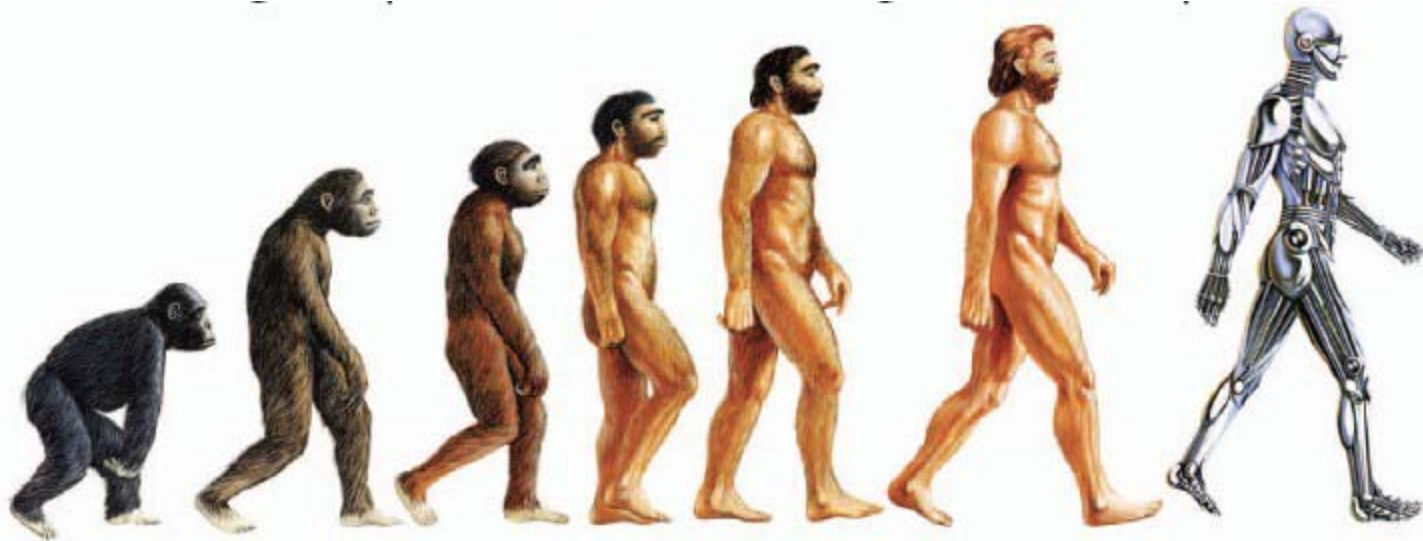




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From apes to robots?



DAVID NICHOLLS / SCIENCE PHOTO LIBRARY

Earth Science Group



What is human enhancement?

boosting our capabilities beyond the *species-typical level* or *statistically-normal range* of functioning for an individual ??

Therapy – enhancement distinction?

Vaccination → therapy or enhancement ?

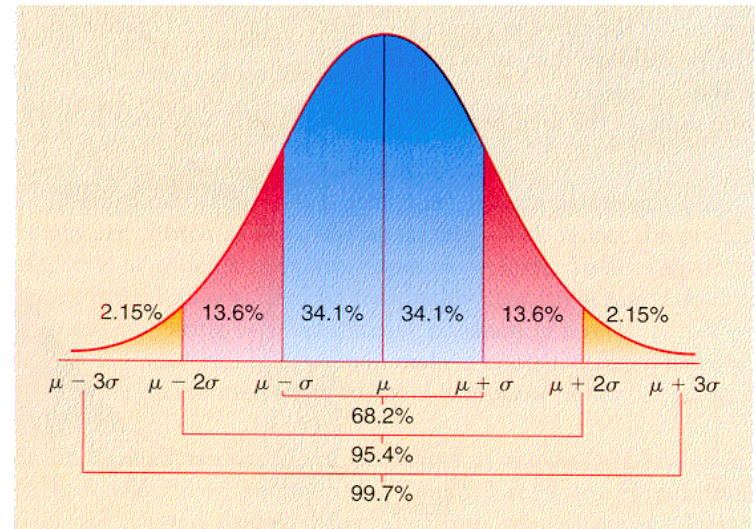
Blurred boundary

Cosmetic surgery

psychopharmacology

Cybernetics

Radical life extension





Will human enhancement be significant to change human nature ?

Against

Radical change so profound that humans suffer an identity crisis

For

Humans will be capable of adapting to the new environment, tech. etc

What does it mean to be human?

An intrinsic feature of humanity:
constantly seeking improvement



Risks and social problems with human enhancement

Risks and safety issues

side effects?

long-term risks?

human mistakes?

without treating humans as experiments?

Potential social problems

enhances existing social and economic inequities

inherently socially-divisive

fairness issues

in order to be ethical, should it be biased *towards the poor?*



Will human enhancement make us happier?

1. Near infrared vision enhancement?
2. Enhanced memory capacity?
3. Radical extension of lifespan?



How far should we go with human enhancement?

We need a comprehensive impact assessment of human enhancement technologies (taking into account political, ethical, legal, societal, cultural, political, safety, security, and health aspects)



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With great power comes great responsibility!

