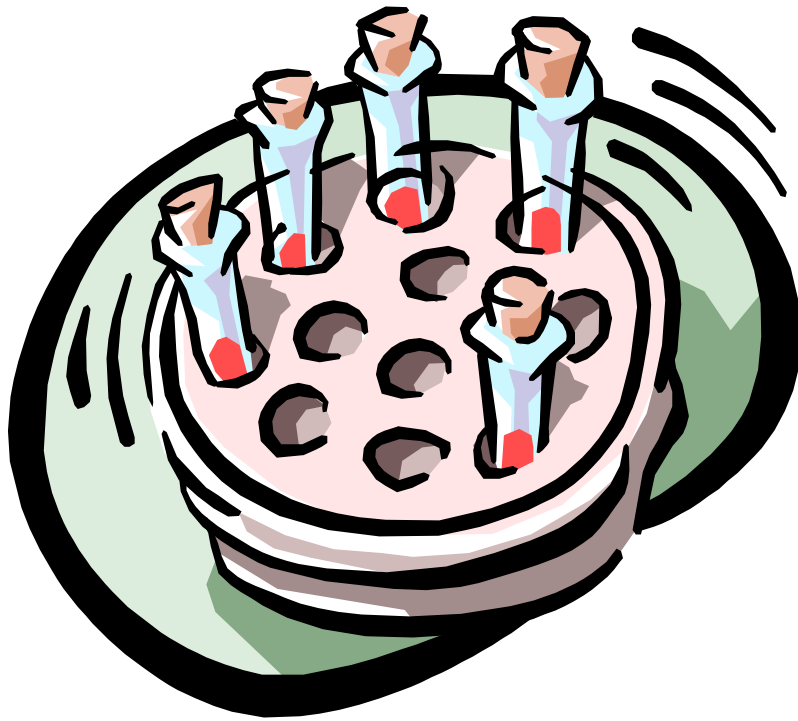


The Ethical Implications of Genetic Selection

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What is Genetic Selection?



- Genetic Selection is choosing a child, based on its genetic code.
- Choosing is a euphemism for allowing to live

This is not a new practice

- Ancient Greeks used to leave retarded children on the hillside
- Chinese law allows only 1 child/family, so many females are disowned, as the males are typically preferred



Genetic Selection is still used in modern society

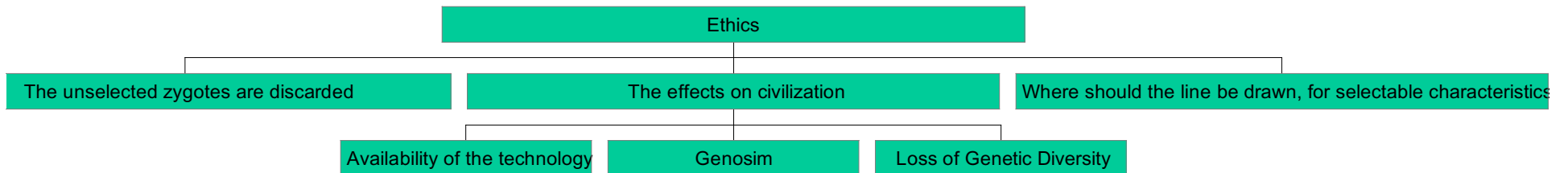


- Male/Female selection is possible (by weight)
- Specified characteristics for egg/sperm donors (Stanford daily)

How the Technology Will Work (In Theory)

- Several eggs will be taken from the female and a collection of sperm from the male.
- The sperm and eggs will be genetically screened and some will be selected.
- A few sperm/egg combo's will be incubated in the lab and grown to an 8 celled zygote.
- Even fewer will be selected for birth.

The Ethical Issues of Genetic Selection



The Discarded Zygotes

- The unused zygotes will be discarded, and many may view this as abortion, an ethical, yet currently legal, issue.
- In *Practical Ethics*, Peter Singer asserts that since the zygote has no nervous system, the only argument against its disposal is its “potential for life”

Resolution



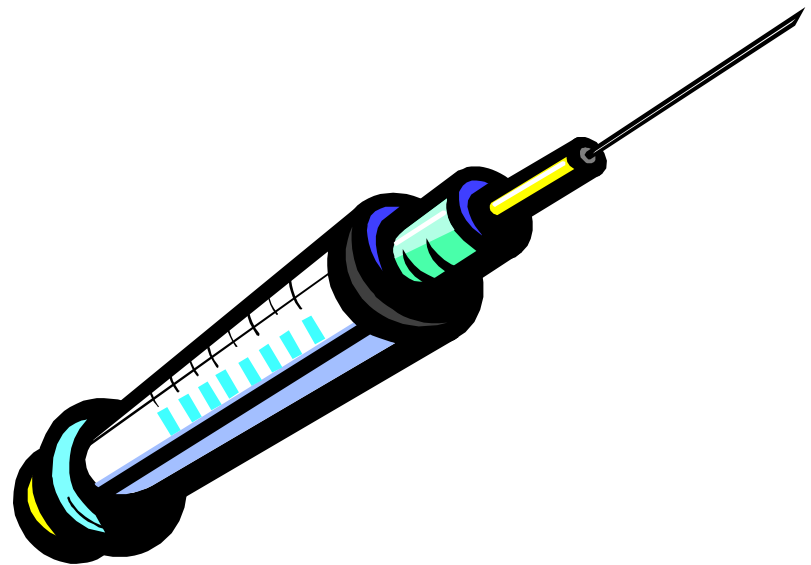
- Although the zygote has the potential for life, a single sperm and a single egg do too. However, there are no ethical qualms for wasting a sperm or an egg.

What Should be Selected

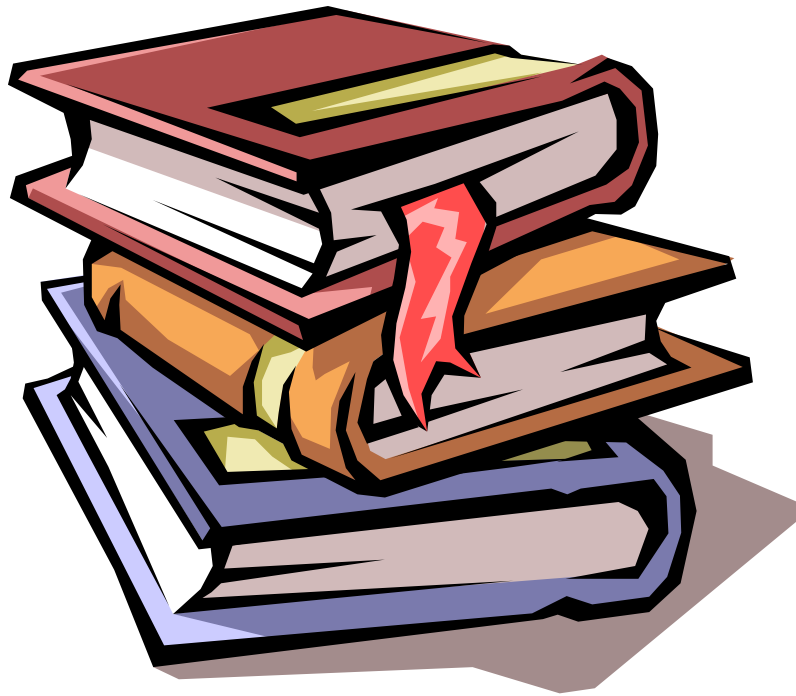
Genetic Diseases	Muscle Enhancement	Height
Intelligence	Hair Color	Eye color
Emotional Dispositions	Weight	Sex

Disease

- This would seemingly pose the least ethical threat. However, there is a concern that health and life insurance will discriminate against those who aren't selected.

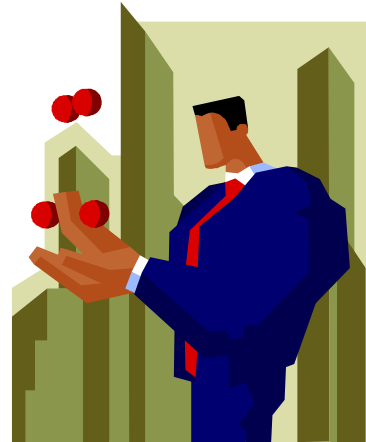


Legislative Action



- In essence, this is not an argument against genetic selection, it is an argument for better privacy laws. Legal bureaucracy should not overshadow the value of reducing human suffering.

The Ethics of Aesthetics



Height, Weight, Complexion, Sex, Appearance

Drawing The Line

- What if your child were to be a midget or dwarf, but otherwise perfectly healthy?
- What if your child were to be 5'6" but you would prefer 6'2"?
- Are these scenarios different?
- What if your child were to be morbidly obese?
- What if you would prefer your child to be of a certain build?
- Are these scenarios different?

Drawing The Line

- What if you child were to have terrible legions on their body, but not otherwise affected?
- What if you child were to have terrible acne?
- Are these different?
- What if you were to prefer a a well behaved child, without a violent temper?
- Is this any different than disciplining a child, to mold his behavior?

Summary of Concerns

If we allow these selections, at what point will we wind up with cookie cutter babies?

Where should we draw the line?



Drawing the Line

We shouldn't draw the line. Many parents will want to leave some things to chance, others will want to specify qualities. Why shouldn't they be allowed to do so from a purely ethical viewpoint? Putting aside the initial disgust built in from science fiction propaganda and a Puritan based society, why shouldn't the parents be allowed to specify the baby they want?

The Child's Identity

“The child is still you; simply the best of you.”
–Geneticist in Gattaca responding to parents’
concerns

Societal concerns

As the age of plausible genetic selection approaches, science fiction has increased literature portraying a culture seemingly amoritized by genetic selection. This heightened public “awareness” of genetic selection has lead to unfounded projections of the future with a distinctive flavor of hysteria.

Societal Concerns

Web sites like:

<http://www.users.globalnet.co.uk/~cahge/>

The home page of The Campaign Against Human Genetic Engineering contains such predictions, which overlook not only the obvious benefits to genetic selection, but the very nature of civilization. Stories of people predestined to a certain stake in life forget that “there is no gene for fate” -Gattaca

Legitimate Concerns

- Forces a greater chasm between the upper and lower class
- Genoism
- Privacy
- Loss of Genetic Diversity
- Loss of Diversity

Will This Be A Service For Only The Rich?

- Hopefully, the government will recognize the importance of genetic selection, and will subsidize costs for under-privileged families. However, in the event of inadequate funding, the technology should still be available.
- Just as expensive cars, and big houses are luxuries, a genetically selected child is a luxury, as well. This might incite greater genoism, and this concern will be addressed shortly.
- Furthermore, as the technology is used, the cost will go down due to market competition and technological advances.

Genoism

Discrimination based on one's
genetic code

Genosim

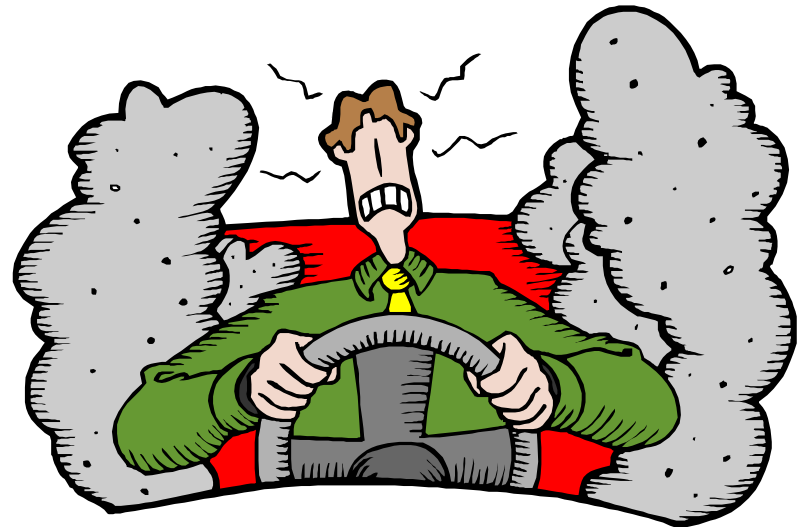
The logic behind genoism is no more valid than the logic behind any racism. Our culture supports the value of an inherent human worth. Therefore, our society is as likely to revert to severe racism as it is to embrace genoism.

Genoism in the workplace

- Concerns regarding the availability of the selected's genetic code and concerns for discrimination against the unselected center on the privacy of a person's DNA.
- The government needs to produce legislation protecting the privacy of the genetic code. Furthermore, restrictions of genetic testing materials need to be implemented.

Genoism and The Real Issue

- Although the legislature might be insufficient, the only alternative is to ban genetic selection. This argument reduces to should we let people have diseases in order to “protect” the public interest. Protection can be offered through other means, such as laws and regulations, but the diseases might be otherwise incurable.



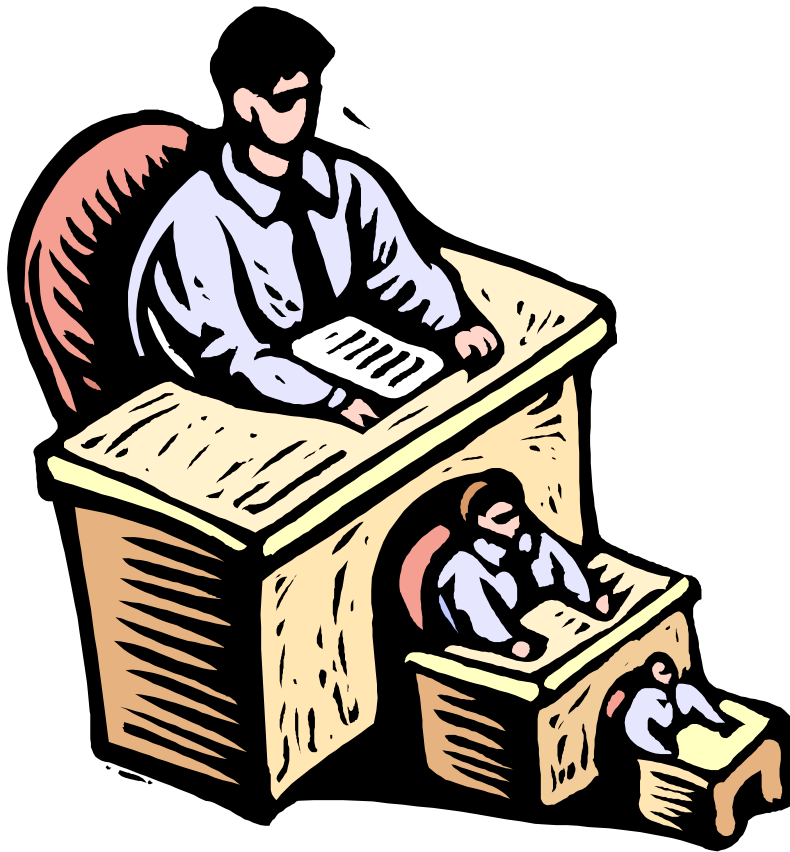
Loss of Genetic Diversity

- Mother nature seemingly built in a defense for the human race in its genetic diversity. Sickle Cell Anemia, although it drastically shortens one's life span, makes one immune to malaria. In many parts of the world, where malaria is rampant Sickle Cell Anemia is very much responsible for the survival of a group of people. If we start selecting against disease, what happens if we are faced in a situation where that genetic diversity could have saved us?

Loss of Genetic Diversity

- Since the technology allows us to select against the disease, the technology will be able to allow us to select for the disease should this necessity arise.

Loss of individuality



- There is a fear that if everyone has a substantially similar genetic code, we will lose our individuality. However, twins, people with exactly the same genetic code, are clearly two distinct people who very much retain their individuality.

Closing Remarks

- Despite logical analysis, many can't shake the feeling that society will somehow lose its humanity in genetic selection. Somehow, making children smarter, healthier, or more attractive deprives the world of something it needs to survive.



Reminder



- Although it is often forgotten, even the smartest, healthiest, most attractive humans on the planet, are still quite human.

