

IATL Genetics and Society - Student Devised Assessment

Sameur Rahman 1412133

Brief Summary of Video

My student devised assessment is a mini documentary style video, that looks at several topics. The video is titled "The Genetic Question". The video starts with an introduction into the history of genetic selection and our historical involvement as a species with genetics. Food is the earliest example where we've able to control genetics. After a brief scientific explanation behind how genetic mutations occur, I explained how we no longer have to rely on nature to produce these genetic changes and how humans have used genetics to "become the most successful species on earth". These two sections serve as an introduction to the main question asked in the video.

The video takes us to the present and how we use genetics today. Genetic testing plays a major role in the screening process for pregnancies and diagnosing hereditary disorders. The crux of the video looks at what genetic screening and selection means for families and parents and explores differing ethical views about what is right and wrong. "Proactive beneficence", the controversial ethical argument proposed by Savulescu in Bioethics 2001, juxtaposed against the viewpoints from those against genetic intervention, highlights the range of perspectives when discussing the potential removal of disorders and disabilities from society. The main question asked to the audience is, "what kind of world do we want to live in?". Whether it is right for us to select who lives, or whether it is right for us to "intervene with what nature has taken care of for millennia".

To explore this question, the video is taken to the future. I explained how many of the consequences and risk factors for genetic selection and engineering are unknown. Despite not knowing what the future holds, the video explains how it is up to us to decide what happens. It explains how science is the tool used to describe the world but how it doesn't have the authority to dictate morality. The answers to the questions asked in the video are ones for the audience to think about. The goal was to make the audience think and question through a medium that is entertaining and visually engaging.

A Critical Engagement With Different Theories Concerning The Links Between Genetics And Society And Different Aspects Of Reality.

The video explored the topic of genetics and society from three aspects. The first aspect was from a scientific overview of genetic technologies, that we have used as a race in the past. Genetic engineering and technologies can sound very daunting for those not involved in the sciences; to be able to introduce the subject easily, the video starts by talking about food. The simplest form of genetic engineering is artificial selection in agriculture; this was then further developed by explaining how we currently use genetic technologies through genetically modified foods.

After talking about food, the topic transitioned to human health. Current applications were explored and this is where genetics and society were engaged through the ethical and philosophical questions that arise, from modern and potential future applications of

genetics; specifically, genetic screening, embryonic selection and future modification of human embryos. By incorporating the “slippery slopes fallacy” (Heigh, 1996), the video asks the viewer to reflect on the past and current applications of genetic interventions, and to question what kind of future do we want.

Currently the NHS is undergoing changes, one of these changes is the way in which genetic screening is undertaken. Despite not currently being mandatory, the most common result from positive test results is termination. Many genetic disorders in the future will become rarer and some will cease to exist. The question of whether this is a good thing is subjective. From a societal point of view, and one from human health it has been generally regarded as positive with many on the ethical spectrum supportive for genetic screening. (UKGNT, 2012). But as discussed in the video there is also a growing number of those who question these changes. In the UK, there is a vastly under represented voice from those with disabilities in the decision-making process of healthcare (International Journal of Disability, 2016). The video tries to highlight these concerns, and intends to deliberate on an issue that is largely undiscussed by the wider population.

Apart from the “genetic question” which remained open ended, the video explored how morality itself should be calculated and decided upon. By reflecting on genetics through scientific and ethical lenses, and by using the accounts of those we talked to during the IATL course, I made a conclusion that science is largely ‘the language used to describe the world around us and that its applications are used to interact with that world’. Additionally, I concluded that pure science doesn’t answer ethical questions, but rather other disciplines fulfil this duty together. In one segment of the video there was a clip of the scales of justice, a symbol synonymous for moral rights and wrongs. The video tries to incorporate the concept of an ethical spectrum, subtly and in a digestible manner. Despite coming from a science background, the focus was on questioning how morality is chosen and the reasons that underlie them.

Talking to parents whose children are affected by genetic disorders, I was able to understand a viewpoint that is vastly different from the consensus held in medicine. Though medicine is practised with respect to a patient’s autonomy and ability to choose their treatment, the difficulties in trying to making an informed decision when emotions and misinformation are widely spread, was evident in the parent’s accounts.

What was clear from my research was that ethical questions are answered both collectively and individually. Collective morality are the values expressed by law and government. Whilst individual morality is the personal values held by citizens. Individual morality constantly changes, by interacting with one another and because of new influences. Over time people’s morality slowly change to become similar to those around them. The sum of a group of people and their shared beliefs, forms the new collective. What results is a set of rules that are agreed upon and what society understands to be right and wrong.

By using the slippery slope fallacy and hypothesising the potential future, the video intends to question the viewers’ individual morality, in an effort to question the current collective morality held on genetic selection.

Form

In the style of a mini film documentary, this medium is perfectly suited for social media and the internet, through platforms such as YouTube. By using theory and forming a well-structured written script to begin with, I was able to form an essay style argument in the form of a video. By synchronising spoken words with engaging and well selected video, I was able to produce a piece that is both entertaining and informative. The video was segmented into an introduction and three further sections and finally the concluding remarks. There are many different types of learners, some are written and other are more practical (Romanelli, 2009). By overlaying well timed text on top of the video, the video uses visual and auditory cues to grab attention and disseminate information in a structured, bite-sized and understandable manner.

Critically, it can be argued that the video doesn't delve into more of the core issues behind genetics and society. The problem I encountered when trying to script the video was how vast the nature of the current debate is and the scope of subjects that can be covered. Trying to create something that firstly introduces a subject and then keeps the viewership engaged, is a difficult task. Despite these challenges I primarily talked about 3 subjects to maximise engagement; food, genetic disorders and finally risks and ethical problems for genetic selection. The length of the video was intentionally kept in mind. Typically videos under 10 minutes have been shown to be the most successful to maximise interaction, with the type of platform this video is intended for (Tubularinsights, 2018).

The intended audience for the piece is for all members of the wider public, as it tries to remain simple and explain concepts easily. The video acts as a starting point and an introduction into the wider ethical debate behind genetic selection.

Most media consumption and ideas that are spread today are through platforms on the internet. This would be perfect for sharing as well as starting dialogue amongst viewers. Being able to comment and even debate with others, on the topics discussed, would demonstrate successful interaction with the audience.

Sources Primarily the core information and resources used to develop my argument was from research articles, reports and papers. The challenge in trying to create an engaging piece, is balancing the quantity and detail of information with the overall message that you are trying to portray. In doing so I intentionally kept facts and figures concise and relevant. Importantly I was also able to incorporate primary sources into the video. This formed a major component of my argument.

(1501 Words)

Bibliography

All clips that were used to put the video together were royalty free and copyright free stock footage, from the following sources:

- <https://pixabay.com/videos/>
- <https://videos.pexels.com/>
- <https://www.videvo.net/>

Together with these specific videos:

- <https://www.youtube.com/watch?v=bUTC0-Xzi5M>
- <https://www.youtube.com/watch?v=sJLSj43nSil&t=57s>
- <https://www.youtube.com/watch?v=gG7uCskUOrA>

References used in the video as well as this essay:

- **Frank Romanelli. (2009). Learning Styles: A Review of Theory, Application, and Best Practices *Am J Pharm Educ.* 2009 Feb 19; 73(1): 09.**
This work was used to select the best type of medium to carry out the assessment. My main aim was to create something informative and this helped me plan and cater to the largest number of people.
- **Matthew Haigh, et al. (2016). Slippery slope arguments imply opposition to change. *Memory and Cognition.* July 2016, Volume 44, Issue 5, pp 819-836**
The main argument that was developed in the SDA used the slippery slopes fallacy. This forms the fundamental question of the video. This work looks into how slippery slope arguments can be used to oppose change.
- **Janet E. Lord. (2016) Screened Out of Existence: The Convention on the Rights of Persons with Disabilities and Selective Screening Policies. *International Journal of Disability, Community & Rehabilitation, Volume 12, No. 2***
Together with my primary source this in-depth report influenced my main argument, over the concerns disable people have over genetic screening. Many genetic disorders will cease to exist in the future, this influenced the questions posed to the viewers.
- **Chloe Swllwood. (2002). Science on the Farm: GMOs and Ethics. *Science Mag.* <http://www.sciencemag.org/careers/2002/11/science-farm-gmos-and-ethics> (Accessed 2018)**
- **UKGTN (2012). Third Report of the UKGTN. https://ukgt.nhs.uk/fileadmin/migrated/tt_news/news_files/UKGTN_3rd_Biennial_Report_2012_01.pdf (Accessed 2018)**
- **Savulescu J. (2001). Proactive beneficence: why we should select the best children. *Bioethics.* 2001 Oct;15(5-6):413-26.**
One of the arguments made in the video was directly quoted from the works of Savulescu.

- **Andy Smith. (2015). WHAT'S THE OPTIMAL LENGTH FOR A YOUTUBE VS. FACEBOOK VIDEO? Tubular Insights**
<http://tubularinsights.com/optimal-video-length-youtube-facebook/> (Accessed 2018)
- **ProCon.org. (2013) History of Cow's Milk from the Ancient World to the Present**
<https://milk.procon.org/view.timeline.php?timelineID=000018> (Accessed 2018)
- **NIH.gov (2018) What is a gene mutation and how do mutations occur.**
<https://ghr.nlm.nih.gov/primer/mutationsanddisorders/genemutation> (Accessed 2018)

Both of these works above, were directly used in the video to explain the history of genetic application in agriculture as well as how genetic mutations occur.