SDA accompanying piece

Our genome and the race to perfect mankind: is the moral obligation to perfect the human race outweighing the mental impacts?

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Introduction

Advancing technology has allowed the capability to edit and interfere with the genetic coding that makes up us humans. In the attempt to become the best of mankind, we use genetic engineering for human enhancement by removing characteristics that put humans at a "disadvantage".

This project will explore the impacts of genetic engineering on society and the impression created on people who have the characteristics that society is so determined to engineer out of the human bloodline. We question the influence science and media have on genetic defects and the impacts on one's identity and self-value, which can cause forms of mental illnesses. We intertwine law and history to evidence these effects on society.

People with disabilities are most affected by this SDA from the inadvertent discrimination and judgements, they are our targeted audience. We reach out to them through art and symbolism in the topics covered, where the core aspects of the module are captured through the meaning behind my artwork pieces and how they connect.

Additionally, the project title was inspired by discussions I had with Nicola Enoch during a modules seminar session. Her personal experiences of having a child with down syndrome sparked awareness of discrimination against the disabled in society and how the negative stigma can devalue a person's self-worth.

Audience and creative piece choice

Art is a form of storytelling, a connection to our history. Hieroglyphics communicated and documented things through characters in the form of pictures (Dorman, P., n.d.). We still use art nowadays to communicate with one another.

Studies show visual arts help people to express emotions and mental stresses. It is a universal language that has proven effective in communicating with people experiencing mental illnesses (Rustin, T., 2008).

The interpretation of these images is unique to the viewer, allowing interaction from the audience through discussions and reflections on the images. It is also a means for improvement where myself and other artists can build upon or remake certain styles or parts of the image to their interpretation.

Traditionally, art expresses ideas, feelings and views of the world through idiosyncratic uses of medians, rather than just using literature (Forrest, E., 1984). I tell a story about the impacts of genetic enhancements through four different paintings, two in watercolour and the other two in acrylic. The association between the pairs of paintings and all four together symbolises the nucleotide pairings in DNA, AT and CG.

Power and influence

My first painting uses the median watercolour, it gives transparent colours and represents uncertainty in changing genetics and who holds power.

How we view genetic technology in the modern-day is heavily influenced by media, where genetic modification of "bad genes" is commonly associated with religion and the "devil" within humans (Kirby, D., 2007). I represent opening the bad genes through the split DNA strand of "animalistic" and "monstrous" genes in humans that media represents in films such as "reversing Darwin's Theory" and "Murders in the Rue Morgue". The blood on the open strands emphasises the negative impacts on society and one's self.

Like a double helix, it also represents the two sides of genetic modification. In the 1908s-1990s, the goal was to perfect the human genome. Fictional films often portrayed humans being one step away from "homo superior", or a flaw that could be perfected one day. To exhibit this, one half of the open strand is tucked behind the surgeon, imitating the unknown for human enhancement and it being "on our shoulders" or essentially, up to us. The other strand with fading watercolour mimics a dying race as the result of going too far in this race to genetic perfection, in which society plays role in the blame. Society, influenced by media and Darwin's theory (evolution) gave the impression that instincts were the result of "animalistic traits" and our genome is something that needs modification.

With society in mind

Media also impacts people's view of themself and others. A great illustration of how we view a "perfected society" is through the movie GATTACA (Niccol, A. 1998). It shows that despite perfecting genetic enhancement, there still exists societal problems such as discrimination against the disabled (the less capable now being the people with lower genetic potentials rather than the illnesses we have today).

The concept behind the background in the second painting is based on GATTACA's representation of society. The washed-out, darkish background and object colours show a dull and bleak "perfect society". In the centre, two bodies of the same person are portraying the cognitive and physical side of working and are connected with DNA-like strands to show how someone's future is not solely dependent on their genes, but on work ethic too. Like in GATTACA, there was this notion of not being able to meet expectations, especially for the brother of the main character. By default of good genes, he did not work hard nor meet his dreams, and this resulted in cases of denial and psychological struggle.

Historically, mental impairments were seen as a threat to society and used as a justification for eugenics movements (Devenney, M., n.d.). Disabled people viewed themselves as abnormal, and their social identities internalised from medical professions represented them as burdens and other negative self-concepts.

The genetics of disabled people were seen as "unfit" by concepts of Darwinism and it was believed criminals and disabled people had similar disorders, implying they were the result of societal problems (Pham, H. and Lerner, B., 2001.). In art, colours evoke different feelings and emotions (Smith, K., n.d), this painting symbolises pain through the prominence of red, characterizing how society values disabled people as less worthy through historic sterilization acts and the stigmas they associated with them.

Who are we?

When we think about identity and self-image, it becomes hard to define the boundary between what we associate with our natural selves and the result of genetic engineering. In genetic engineering, the desired trait is discovered from another organism, and then steps are taken to separate the DNA from other parts of the cells via gene cloning. Once cloned, it is cut apart with a restriction enzyme and certain regions are replaced, and then it is inserted into the desired cell (Suza, W. and Lee, D., 2022.).

Our next paintings use acrylic paint, a strong and bold median that represents the permanent effect we have on changing the demographics of the human race. It exhibits the attempt in separating someone from their DNA to enhance and improve, conveyed by the gold bases in the DNA strand. Gold is seen as a commodity and portrays how sciences rationalised their eugenic practices with economic productivity and social stability. As a result, research and developmental support have exceptionally grown in this area (Gottweis, H. 1995.). It also gives the impression of artificial evolution resulting in this identity crisis as it's not seen as natural evolution (Richards, C., 2018). This has given science the power to influence how we view our genetics and what we see as "better" for society. The asymmetric DNA strand signifies the disproportionate society and its power to alter views through certain groups such as religion or science.

What are we to society?l

These groups heavily influence a mother's choice to keep or abort foetuses with defects. In the Documentary: A world without Down Syndrome, a mother talks about how views surrounding kids with downs syndrome are negative and could be the reason why 9/10 women terminate when they receive a positive diagnosis of Down syndrome. By the Abortion Act 1967, abortions after 24 weeks are legal if there are substantial risks that the child born would suffer from such physical or mental abnormalities as to be seriously handicapped.

So the last painting represents disabled people's vulnerability in society, shown by the curled up position as if those shunned by society or as outcasts. This was through laws making it more accessible to get rid of foetuses that present these genes, as a result of societies' perspectives toward genetic disorders.

In 1907, the first sterilization law was introduced in Indiana. They targeted mentally disabled women with the justification of protecting vulnerable women from unwanted pregnancy. The United States followed by implementing similar laws in 1927 (Reilly, P., 2015.). Women would feel less valued by partners, families and society. In the extreme circumstances: abuse, divorce and rejection by society. Parents also described anxiety about the well-being of children of other parents and the fear of less support (Heazell, A., 2016), and I show this social exclusion by singling out the woman as if she were shunned from society.

Conclusion

In my creative pieces, the emphasis is on the median used and the background of each image. The first two pieces represent history and media through watercolour, showing the "flow" or change in genetic engineering and its social views. The second two represent identity and self-worth through acrylic and bold colours to show emotions and feelings.

In conclusion, I represent how history and media have impacted the course of genetic engineering and the idea of reducing disability in the population results in people with disabilities feeling less valued. Thus, genetic technology with the means to improve human quality of life also has its negative impacts, including physiologically damaging people with disabilities.

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