose a risk a problem of the psyche. Just as a child without a mother, father, or grandparent, the child then wishes to know the traits that they are missing due to the procedure. The knowledge fosters a type of curiosity, resentment and even loss of self. They begin to wonder who they *really* are and the things they are missing in life. Enhancement could transform one from being an autonomous, active agent into a passive recipient of externally engineered state of being.

Although the drastic measures of genetic engineering have not yet affected humanity, the future possibilities are endless. Those living now should know the drastic, and immoral measures that some wish to impose on the human race in order to prevent the horrific outcomes that the future holds with human genetic engineering. Unnatural alterations that would change the "societal normal" would be prevalent, affecting individuals throughout the world. Risks among

the processes are too high and too deadly and should not be attempted. Individuality will be no more because natural traits that make a person unique will be gone. Sports, for example will be nonexistent. The goal among humans will be to enhance themselves and their children more and more until all skill levels are lost and everyone will have exactly the same abilities. The altered individual his/herself is also an important reason to avoid the outcome. The drastic emotional effects of being created to be a certain way is appalling and can disrupt a person's mental health; their identity would be lost with the modifications. The discussion of genetic engineering among humans should be banned due to immorality, or the human race will suffer serious consequences.

- Grobet, L. *et al.* "A deletion in the bovine myostatin gene causes the double-muscled phenotype in cattle." Photograph. *Nature Genetics*. 17.7: (1997). Web. 13 Nov. 2012.
- Harris, John. "Goodbye Dolly' The Ethics of Human Cloning." *Journal of Medical Ethics*. 23.6 (1997): 353. *JSTOR*. Web. 10 Nov. 2012.
- Lassen, Jesper, Andrew Jamion. "Genetic Technologies Meet the Public: The Discourse of Concern." Science, Technology & Human Values. 31.1 (2006): 8.10. JSTOR. Web. 1 Nov. 2012.
- Nelkin, Dorothy. "God Talk: Confusion Between Science and Religion: Posthumous Essay." Science, Technology, & Human Values. 29.2 (2004): 143-144. JSTOR. Web.1 Nov. 2012.
- Rabino, Isaac. "Genetic Testing and Its Implications: Human Genetics Researchers Grapple with Ethical Issues." *Science, Technology, & Human Values*. 28.3 (2003): 370. *JSTOR*. Web. 16 Nov. 2012.
- Sparrow, Robert. "A Not-So-New Eugenics." *Hastings Center Report*.41.1 (2011): 32-33. *Academic Search Premier*. Web. 1 Nov. 2012.
- Tennison, Michael N. "Moral Transhumanism: The Next Step." *Journal of Medicine* & *Philosophy*.37.4 (2012): 408-409. *Academic Search Premier* .Web. 31 Oct. 2012.
- Wells, Dominic. "Genetic Engineering in Athletes." *BMJ: British Medical Journal.* 337.7661 (2008): 63. *JSTOR*. Web. 16 Nov. 2012.