



# What is Transhumanism?

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# Diderot - "D'Alembert's Dream" 1769

- Mind is not separate from the body/brain
- Lower animals are evolving towards intelligence
- Machine minds are possible
- The self is a fictional aggregate of multiple wills
- Minds may be deconstructed and rebuilt later
- Science can bring the dead back to life
- Human-animal hybrids OK
- Sexual freedom OK, including homosexuality



Denis Diderot 1713-1784

# Marquis de Condorcet 1744-1794

## **Sketch for a Historical Picture of the Progress of the Human Mind**

- Reason liberates from church, authoritarianism, nature
- Women's suffrage
- Opposed to slavery
- Radical life extension
- Freedom from work



Marquis de Condorcet

# Condorcet on H+ & X-Risks

"Nature has set no term to the perfection of human faculties; the perfectibility of man is truly indefinite; and the progress of this perfectibility, from now onwards independent of any power that might wish to halt it, has no other limit than the duration of the globe upon which nature has cast us....it will never be reversed as long as the earth occupies its present place in the system of the universe, and as long as the general laws of this system produce neither a general cataclysm nor such changes as will deprive the human race of its present faculties and its present resources."





# Regiment of the Enlightenment

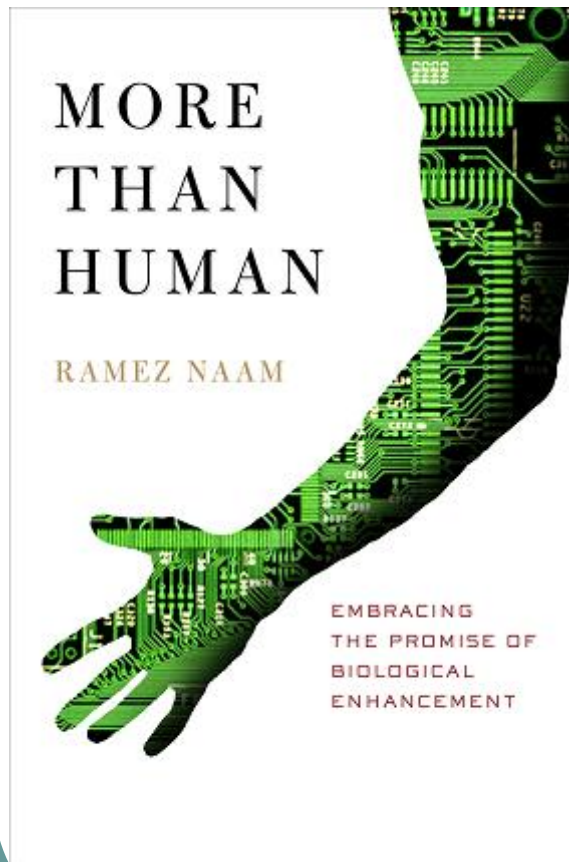


# Why Human Enhancement?

- Curing disabilities
- Health
- Longevity
- Intelligence
- Emotional control
- Aesthetic expression
- Spiritual goals
- Ensuring the best lives for our kids

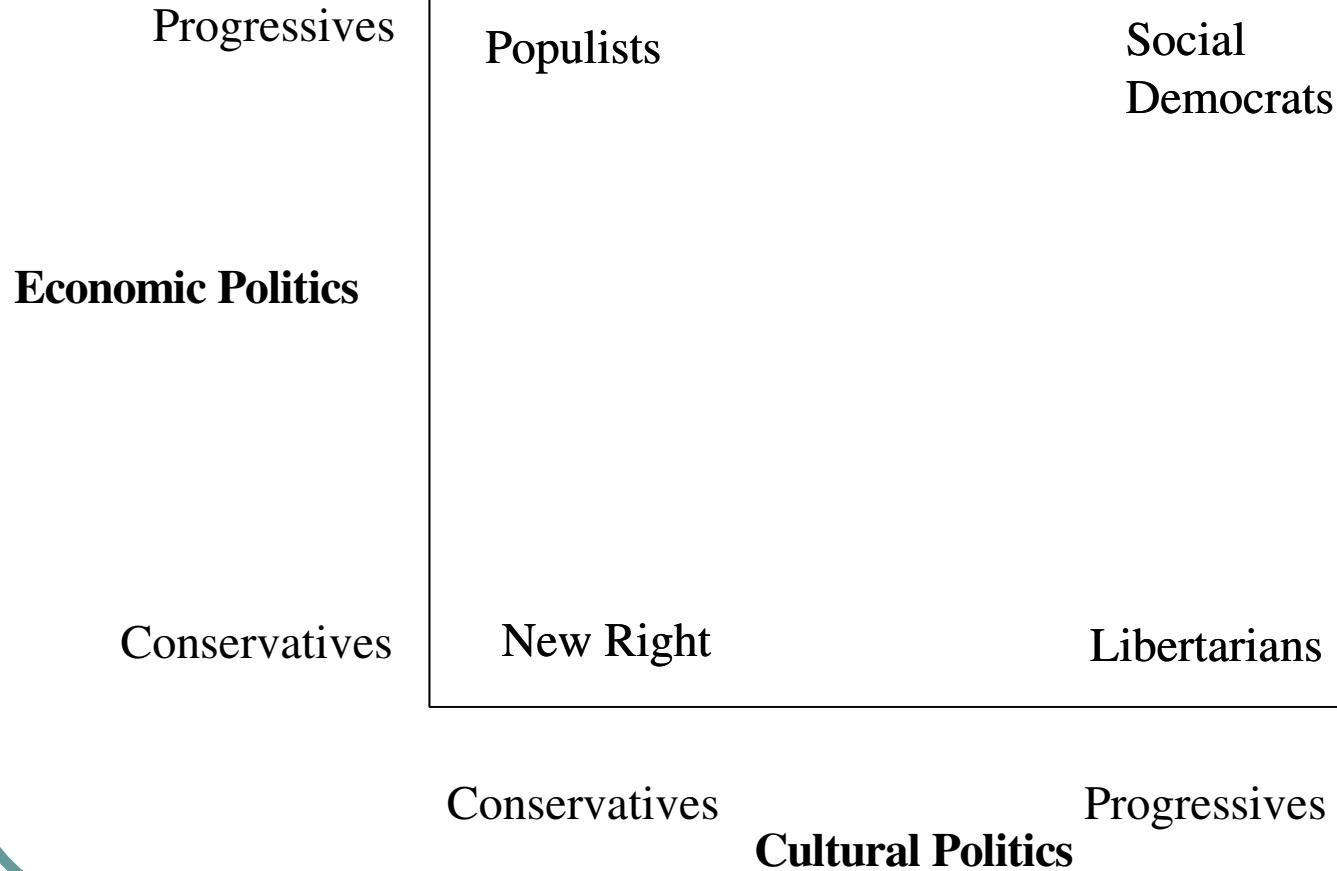


# Biopolitical Battlefronts

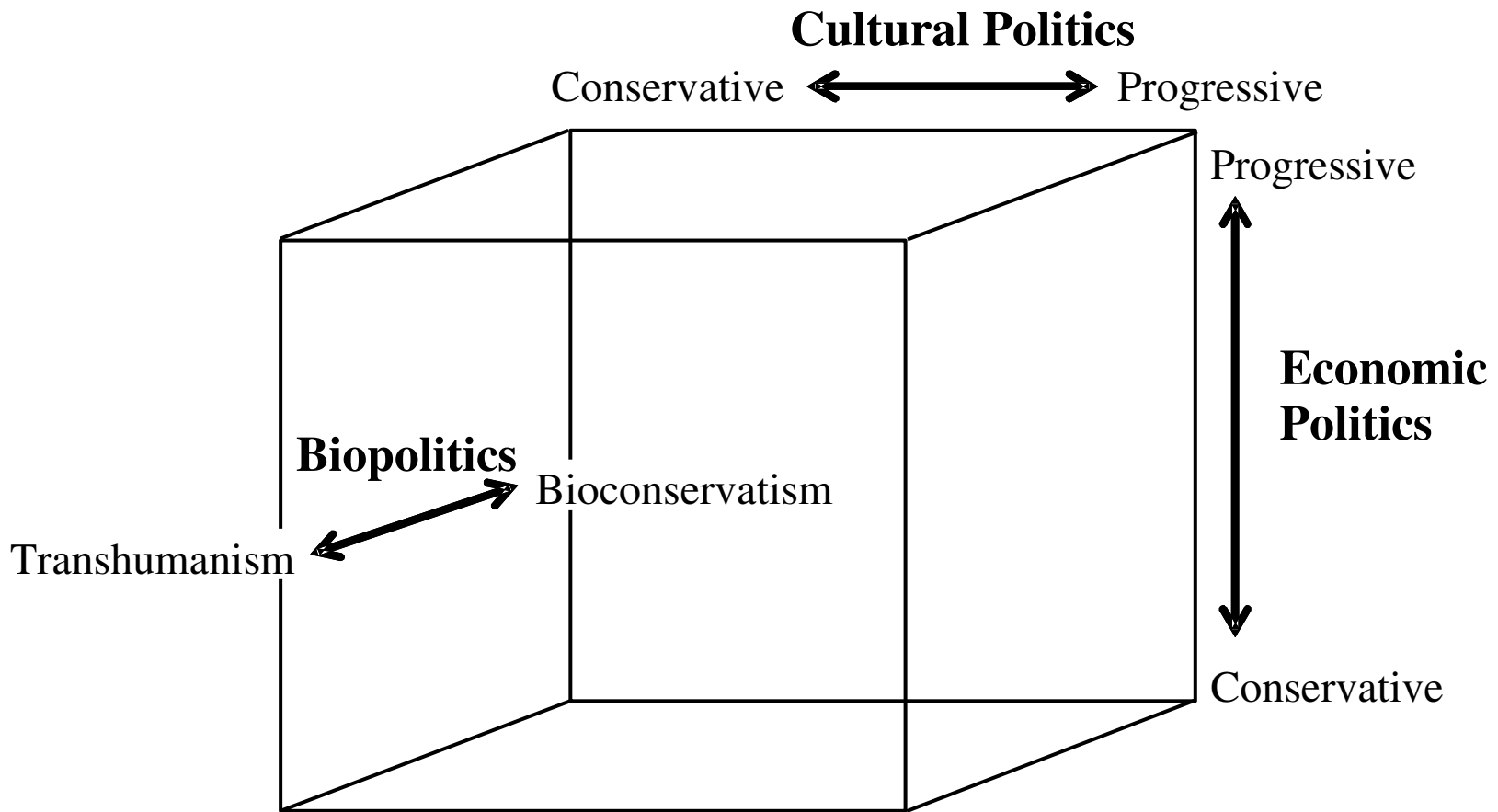


- **Who is a citizen with a right to life?:** abortion, stem cells, great ape rights, brain death, chimeras
- **Control of Reproduction:** contraception, abortion, fertility treatments, genetic testing, germline gene therapies, cloning
- **Fixing Disabilities to “Human Enhancement”:** cochlear implants, prosthetics, eye and brain chips, gene therapies, cosmetic procedures
- **Extending Life:** from treatments for aging-related diseases, to anti-aging drugs and therapies
- **Control of the Brain:** Ritalin and Prozac, psychoactive drugs, brain chips

# 20<sup>th</sup> Century Politics



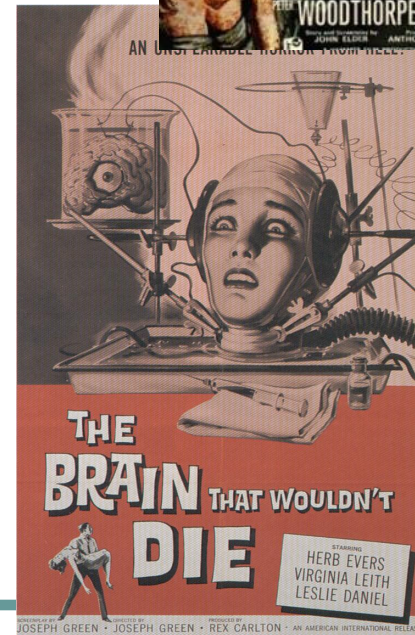
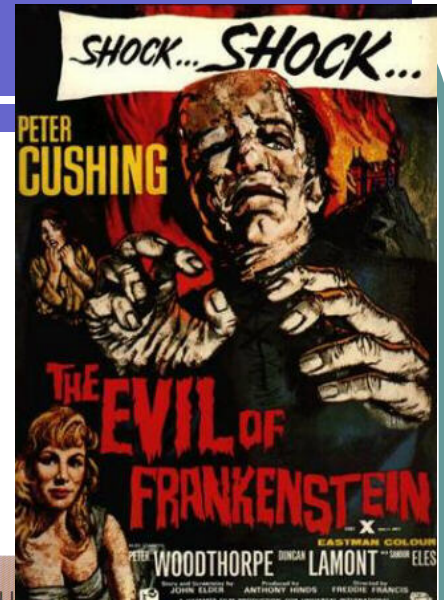
# 21<sup>st</sup> Century Politics





# BioConservatives

- **Religious Right**
  - CS Lewis *The Abolition of Man*
- **Deep Ecologists, Romantic Luddites**
  - Aldous Huxley *Brave New World*
  - Jeremy Rifkin *Algeny*
- **Left-wing/Feminist Critics of Biotech**
  - Gena Corea *The Mother Machine*
  - Center for Genetics and Society
- **Pro-Disability Extremists**
  - Not Dead Yet

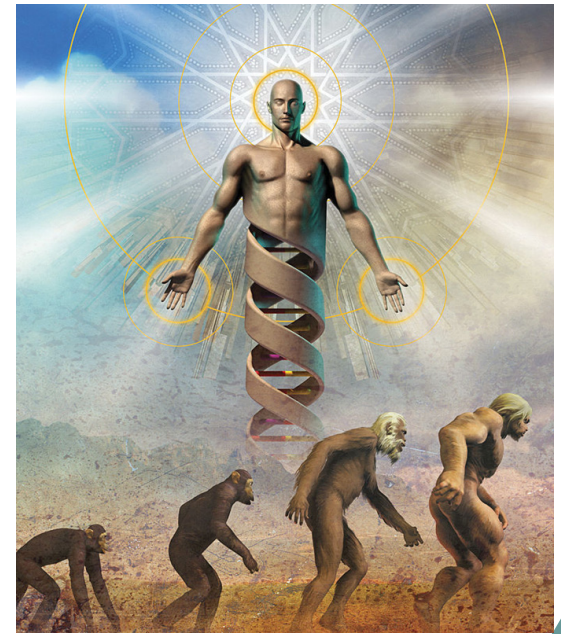


# What is Transhumanism?

**An intellectual and cultural movement**  
that affirms

- the possibility and desirability of transcending the limitations of the human body through applied reason
- especially by using technology to eliminate aging and enhance human intellectual, physical, and psychological capacities.

Trans-humanists are *humanists* who emphasize what we have the potential to become through reason.



# Proto-Transhumanists

- **Diderot, JP Condorcet and William Godwin** – radical life extension
- **HG Wells** and **Olaf Stapledon** – portrayed future evolution of humanity
- **JBS Haldane**, 1923, "Daedalus: Science and the Future" – in vitro fertilization, genetic engineering
- **JD Bernal**, 1929, "The World, the Flesh and the Devil" – first projection of cybernetic implants



JBS Haldane

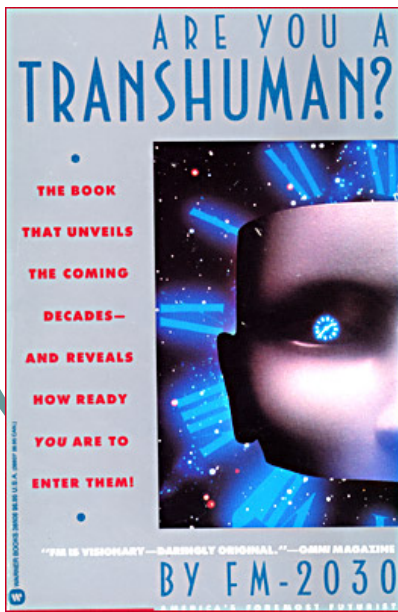
# “Trans-humanism” and “Transhuman-ism”

## Julian Huxley

first director of UNESCO

“Transhumanism”

“the human species can  
transcend itself.”

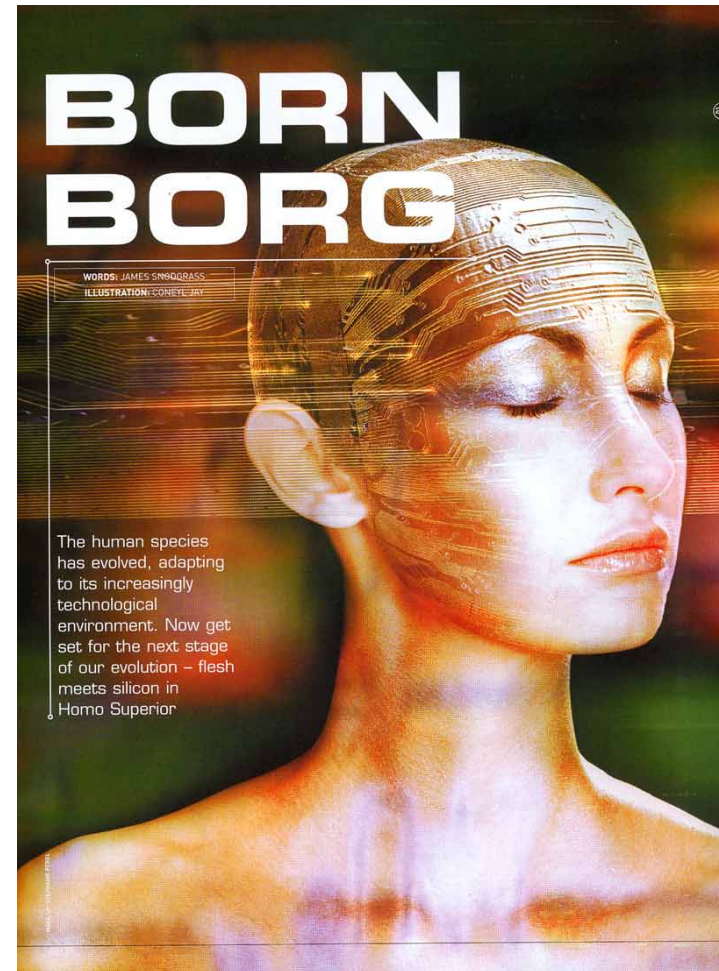


“**FM-2030**” (FM Esfandiary)  
popularized term “transhuman”  
in the 1970s



# Five Key Contemporary H+ Values

- **Pro-Enhancement Technologies**
- **Humanism & Secularism**
- **Scientific & Technological Optimism**
- **Personhood Ethics**
- **Repro Rights, Cog Liberty, Body Autonomy**





# Growing H+ Movement

## **World Transhumanist Association**

transhumanism.org

30 chapters, 3000 members

## **Institute for Ethics and Emerging Technologies**

ieet.org

## **Immortality Institute**

## **Terasem Foundation**

## **Betterhumans.com**

## **Foresight Institute**

## **Singularity Inst for AI**



**Nasteheo Abdi  
Jumale**

Vice-Chair of  
WTA-Kenya



**Gaurav Gupta**

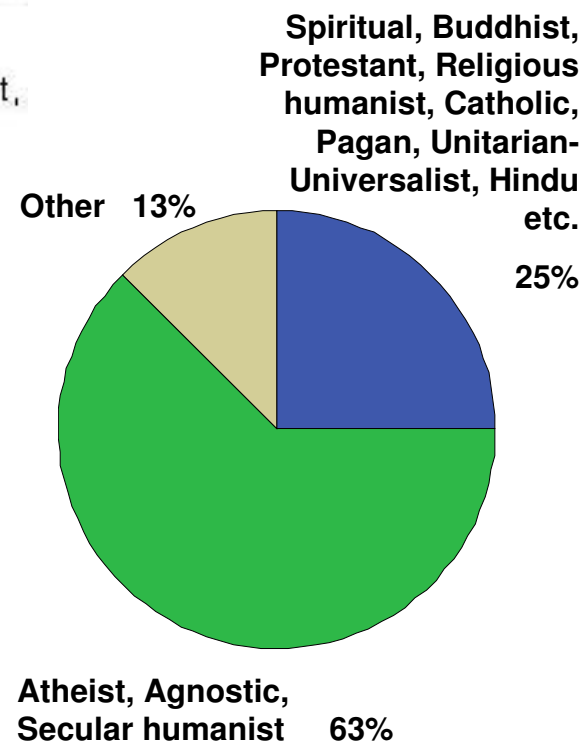
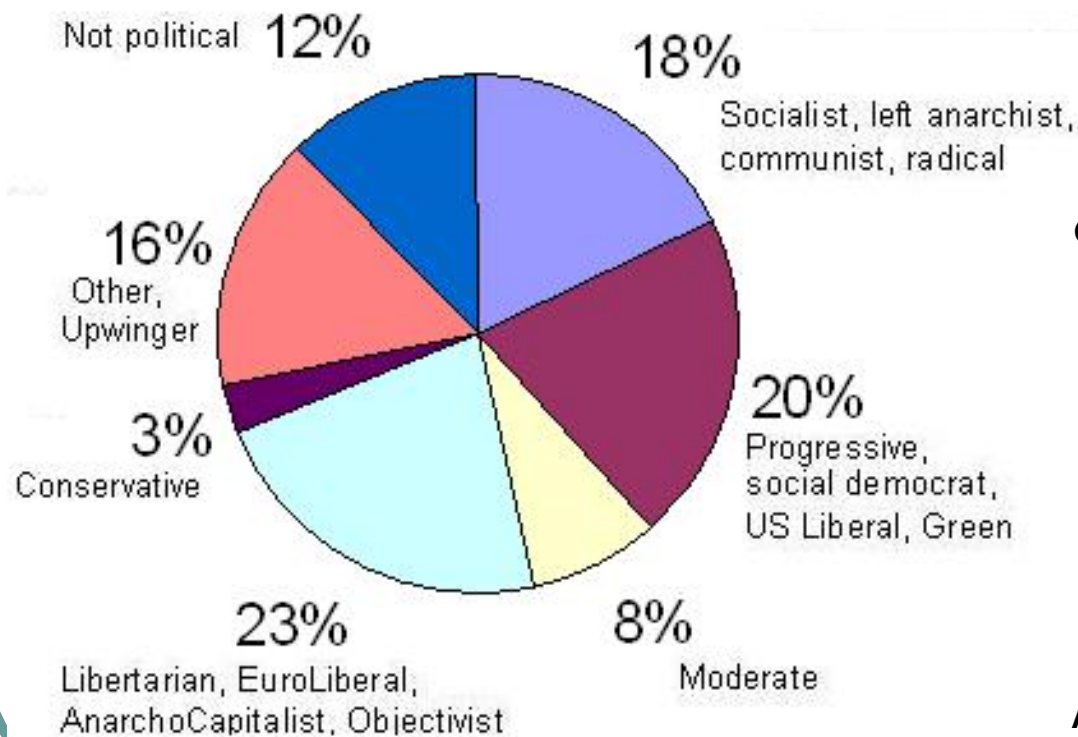
Chair, Indian  
Society for  
Transhumanity



**Dr. Nick Bostrom**  
Oxford University  
WTA & IEET Chair

# Growing Diversity of H+

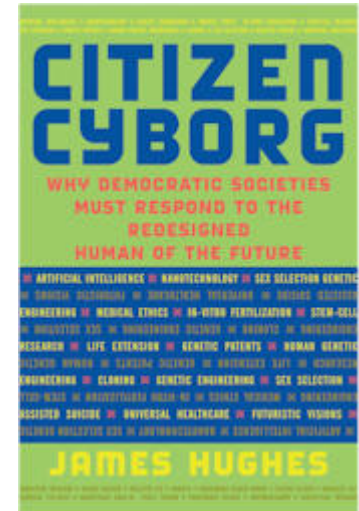
From the March 2005 survey of WTA members



# Technoproggressivism

## Core Ideas:

- We need **equality** and **solidarity**, as well as **liberty**
- Tech needs **regulation** and **universal access**
- Policies needed to prevent and redress downsides of techno innovation, e.g. Social Security for structural employment
- “**Techno-Progressives**”
- **Technoliberation list:**  
[groups.yahoo.com/groups/technoliberation](http://groups.yahoo.com/groups/technoliberation)



# Biopolitical Coalitions

## H+ Coalition

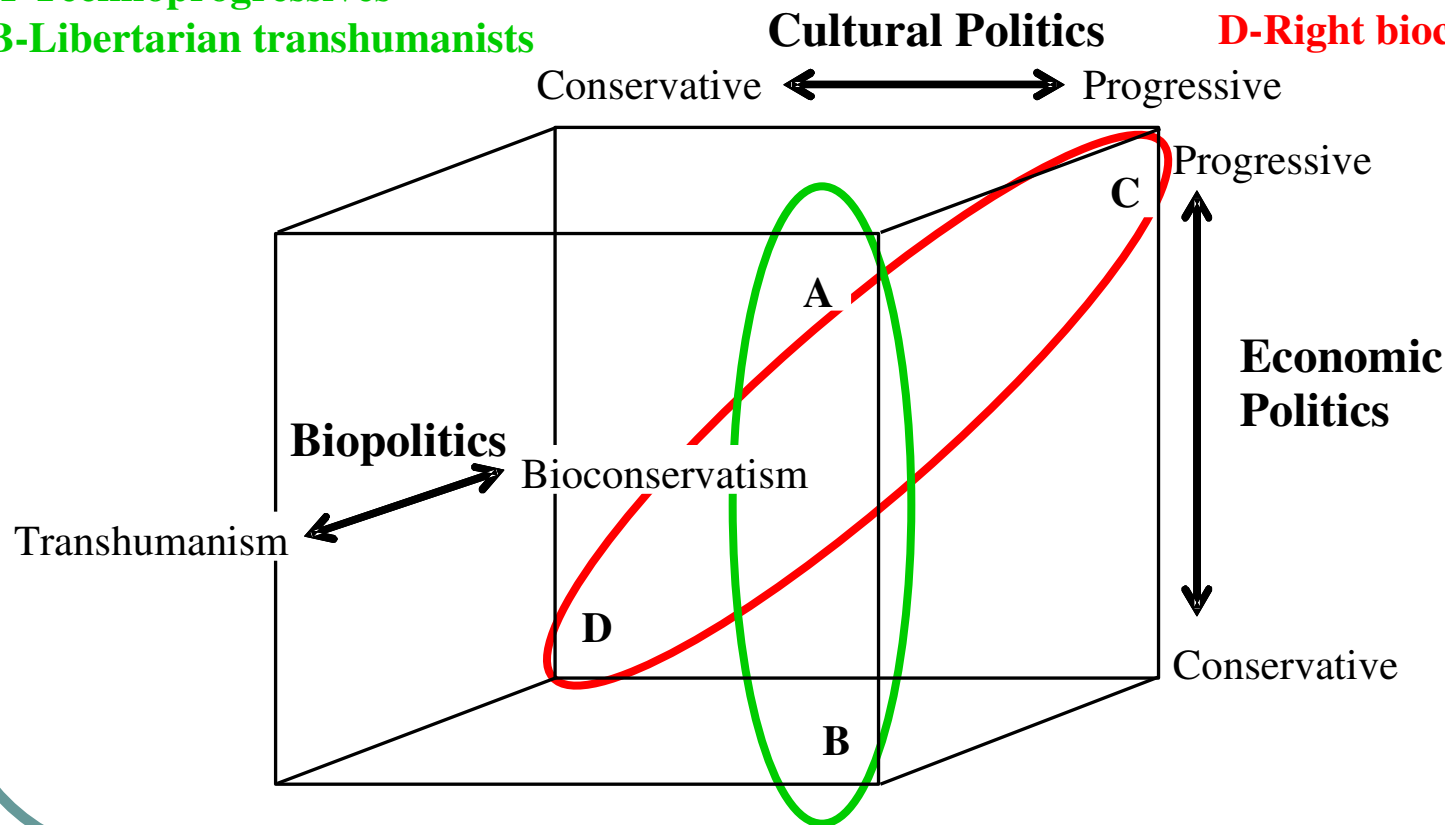
**A-Technoproggressives**

**B-Libertarian transhumanists**

## BioCon Coalition

**C-Left bioconservatives**

**D-Right bioconservatives**



# Central Biopolitical Disputes

<b>Transhumanists</b>	<b>BioConservatives</b>
<b>Personhood, cyborg citizenship</b>	<b>Human-Racism (or Deep ecology)</b>
<b>Humanism, reason, individual liberty, progress</b>	<b>Sacred taboos, “the natural”, yuck factor, romanticism</b>
<b>Risks are manageable</b>	<b>Risks are unknowable; Punishment for hubris inevitable; Tech should be banned</b>



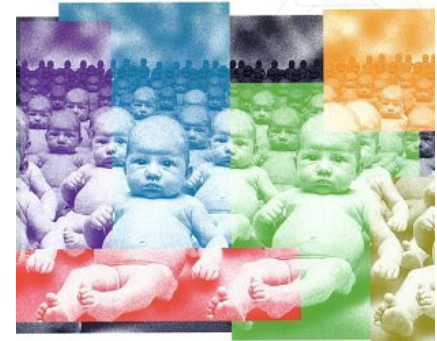
# Beyond Human-racism...

- **Human-racism** =  
Humanness as basis of  
rights-bearing
- Humans have souls or  
crypto-spiritual “human  
dignity”
- Fetus to cremation



Embryonic citizens?

**OUR**  
**POSTHUMAN FUTURE**  
CONSEQUENCES OF THE BIOTECHNOLOGY REVOLUTION



"Stunning...The genius of Our Posthuman Future is that it brings home just how important [these issues] will be in our immediate future for ordinary people." — San Francisco Chronicle

**FRANCIS FUKUYAMA**

PICADOR

# Race-Mixing Panic



## Race Mixing A Social and Spiritual Disaster Part 1 of 2

by Lt. Col. Gordon "Jack"  
Mohr, AUS Ret.

*"And God made the beast of the earth after his kind and cattle after their kind ... and God saw that it was very good." (Genesis*

## HELP STOP HUMAN-ANIMAL HYBRIDS

"Tonight I ask you to pass legislation to prohibit the most egregious abuses of medical research: human cloning in all its forms, creating or implanting embryos for experiments, creating **human-animal hybrids**, and buying, selling, or patenting human embryos. Human life is a gift from our Creator -- and that gift should never be discarded, devalued or put up for sale."

-George W. Bush in his State of the Union Address, 2006

Help President Bush raise awareness about these terrible half-men / half-beast creatures by these t-shirts and exposing the horrible truth about human-animal hybrids.



# Rights Based on Racial Identity

## Universal Declaration on the Human Genome and Human Rights (UNESCO, 1998)

“The human genome underlies the fundamental unity of all members of the human family, as well as the recognition of their inherent dignity and diversity.”

Is hairlessness one of the human genes necessary for citizenship?



Sorry – no rights!

# Coercive Dys(Eu)genics

**Old Eugenics:**  
**State control of  
reproduction in the name  
of “health”**

**New Eugenics:**  
**State control of  
reproduction in the name  
of “humanness”**

STATE CRITERIA FOR LEGAL EUGENICAL STERILIZATION	
STATE	TYPE OF PATIENT
Alabama	"Feeble-minded."
Arizona	"Inmates of Hospital for Insane."
California	"Feeble-minded, habitual criminals, insane, idiots, mental defectives."
Connecticut	"Feeble-minded, insane, idiots, imbeciles and those with inherited tendency to crime."
Delaware	"Mentally defectives, insane, feeble-minded or epileptic persons."
Idaho	"Feeble-minded, insane, epileptics, habitual criminals, morally degenerate persons."
Indiana	"Hereditary insane, feeble-minded or epileptic."
Iowa	"Feeble-minded, insane, syphilitic, habitual criminals, morally degenerate persons."
Kansas	"Feeble-minded, insane, habitual criminals."
Maine	"Feeble-minded."
Michigan	"Mentally defectives, insane."
Minnesota	"Feeble-minded, insane."
Mississippi	"Persons with hereditary form of insanity, feeble-mindedness, idiocy, epilepsy."
Montana	"Feeble-minded, insane, epileptic."
Nebraska	"Insane and feeble-minded."
New Hampshire	"Feeble-mindedness or certain forms of other mental diseases."
North Carolina	"Mentally defective persons."
North Dakota	"Feeble-minded, insane, epileptic, habitual criminals, moral degenerates and sexual perverts."
Oklahoma	"Habitual criminals, hereditary feeble-minded, insane, idiots, imbeciles, epileptics."
Oregon	"Feeble-minded, insane, epileptic, habitual criminals, moral degenerates and sexual perverts."
South Carolina	"Hereditary form of insanity, idiocy, imbecility, feeble-mindedness or epilepsy."
South Dakota	"Feeble-minded."
Utah	"Habitual criminals, insane, idiots, imbeciles, feeble-minded, or epileptics."
Vermont	"Prevent procreation of idiots, imbeciles, feeble-minded or insane persons."
Virginia	"Hereditary insanity, idiocy, imbecility, feeble-mindedness or epilepsy."
Washington	"Feeble-minded, insane, epileptic, habitual criminals, moral degenerates and sexual perverts."

“It will take focused effort to make it clear that altering the genes of one’s children is not among the reproductive rights for which so many women and women’s organizations have struggled.” - Marcy Darnovsky, Center for Genetics and Society



# "They" Want Your Jobs

## MISSING



### A Future for White Children

**Description:** Blonde, red, or brown hair, fair skin; innocent, inquisitive, intelligent, trusting personality. Corrupt politicians and minority special-interest groups have abducted her future. There will be no future for her in the Third World America that our nation's enemies are planning. Let us take back our country and make it great, clean, decent, and beautiful once again: for our children's sake. The men and women of National Vanguard want you to join in this great, patriotic effort.

NATIONAL  VANGUARD

## Supertots And Frankenkids

On the Rights of Those Not Yet Designed

by Erik Baard

April 23 - 29, 2003

The complete accounting of the human genome, a de facto guide for building a person, met with predictable fanfare last week. Its celebration marked 50 years since Francis Crick and James Watson published their Nobel Prize-winning description of that iconic spiral staircase, the double helix of DNA.

"After three billion years of evolution, we have before us the instruction set that carries each of us from the one-cell egg through adulthood to the grave," Dr. Robert Waterston, of the International Human Genome Sequencing Consortium, told a crowd at the National Institutes of Health.

With this new knowledge comes

WRITE TO US  
EMAIL STORY  
PRINTER FRIENDLY  
RSS NEWS  
MY YAHOO!





# Human Nature and the Embryo

"The uniqueness of **human nature** is at stake. **Human dignity** is indivisible... every **human being** is possessed of an equal dignity ...at every stage of life..."



James Dobson

# Missouri Vote to Ban H+

- MO referendum to ban hybrids, cloning, transhumanism and human genetic engineering
- Vote Nov 4, 2006

The screenshot shows the Elliot Institute website. The header features the 'Elliot INSTITUTE' logo and navigation links for 'About Us', 'The Initiative', and 'FAQ's'. A dark teal sidebar on the left contains links: 'Modern Mad Scientists', 'Our Initiative', 'Questions and Answers', 'Lies and Deceptions', 'About Us', 'News Releases', 'Join Us', 'Donate', and 'How You Can Help'. The main content area is titled 'The Proposed Amendment' and contains the following text:

*Be it resolved by the people of the State of Missouri that the Constitution be amended:*

One new article is adopted and added to be known as Regulation of Human-Animal Crossbreeds, Cloning, **Transhumansim**, and Human Engineering Is Reserved to the People

**Section 1. Findings Regarding the Threat of Unregulated Human Engineering**

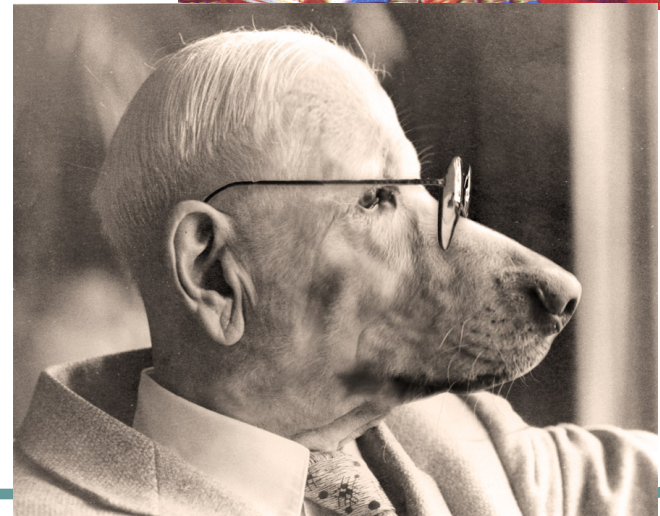
1. Scientific discoveries and advances in genetic engineering have now made it possible to clone human beings, to genetically alter human beings for the purpose of eliminating disease or adding new biological features, and to create genetic hybrids using both human and animal genes.
2. Proponents of transhumansim, neoeugenics, and human engineering have proposed ideas that would drastically alter society in known and unknown ways. Among other proposals, proponents of human engineering have suggested the following:
  - a. the cloning or creation of modified clones that would be mutilated or destroyed to secure organ transplants for the benefit of the original cell donor;
  - b. the genetic creation of a half-human slave race to serve humankind;

# Brownback Bill on Chimeras

Which prohibits “human chimeras” which are, in part, defined as

*a human embryo that consists of cells derived from more than one human embryo, fetus, or born individual*

i.e. it outlaws all reproduction, since a mother and father are two born individuals



# Inevitability of Race War?

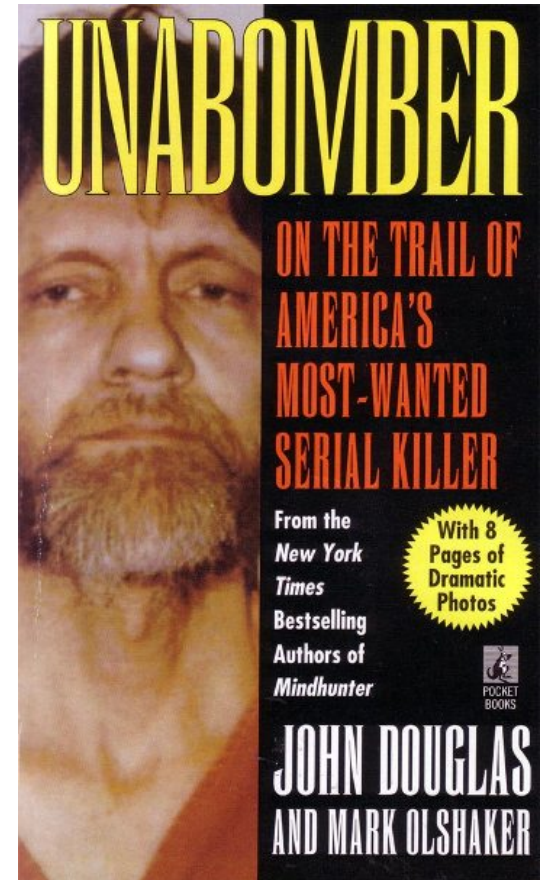


"The posthuman will come to see us (the garden variety human) as an **inferior subspecies** without human rights to be **enslaved** or **slaughtered** preemptively. It is this potential for genocide based on genetic difference, that I have termed "**genetic genocide**," that makes species-altering genetic engineering a potential **weapon of mass destruction.**" (Annas, 2001)



# Violent Defenders of Human Nature

“**Human nature** has in the past put certain limits on the development of societies. But ... technology is developing ways of modifying human beings.... Getting rid of industrial society ... will remove the capacity of ... control over **human nature**”  
- the “Unabomber Manifesto”

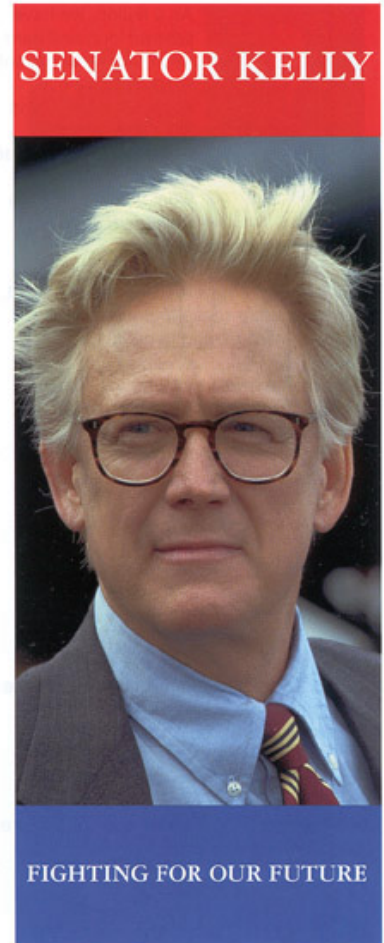




# Enhancement a Crime Against Humanity?

George Annas & Lori Andrews:  
make human enhancement  
**“a crime against humanity”**

**Senator Kelly:**  
"Are mutants dangerous? We license people to drive."  
**(X-Men) Dr. Grey:**  
"But not to live."



# ...to Personhood

- **Persons:** “conscious beings, aware of themselves, with intents and purposes over time”
- You can be **human and not persons:** fetus, braindead
- You can be a **person and not human:** great apes, AI, posthumans



# H+ = Radical Human Rights

- **Personhood**, *not* race, gender or species, defines citizenship
- Citizens have a right to control own bodies & brains
- Goal of governance should be to help each person fulfill her potential



John Locke

1632-1704

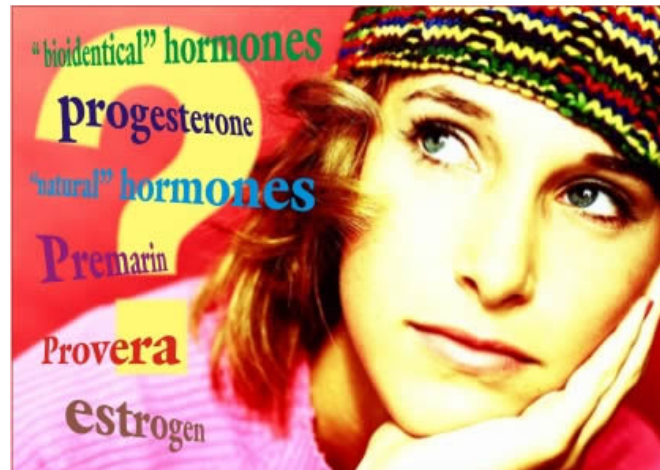
# Technological Self-Determination

- The right to know how safe and effective technologies are
- The right to use technology to control our own bodies and minds
- The right of equal access to technological empowerment





# Legitimate Risk Concerns: Safety, Efficacy, Equity



Make  
technology  
accessible to all

Ensure technology  
is safe and effective





# Yuck Factor Stops Critical Thinking

Bioconservative risk estimates are grounded in yuck factor so that tech bans seem only logical policy



# Max Mehlman: Wondergenes

- Global ban on genetic enhancement for equality reasons
- Mandatory, global gene testing “like Gattaca”
- April 2006: NIH gives Mehlman \$770,000 to develop gene enhancement research policies



Maxwell  
Mehlman

# Christian Right Goes to Town

- **Center for Bioethics and Human Dignity and Baptist Press:**

## **ANALYSIS: NIH eugenics project a flashback to Nazi research**

May 4, 2006

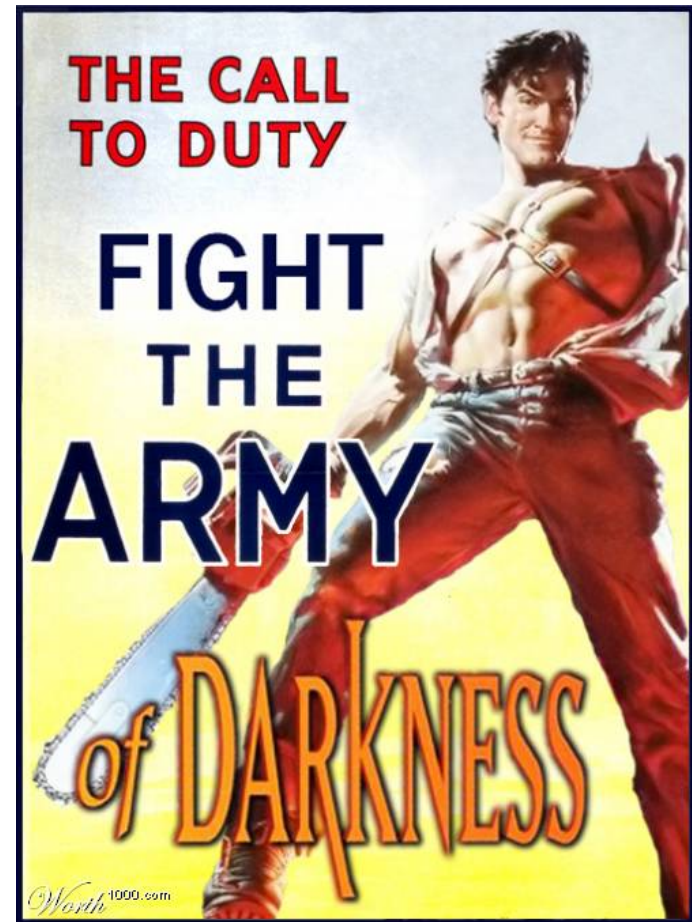
*By C. Ben Mitchell*

Baptist Press



# Transhumanist Conspiracy

- **Family Research Council:**  
“NIH Slush Fund for Transhumanism”
- **Concerned Women of America:**  
“...shocked by NIH backing of transhumanist ideology.”



# Mehlman an “H+ Leader”

## Christian MD: Dangerous Eugenics Research Being Funded With Taxpayer Dollars

By Mary Rettig

(AgapePress) - The executive director of the Christian Medical & Dental Associations (CMDA) says taxpayer dollars are going to fund a dangerous area of scientific research. The National Institutes of Health has given a grant of nearly three-quarters of a million dollars to Professor Maxwell Mehlman, a scientist at Case Western University, to assist him in studying the genetic enhancements of human beings.

Dr. David Stevens of the CMDA says Mehlman is a known leader in the field of transhumanism, an area of study that the Christian doctor says has "creating a post-human future" as its goal. The quest of transhumanism, he explains, is to move into that future "by first connecting human beings to computers, essentially creating cyborgs -- part human, part computer."

But the transhumanists' ultimate objective, Stevens asserts, is "to be able to live forever by downloading your brain into cyberspace." He says the U.S. government is highly interested in this far-out field of study, and particularly in the area of human genetic enhancements.

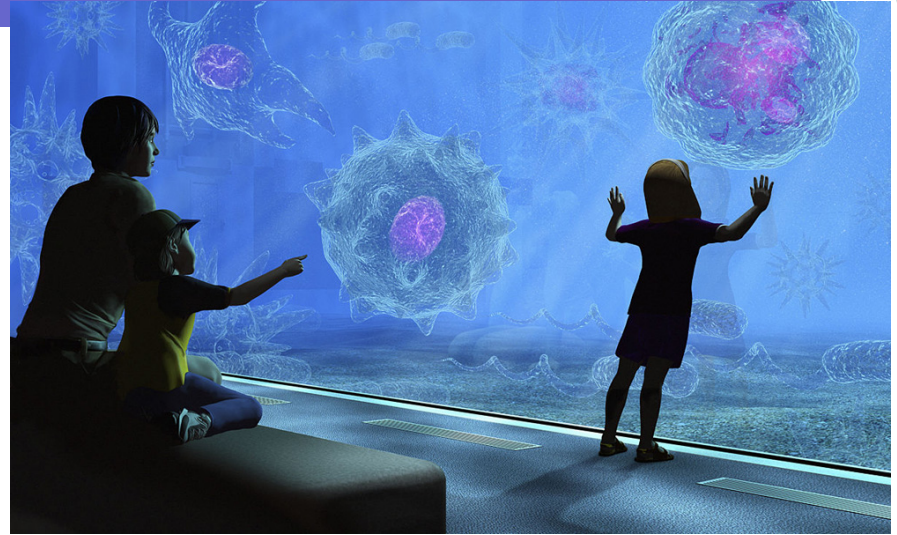


# Enhancement Policy Agenda

	<b>Cultural Political</b>	<b>Regulatory</b>
<b>Innovation Safety</b>	Promote technocitizenship	Facilitate HET innovation
<b>Access</b>	Establish rights of the person to tech enablement	Promote access to HETs

# Promote Technocitizenship

- Political opening for strengthening math, science & eng ed
- Familiarity with sci-tech reduces technophobia
- Help students, NGOs, parties, journalists learn about benefits of research, and engage informedly and constructively with HET issues



**Tech-familiar citizens are less Luddite, *and* more competitive**

# Pro-Science Citizen Lobbies

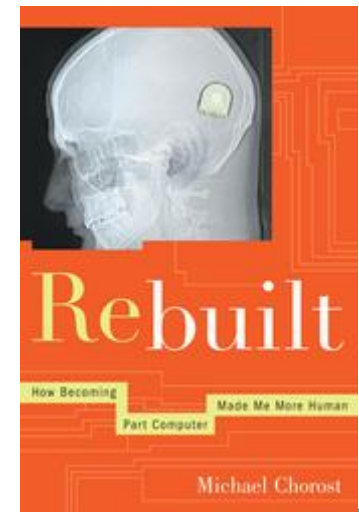
Mobilized citizens can be allies of science policy

- Disease lobbies
  - JDRCF, ACT-UP, stem cell research lobby groups
- Consumer protection groups
  - Critiquing corporatized science policy and regulation



# Constituencies for TechPro

- **Disabled** seeking assistive tech and cures
- **Feminists** supporting full reproductive rights including germinal choice
- **Drug law reform advocates** supporting deregulated access to neurotechnologies
- **Scientists & health workers** alienated by religious right and Republican restrictions on science



# More Constituencies

- **LGBT community** seeking reproductive options
- **Tech-friendly ecologists** supporting tech solutions to eco-threats
- **Senior citizens** looking for cures for aging

## Sweden to allow IVF for lesbians

Swedish legislators are due to amend a law which would legalise fertilisation treatment for lesbian couples.

The new provision, which is expected to pass easily before coming into effect...





# Bioethicists Moving Towards H+

- Religious Right (Schiavo) and Kassites polarize bioethicists
- Bioethicists becoming more H+ when forced to defend autonomy & technology against religious and yuck factor arguments



**Arthur Caplan:** "...enhancing intelligence or changing personality or modifying our memory, maybe that should be available to everyone as a guarantee of equal opportunity."

# Facilitate Innovation

- Right to research
- Defend safety & efficacy, oppose moral police
- Support funding of HET research initiatives
  - Embryonic stem cell research funding
  - NBIC
  - Neural prosthetics
  - Human Cognos Project



# Antiaging Program to Secure “Longevity Dividend”

- Multi-national Manhattan project on anti-aging
- Olshansky's about-face



Aubrey de Grey

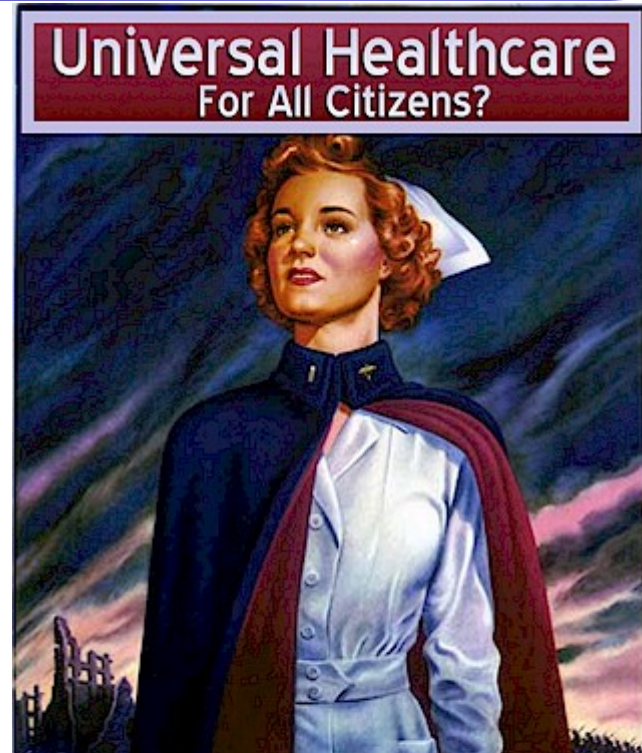


Jay Olshansky



# Pursue Universal Access

- Defend & expand universal health care
- Expand access in the developing world
  - Anti-retroviral drugs



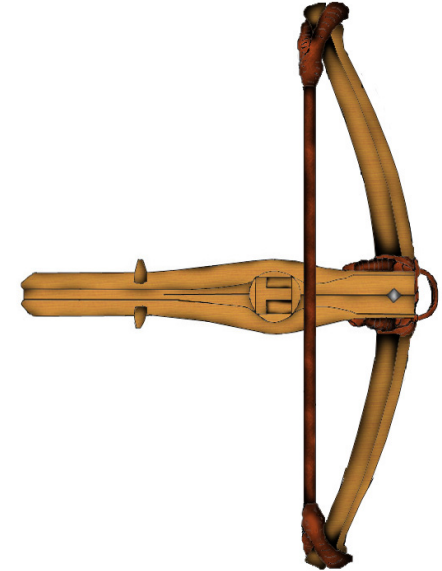
Investing in our future

**The Global Fund**

To Fight AIDS, Tuberculosis and Malaria

# Tech is *not* the problem

- **Greed, racism, inequality, patriarchy, authoritarianism, ignorance and superstition** are the problems
- Technology only opens new battlefronts

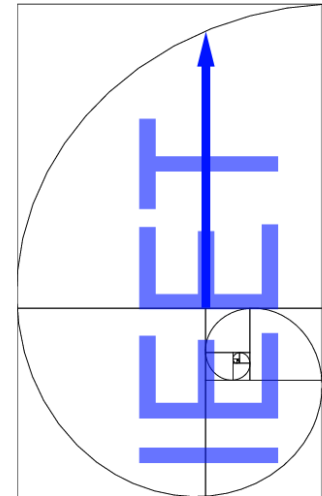
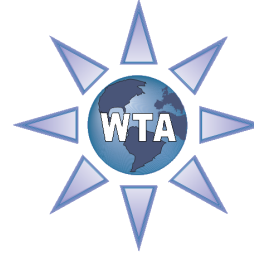


**The Crossbow** was invented to oppress peasants. But it became the perfect tool for knocking knights off horses.



# For more information

- **World Transhumanist Association**  
[transhumanism.org](http://transhumanism.org)
- **Institute for Ethics and Emerging Technologies**  
[ieet.org](http://ieet.org)
- **Me:** [james.hughes@trincoll.edu](mailto:james.hughes@trincoll.edu)



INSTITUTE FOR ETHICS  
AND EMERGING TECHNOLOGIES