

ALDOUS HUXLEY'S

BRAVE NEW WORLD

NARRATED BY THE AUTHOR

**ORIGINAL SCORE
COMPOSED AND
CONDUCTED BY**

**BERNARD
HERRMANN**

Original Radio Broadcasts



**The paradoxical
ethics of PGD**



Associate Professor Robert Sparrow

BA (Hons) (Melb.), PhD (A.N.U.)

*Australian Research Council Future Fellow, Philosophy Program, Monash University;
Adjunct Associate Professor, Centre for Human Bioethics, Monash University.*

I have no conflict of interest relating to this presentation



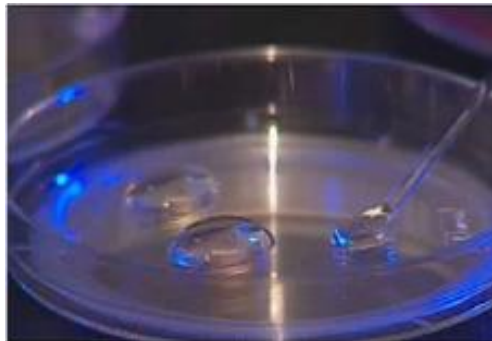
A couple are planning to conceive a child and have a choice of two houses to move into. **“Smogsden”** is near a copper smelter **associated with bowel cancer**. Persons near this smelter don’t always get bowel cancer but living near it as a child greatly increases an individual’s risk of getting bowel cancer by the age of 50. **“Happy Valley”** has clean air. The couple are only able to rent one of these two houses, which are equally desirable in all other respects.



Which house should they choose?

Happy Valley / Smogsden / Toss coin

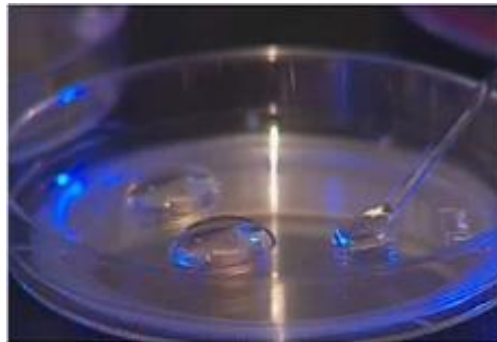
A couple have conceived two embryos using IVF and have used PGD to find out some information about each embryo. **Embryo B** is diagnosed as having a **gene associated with bowel cancer**. Persons with this gene don't always get bowel cancer but having the gene greatly increases a person's risk of getting bowel cancer by the age of 50. **Embryo A does not have this gene**. The couple want to implant one embryo into the woman's womb in order to have a child.



Which embryo should they choose?

Embryo A / Embryo B / Toss coin

- A couple have conceived two embryos using IVF and have used PGD to find out some information about each embryo. **Embryo B** is diagnosed as having a gene associated with a **life expectancy of 90% of “X”**. **Embryo A** is diagnosed as having a gene associated with a **life expectancy of “X”**. The couple want to implant one embryo into the woman’s womb in order to have a child.



Which embryo should they choose?

Embryo A / Embryo B / Toss coin

(a mixed race couple)... **Embryo B** is diagnosed as having a gene associated with a **dark skin tone**. **Embryo A** is diagnosed as having a gene associated with a **white skin tone**. In the **racist society** in which the couple live, **children born with dark skin have only 90% of the life expectancy of children born with white skin**. The couple want to implant one embryo into the woman's womb in order to have a child.



Which embryo should they choose?

Embryo A / Embryo B / Toss coin

(a mixed race couple)... **Embryo B** is diagnosed as having a gene associated with a **dark skin tone**. **Embryo A** is diagnosed as having a gene associated with a **white skin tone**. In the **high latitude location** in which the couple live, **children born with dark skin have only 90% of the life expectancy of children born with white skin**. The couple want to implant one embryo into the woman's womb in order to have a child.



Which embryo should they choose?

Embryo A / Embryo B / Toss coin

Embryo B is diagnosed as having a gene that is associated with **Mayer-Rokitansky-Kuster-Hauser syndrome**. Girls born with this syndrome are **born without a uterus** (or with a severely malformed uterus) although their genitalia and other secondary sexual characteristics are outwardly normal; because they possess gonads, **it is possible for MRKH sufferers to become parents** but only via the use of a surrogate mother. The gene also significantly **reduces**—by some **five years**—**the life expectancy** of those who are born with it. **Embryo A does not have this gene.**



Which embryo should they choose?

Embryo A / Embryo B / Toss coin



... **Embryo B** is diagnosed as having a gene that is associated with **Maybe-Rotikansky-Kaster-Hauber syndrome**. Children born with this syndrome are born **without a uterus** although their genitalia and other secondary sexual characteristics are outwardly normal; because they possess gonads, **it is possible for MRKH sufferers to become parents** but only via the use of a surrogate mother. The gene also significantly **reduces**—by some **five** years—the **life expectancy** of those who are born with it. **Embryo A does not have this gene.**



Which embryo should they choose?

Embryo A / Embryo B / Toss coin

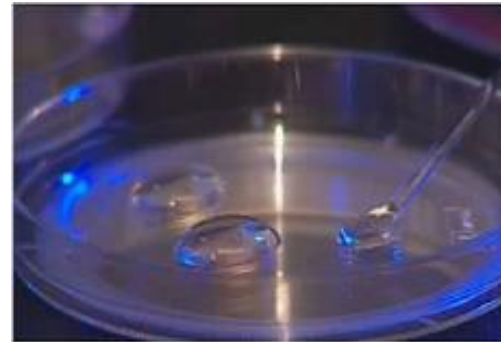


**Maybe-Rotikansky-Kaster-Hauber
syndrome
is “male-ness”!!!**





- A couple who are culturally Deaf wish to use PGD to deliberately select a deaf child



Is it morally permissible for them to do so?

Yes / No



**The
Deaf
Club**

- Due to a mix up at the IVF clinic their child is born hearing. They want the child rendered deaf through surgery

Is it morally permissible for them to do so?

Yes / No



- Sociological research has revealed that men who are half an inch taller than average height achieve significantly greater earnings and welfare.

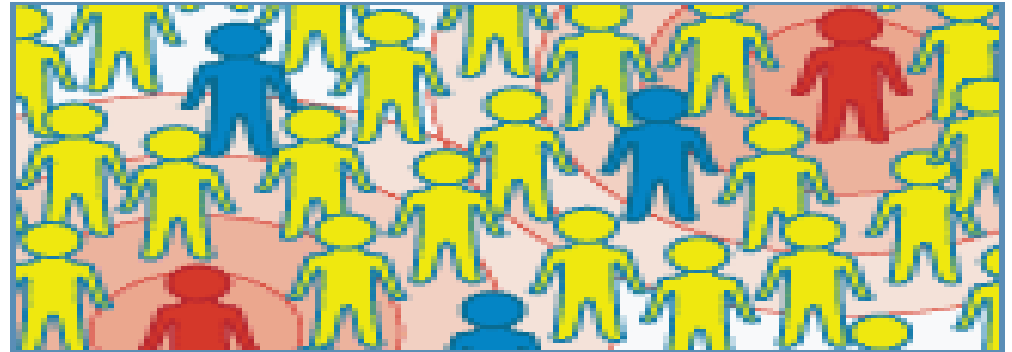
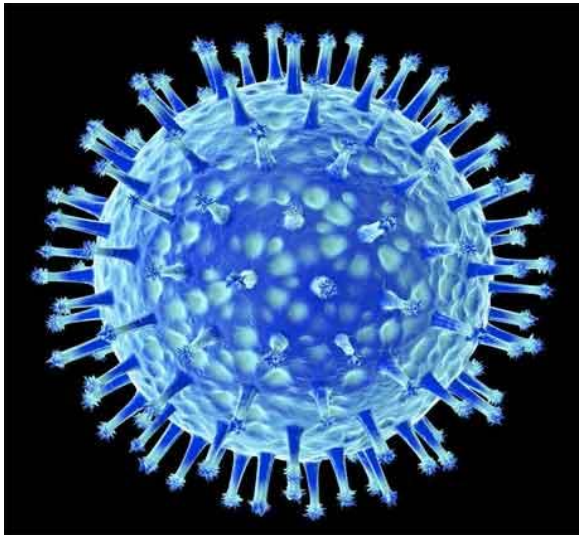


Are parents with two male embryos morally obligated to choose an embryo with genes predisposing to slightly above average height, all other things being equal?

Yes / No



Most couples are choosing embryos with a gene that confers resistance – but not immunity – to the deadly “bat-flu”. Herd immunity will only be established if more than 90% of individuals carry this gene.



Are parents morally obligated to include this gene in the “design” of their child?

Yes / No



Research at the Oxford-Uehiro Centre for Practical Ethics has revealed that an enhanced society would be much much happier if, while most people enjoy perfect health, a small number of people were born with very severe disabilities. These people would nonetheless have lives “worth living”.

Are parents morally obligated to take a drug that serves to ensure a small risk they will have such children?

YES/NO

ALDOUS HUXLEY

BRAVE NEW WORLD



Genetics has advanced more than robotics so we still need people to empty the garbage. Everyone would be much happier if those people who did empty the garbage really wanted to...

Are parents morally obligated to enter a lottery to determine if their child will be engineered to enjoy garbage collection?

YES/NO

Competing accounts of the ethics of PGD

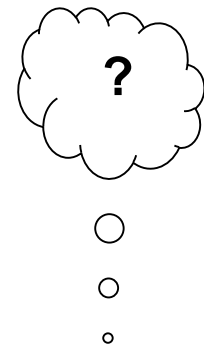


- **No use of PGD** (but “Smogsdén”)
- **Full parental liberty** (but “deafening hearing child”)
- **Therapeutic use only**
(but “life expectancy”, “skin colour [racism]” & “skin colour [latitude]”)
- **Enhancement (individual)**
 - Obligated to maximise well-being of child
(but “Maybe-Rotikansky-Kaster-Hauber syndrome”, “skin colour [racism]”, “height race”, “bat flu”)
- **Enhancement (social)**
 - Obligated to increase aggregate well-being
(but “disability lottery”, “skin colour [racism]”, “Garbage gene lottery”)



Conclusion

- There is currently no plausible account of the ethics of PGD!



- Researchers have discovered a set of genes that strongly predispose towards artistic genius but weakly predispose towards psychopathy



Is it morally permissible for parents to include these genes in the design of their child?

Yes / No