



PROJECT

# Bioethics

[frederickuu.org/fcc](http://frederickuu.org/fcc)

DATE

**6 sessions**

CLIENT

**March 12, 10-11:30am (6 sessions)**

# Covenant

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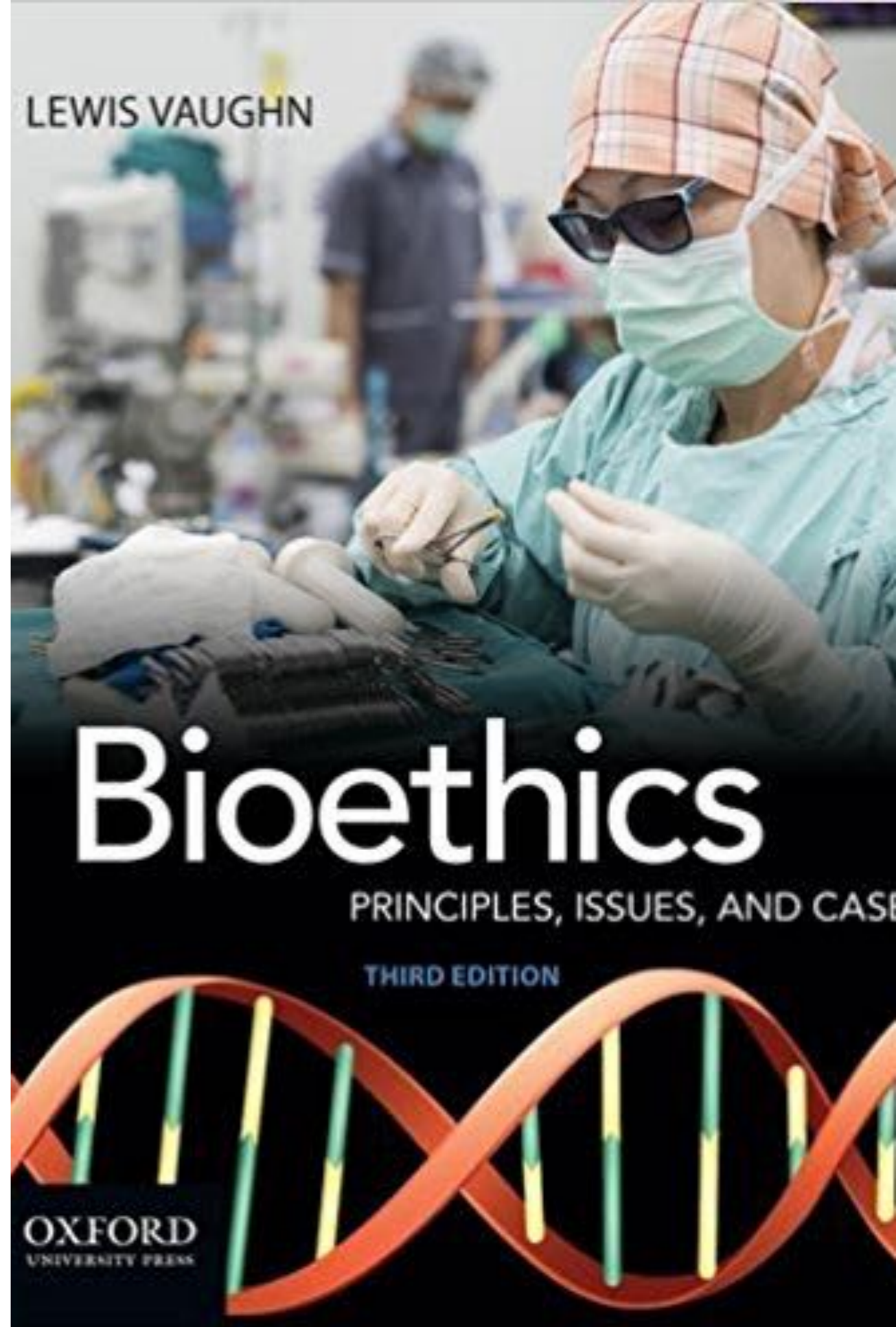
- Use **“I” statements**: *speak from your own experience.*
- **Ask permission before sharing** other participants’ stories outside the group.
- **Lean-in, lean-back**: be conscious of the level of participation that you bring to the conversation. “Share the airspace” to allow everyone a chance to speak before you speak again.
- You always have **permission to “pass.”**



# Housekeeping

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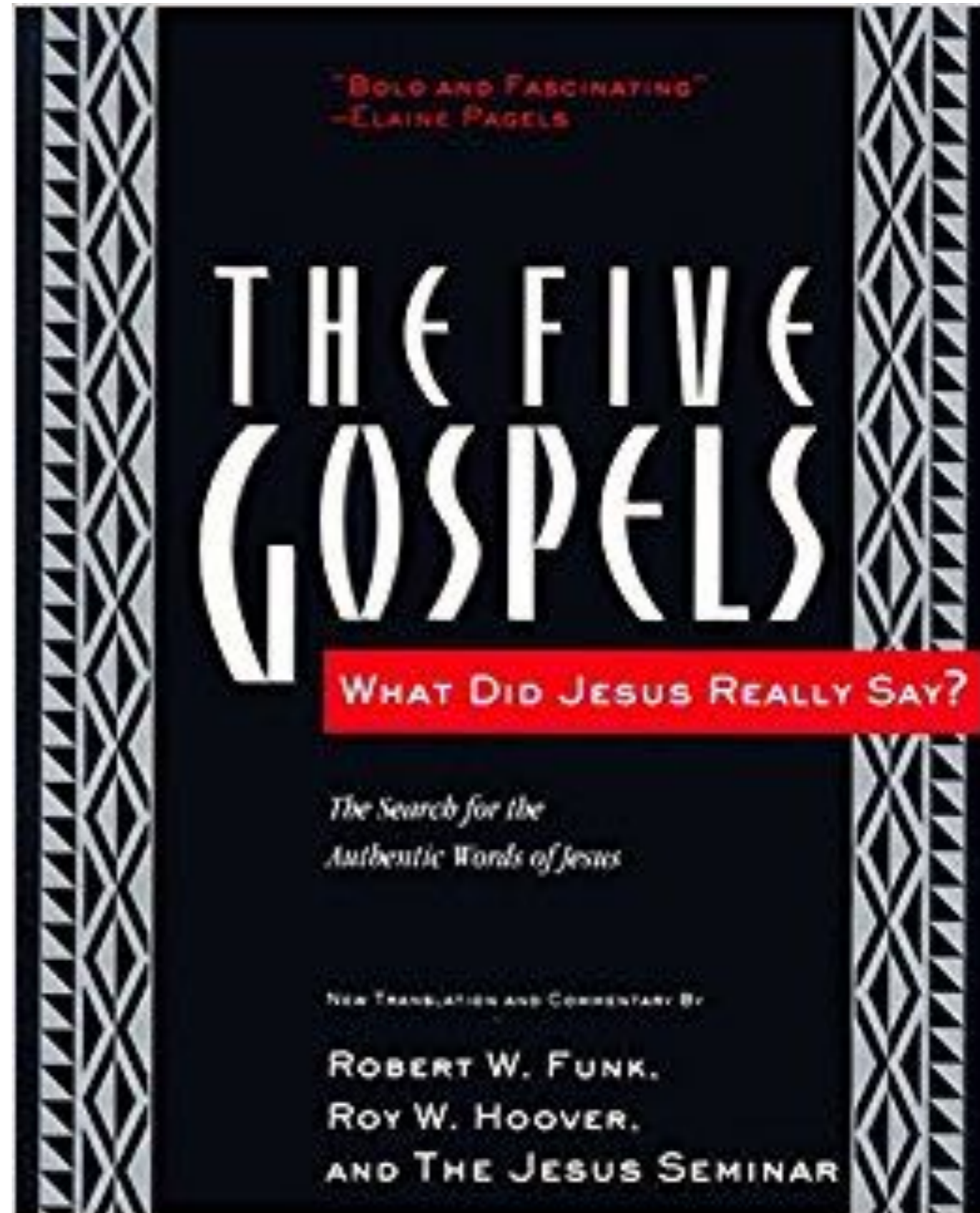
- [Are you receiving emails?]
- 21-page Case Study PDF



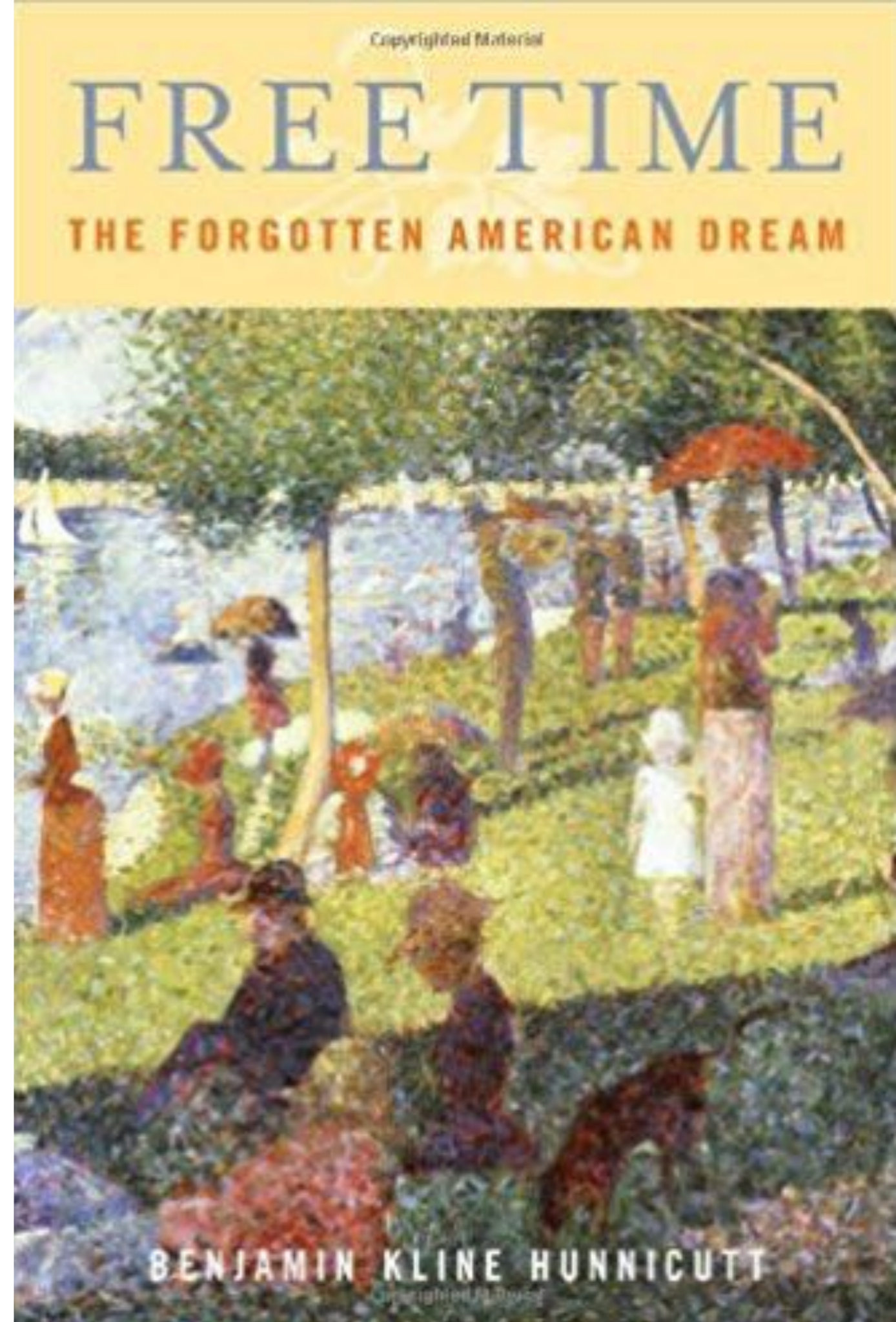
# What Did Jesus Actually Say & Do?

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- Fall 2018
- Forty years passed from Jesus's death to when the first surviving Christian Gospel was written.
- Moving chapter-by-chapter, starting with the Gospel of Mark,
- learn how scholars determine the historical Jesus's authentic words and deeds
- from those which are categorized as "possible," "unlikely," or "implausible."



- 
- Blog post with further reflections, available at [patheos.com/blogs/carlgregg/2015/07/the-promise-of-summer-free-time-and-the-forgotten-american-dream/](http://patheos.com/blogs/carlgregg/2015/07/the-promise-of-summer-free-time-and-the-forgotten-american-dream/)



A NEW YORK TIMES BESTSELLER

BUSINESS  
BOOK OF THE  
YEAR 2015  
WINNER

M. KANEY & COMPANY

# RISE OF THE ROBOTS

TECHNOLOGY AND THE  
THREAT OF A JOBLESS FUTURE

MARTIN FORD

"A BREATHTAKING NEW BOOK ON  
MODERN ECONOMICS."

—FORBES.COM

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# WORLD

— THE EXISTENTIAL —

# WITHOUT

— THREAT OF BIG TECH —

# MIND

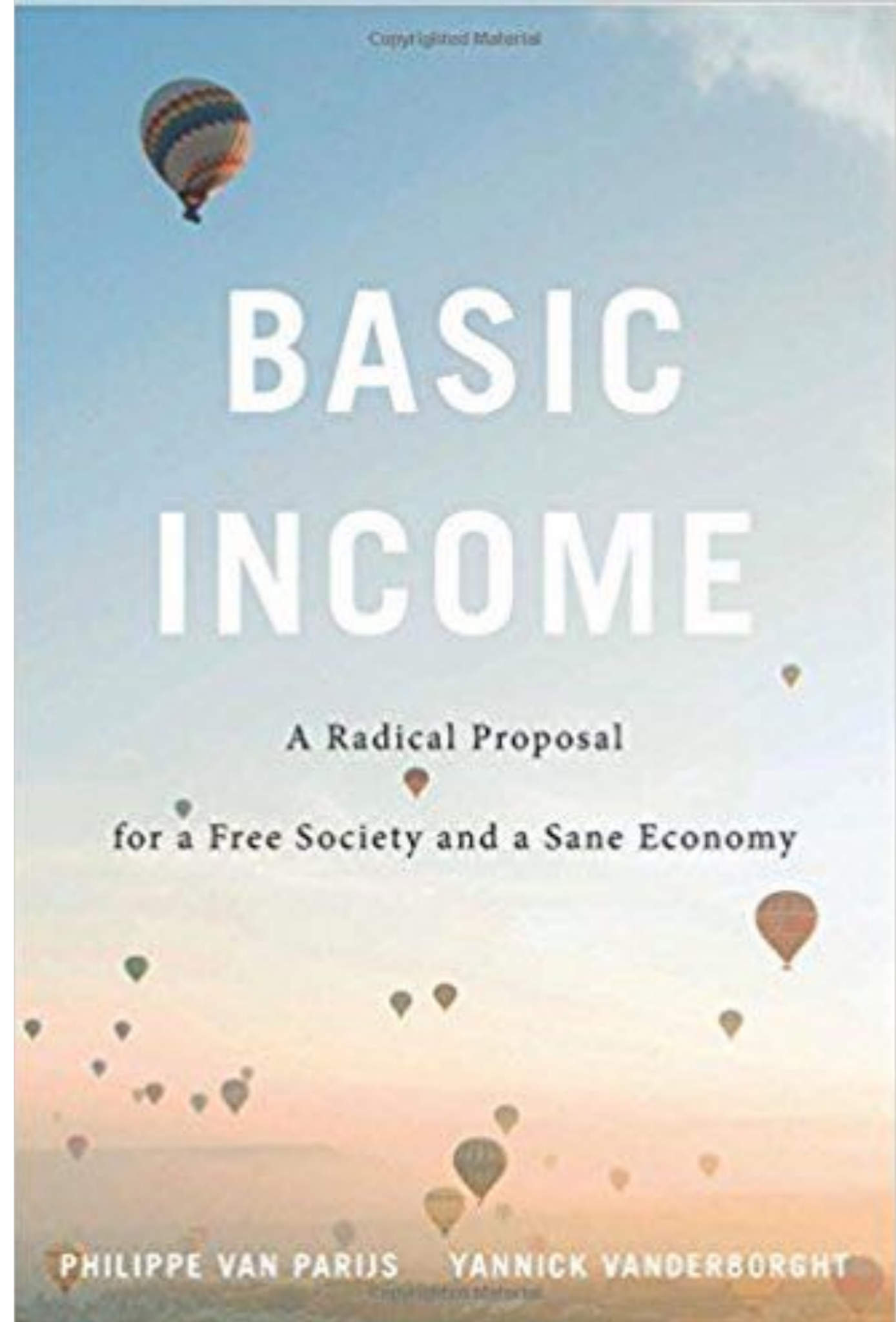
— FRANKLIN FOER —

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Blog post on “Rise of the Robots”

**<http://www.patheos.com/blogs/carlgregg/2018/03/is-your-job-predictable-immigrants-arent-coming-for-your-job-robots-are>**

- 
- Blog post with further reflections, available at: <http://www.patheos.com/blogs/carlgregg/2017/09/beyond-15-toward-universal-basic-income-21stcenturyuniversalism/>





- \* *Session #1: Contemporary Issues: Revolutionary genome-editing technology CRISPR*
- \* **Session #2 Contemporary Issues: Biotechnologies that will boost human physical & mental performance to unprecedented levels**
- \* **Session #3: Biotech, part 2**
  - \* Moral Reasoning
  - \* Paternalism & Autonomy: Before class, please review the "Cases for Evaluation" marked "Ch. 3" ("pages 91-93") of the 21-page PDF.
- \* **Session #4: Truth-telling & Confidentiality**: Before class, read "Cases for Evaluation" marked "Ch. 4" ("pages 152-153")
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- \* **Session #5: Human Research**: Before class, read "Cases for Evaluation" marked "Ch. 6" ("pages 254-258") of the 21-page PDF.
  - \* Reproductive Technologies: Before class, read "Cases for Evaluation" marked "Ch. 8" ("pages 425-427").
- \* **Session #6: Genetic Choices**: Before class, read "Cases for Evaluation" marked "Ch. 9" ("pages 557-558") of the 21-page PDF.
  - \* Dividing Up Health Care Resources: Before class, read "Cases for Evaluation" marked "Ch. 8" ("pages 732-735").

# Check-in

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- Further thoughts on previous sessions?
- “Show & Tell”
  - **UK scientists edit DNA of human embryos (9/20/17):** [bbc.com/news/health-41269200](http://bbc.com/news/health-41269200) (Mindy)
  - **"Mutant butterflies reveal the genetic roots of colorful wings":** [washingtonpost.com/news/speaking-of-science/wp/2017/09/19/mutant-butterflies-reveal-the-genetic-roots-of-colorful-wings/](http://washingtonpost.com/news/speaking-of-science/wp/2017/09/19/mutant-butterflies-reveal-the-genetic-roots-of-colorful-wings/) (Steve)
  - **"With advances in gene-editing tools, more diseases could get the ax":** [genomemag.com/crispr-comes-to-the-clinic](http://genomemag.com/crispr-comes-to-the-clinic) (Joanne)
  - <https://www.nytimes.com/2018/03/23/opinion/sunday/genetics-race.html> (Toni Clarke)

- \* In a first, scientists edit genes inside a man's body to try to cure a disease. What's next?: [washingtonpost.com/news/to-your-health/wp/2017/11/16/in-a-first-scientists-edit-genes-inside-a-mans-body-to-try-to-cure-a-disease-whats-next](https://www.washingtonpost.com/news/to-your-health/wp/2017/11/16/in-a-first-scientists-edit-genes-inside-a-mans-body-to-try-to-cure-a-disease-whats-next)
- \* Scientists 'Inject' Information Into Monkeys' Brains: [nytimes.com/2017/12/07/science/brain-information-monkeys.html](https://www.nytimes.com/2017/12/07/science/brain-information-monkeys.html)
- \* Brain Implant Improved Memory, Scientists Report: [nytimes.com/2018/02/06/health/brain-implant-memory.html](https://www.nytimes.com/2018/02/06/health/brain-implant-memory.html)
- \* Genetically Engineering Yourself Sounds Like a Horrible Idea—But This Guy Is Doing It Anyway: [gizmodo.com/genetically-engineering-yourself-sounds-like-a-horrible-1820189351](https://www.gizmodo.com/genetically-engineering-yourself-sounds-like-a-horrible-1820189351)
- \* 3D-printed prosthetic limbs: next revolution in medicine: [theguardian.com/technology/2017/feb/19/3d-printed-prosthetic-limbs-revolution-in-medicine](https://www.theguardian.com/technology/2017/feb/19/3d-printed-prosthetic-limbs-revolution-in-medicine)
- \* [nytimes.com/topic/subject/artificial-intelligence](https://www.nytimes.com/topic/subject/artificial-intelligence)



**Keith Coleman**

@kcoleman



Follow

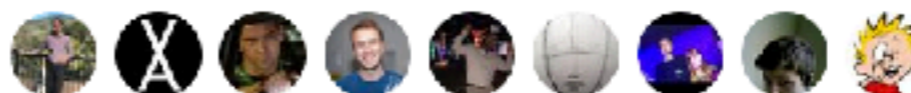


OH (from an awesome Lyft driver): “Today has been great. I’ve been blessed by the algorithm.”

Immediately had an eerie feeling that this could become an increasingly common way to describe a day.

11:58 PM - 15 Mar 2018

4,931 Retweets 15,721 Likes



 209

 4.9K

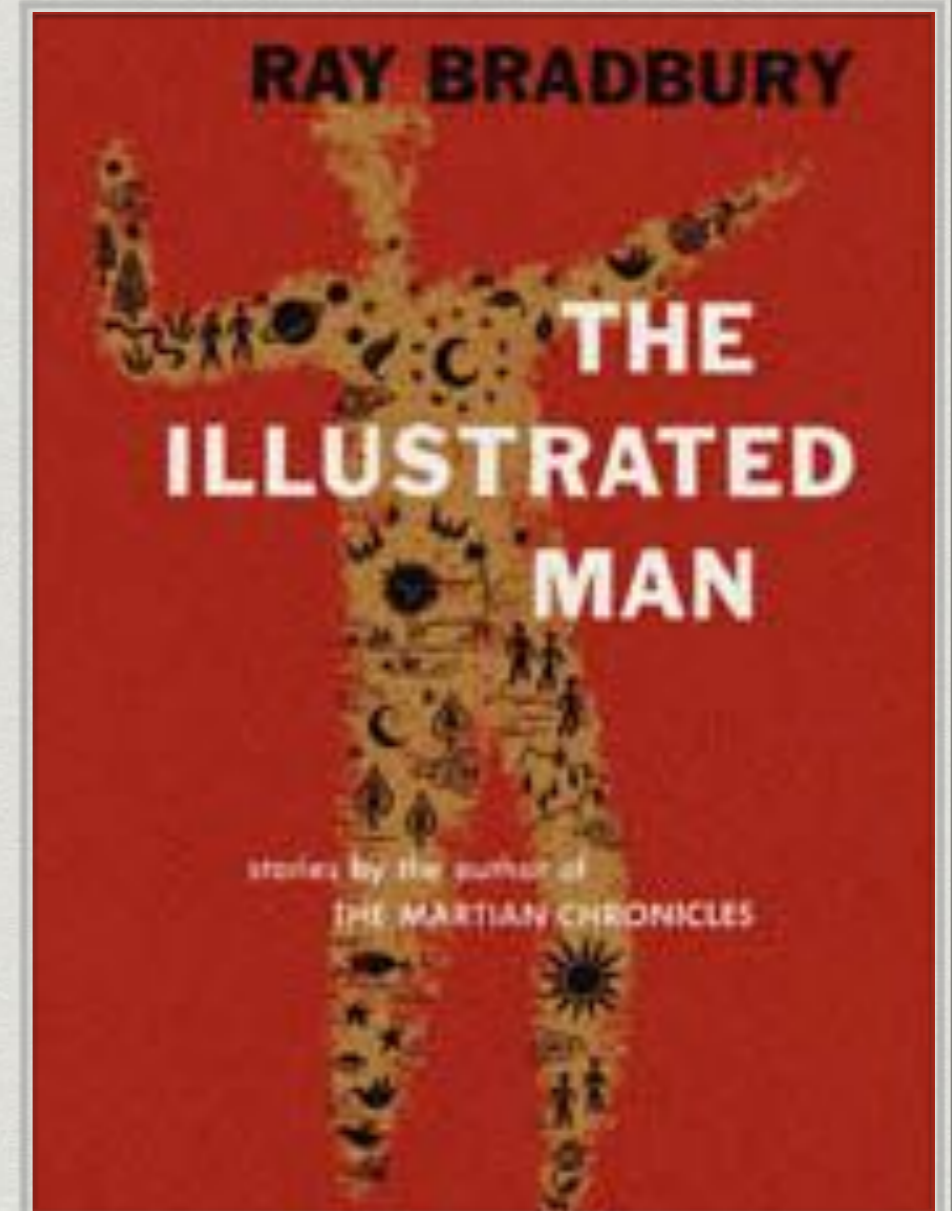
 16K



Tweet your reply

# "The Veldt"

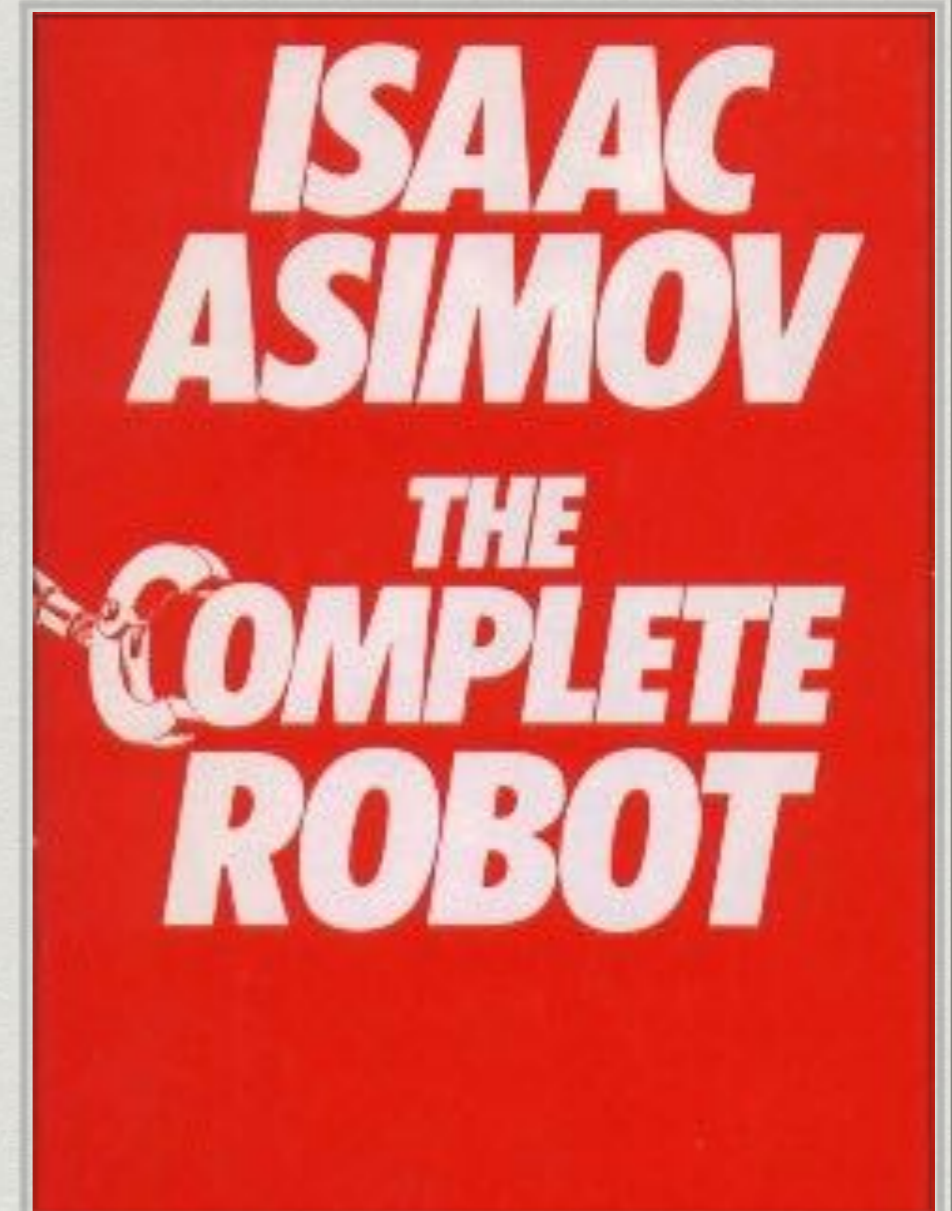
- \* science fiction short story
- \* Originally appearing as "The World the Children Made" in the 23 September 1950 issue of *The Saturday Evening Post*
- \* Republished under its current name in the 1951 anthology *The Illustrated Man*.
- \* In the story, a mother and father struggle with their technologically advanced home taking over their role as parents, and their children becoming uncooperative as a result of their lack of discipline.



1951

# “Evidence” (1946)

- \* Political candidate who's desperate to prove that his opponent is not human, but is rather a humanoid robot.
- \* Problem: hard to tell difference between a robot who follows the Three Laws & an exceptionally ethical human being...
  - \* A robot may not injure a human being or, through inaction, allow a human being to come to harm.
  - \* A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
  - \* A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws



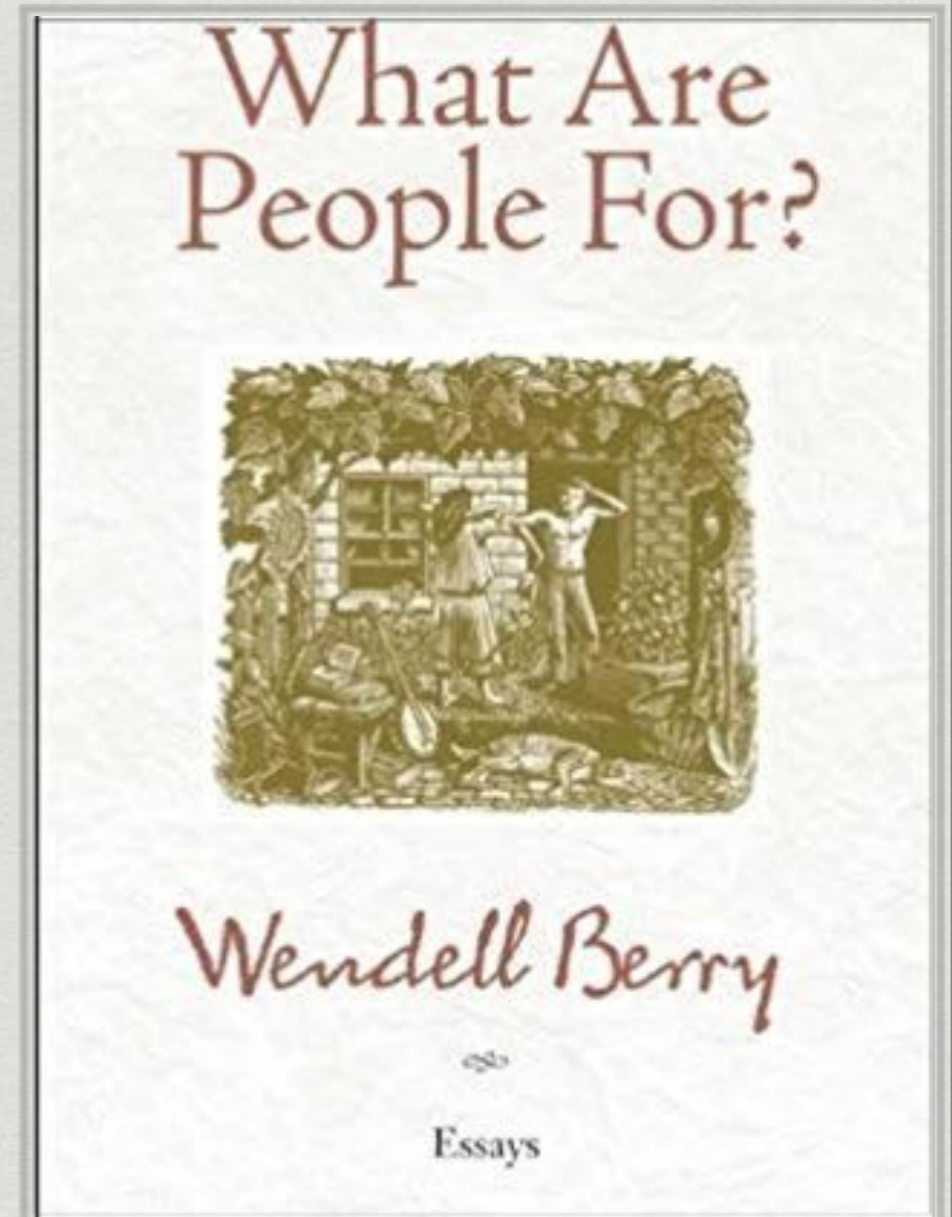
# How should humans respond?

## Cautions

- \* **Growing rift** between the biologically enhanced and those who can't afford such modifications
- \* **Constant cycle of upgrades** and boosts as the bar of “normal” rises ever higher—“Humans 95, Humans XP, Humans 8”
- \* **Fragmentation** of humankind into rival “bioenhancement clusters”
- \* Gradually **blurring boundary between “person” & “product”**
- \* Extreme forms of self-modification, with some individuals **no longer recognized as unambiguously human**

# Why I Will Not Buy a Computer

- \* *If we are ever again to have a world fit and pleasant for little children, we are surely **going to have to draw the line where it is not easily drawn.***
- \* We are going to have to learn to **give up things that we have learned (in only a few years, after all) to “need.”**
- \* I am not without hope. I knew a man who, in the age of chainsaws, went right on cutting his wood with a handsaw and axe.
- \* He was a **healthier** and a **saner** man than I am. I shall let his memory trouble my thoughts.





# It All Turns on Affection

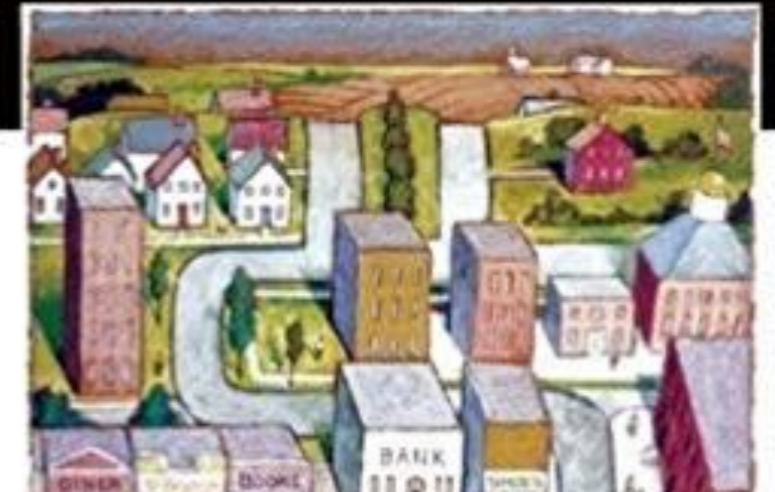
THE JEFFERSON LECTURE  
& OTHER ESSAYS *by*

Wendell Berry



# What Matters?

Economics for a Renewed Commonwealth



# OUR ONLY WORLD

TEN ESSAYS

by WENDELL  
BERRY

author of *The Unsettling of America*

**Wendell Berry**

(1934 - )

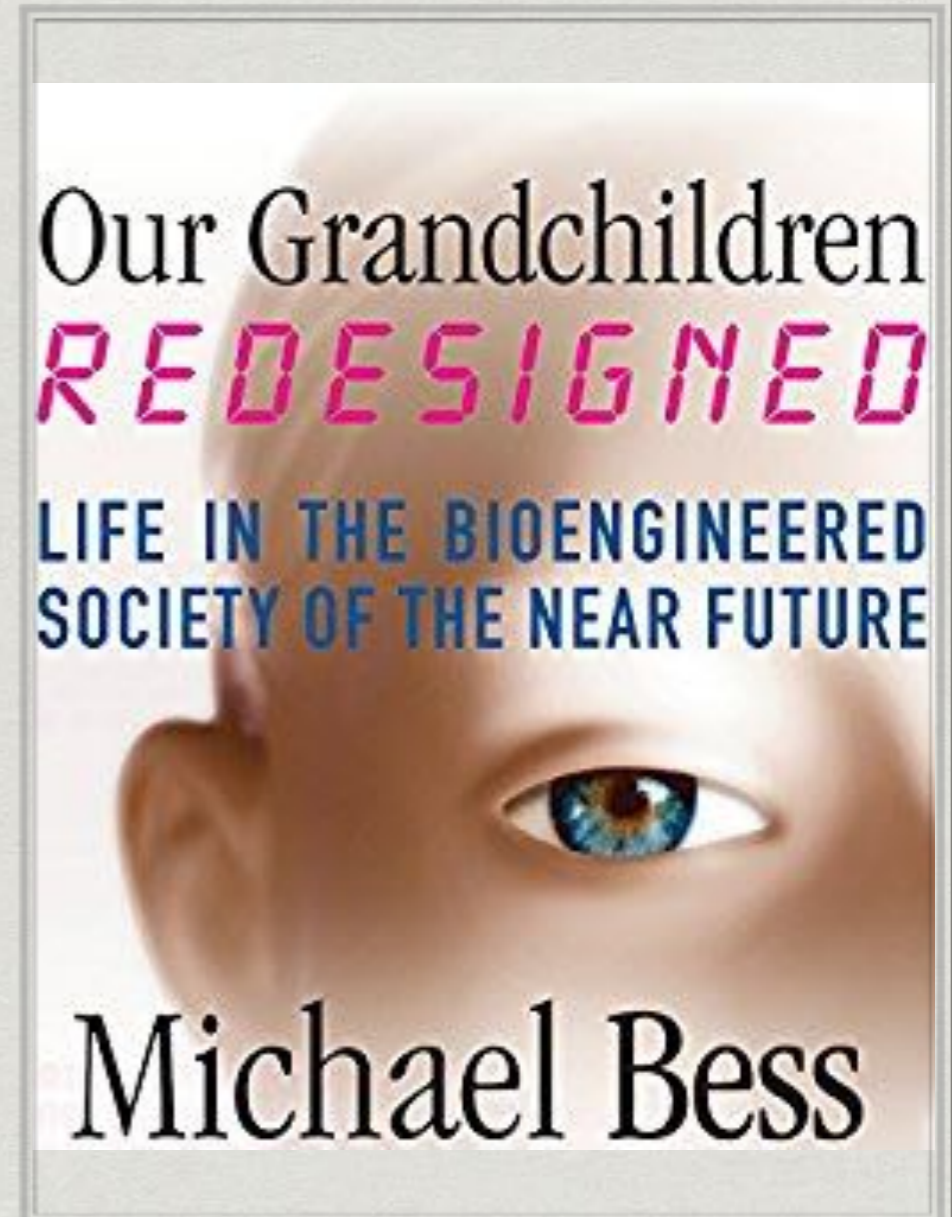


# Welcome to the Future: Reflections from 2049

Bess xiii - xiv

# Thesis (xv-xvi)

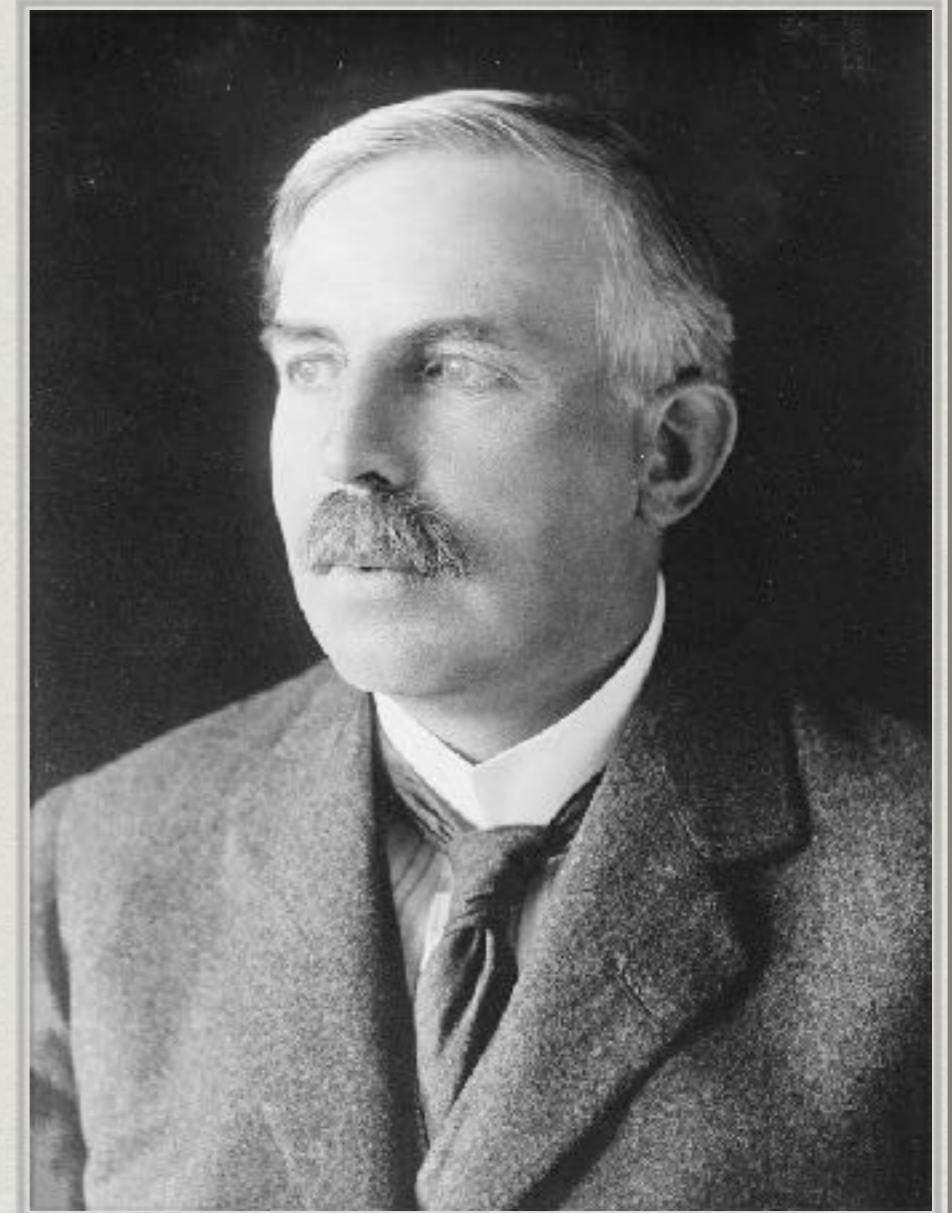
1. Going to happen
2. Opportunity & Peril
3. Radical Impact



**Beacon Press**  
**2015**

# Lord Ernest Rutherford

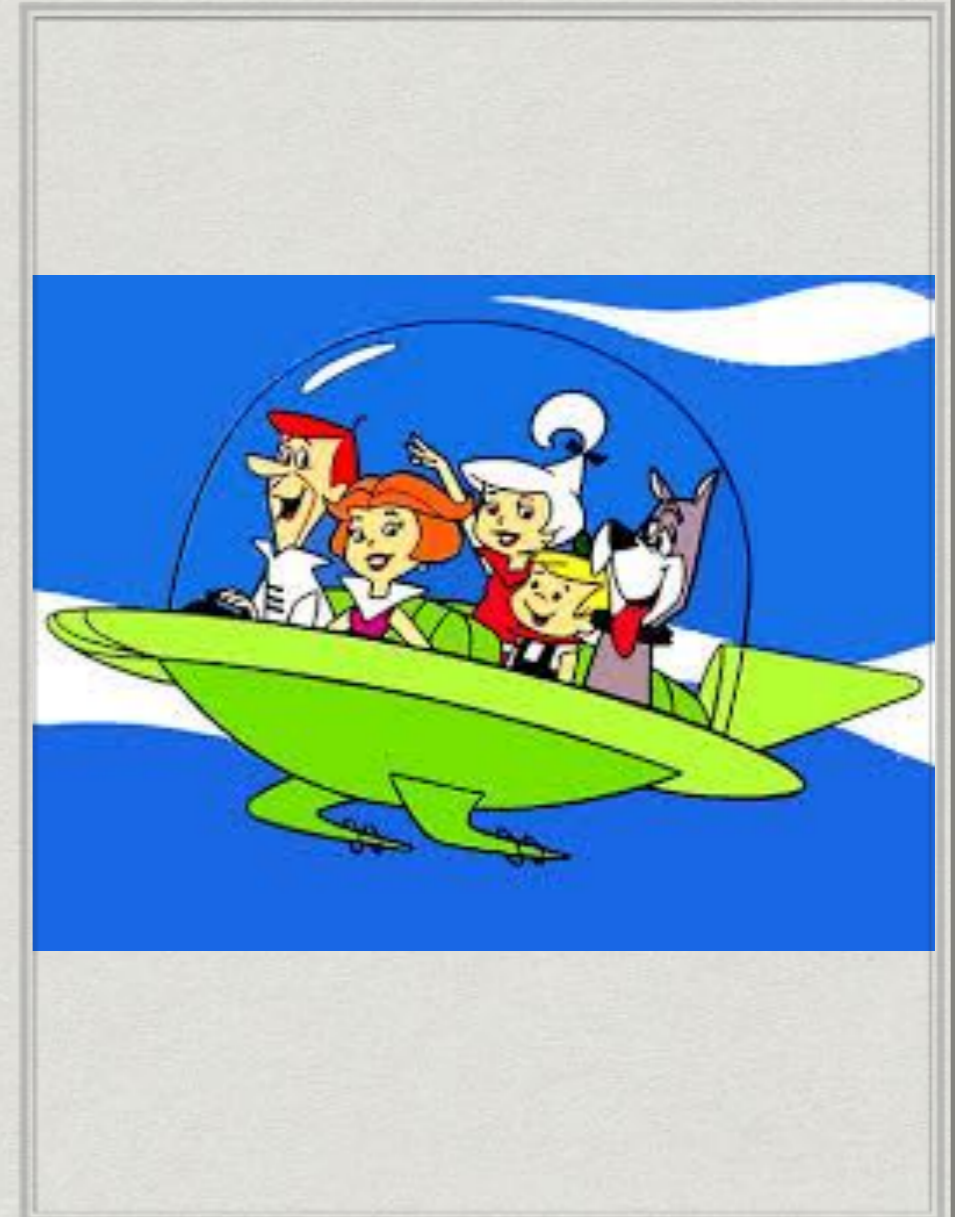
- \* 1930s: Leading figure in British physics
- \* “Merest moonshine” - Categorically dismissed the possibility of harnessing the forces of the atom
- \* 12 year later: Hiroshima & Nagasaki [*8 years after his death at age 66*]



**(1871 - 1937)**

# Jetsons Fallacy (4)

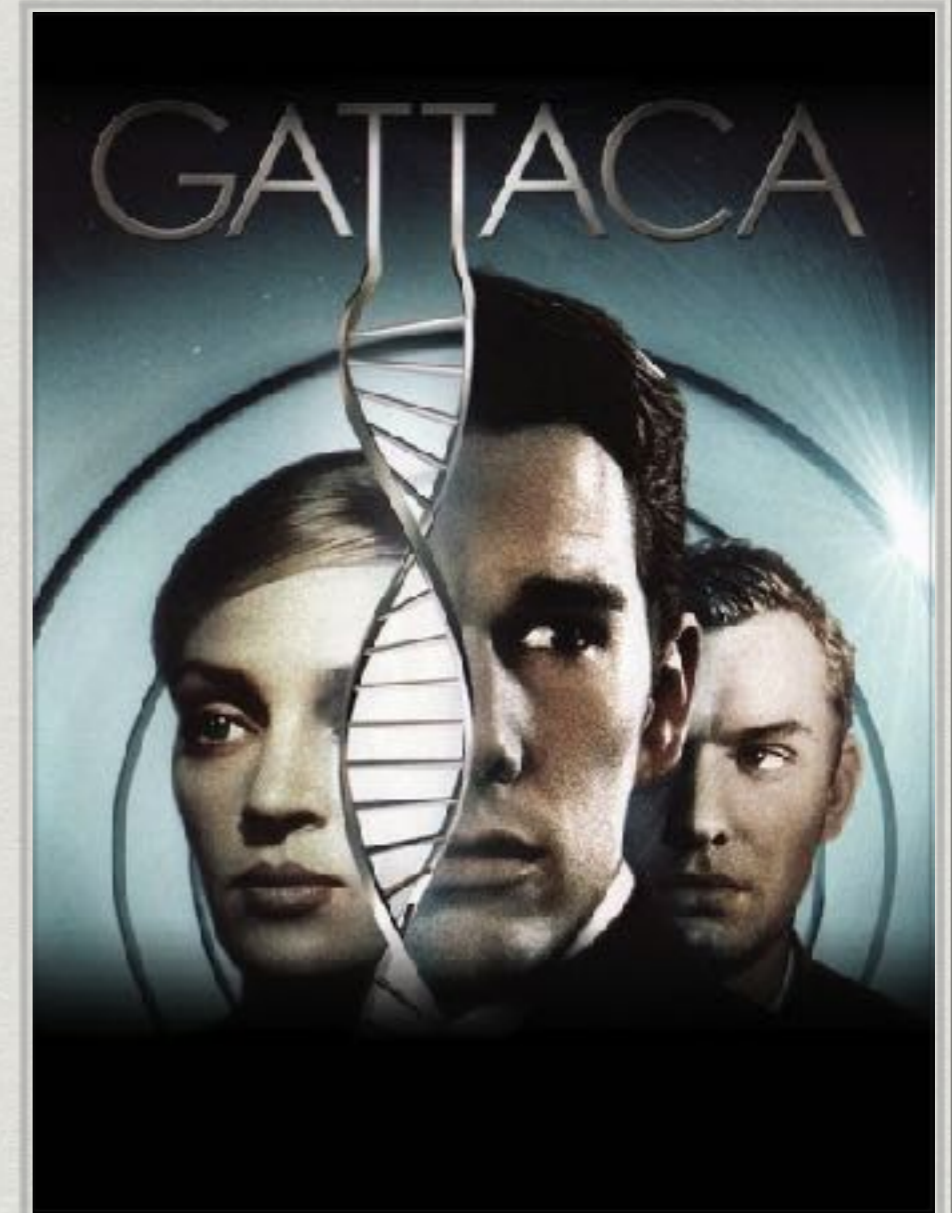
- \* Technology - will evolve dramatically and even radically
- \* Humans - will stay fundamentally the same
- \* Star Wars & Star Trek: Alien biological species & intelligent robots coexist *alongside* unmodified humans no different from today – same w/ *Blade Runner & AI*.
- \* Six Million Dollar Man, Bionic Woman, Inspector Gadget, Iron Man, or Limitless - modifications uniquely confined to single individual not surrounding population.
- \* Exception: Huxley's *Brave New World*



1962 / 2062

# Gattaca (4)

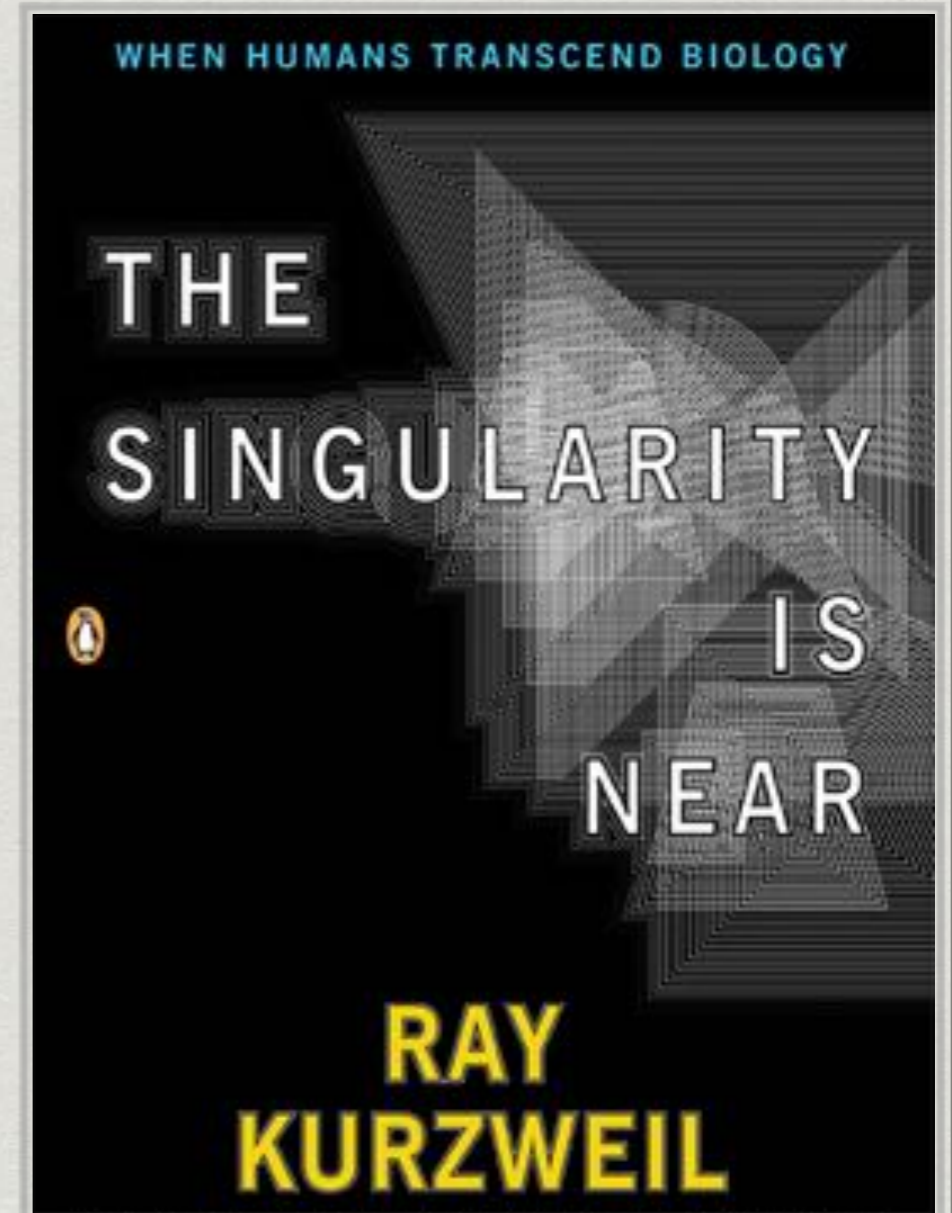
- \* Genetically enhanced humans and unmodified humans impossible to tell apart —except through DNA tests.
- \* Still “Jetsons Fallacy”: unmodified human, through sheer force of will, overcomes his genetic “destiny” & outperforms engineered humans whom society labels as superior
- \* Premise: old-fashioned humans will still be able to prevail



1997

# Humanity Plus (H+)

- \* “Event Horizon”: combined impact of genetics, nanotechnology, and informatics will birth trans-humanism.

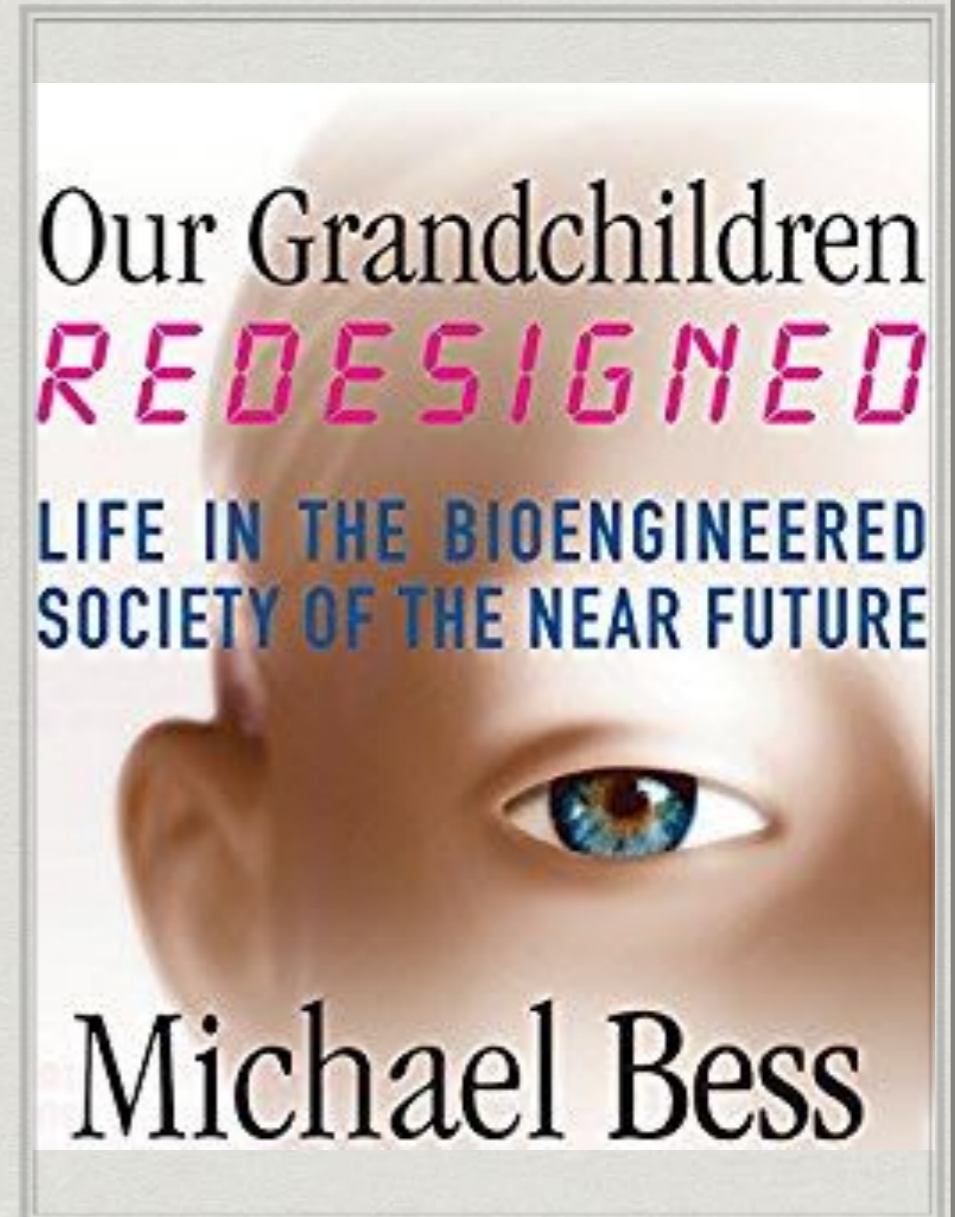


2005

# Kurzweil's Predictive Models Flawed

History is \_\_\_\_\_ than Kurzweil thinks:

- \* *Jerkier*, more discontinuous
- \* *Messier*, more interconnected and tangled
- \* *Less inevitable* (including technological advances)



**Beacon Press**  
**2015**



# Kurzweil's Predictive Models Flawed

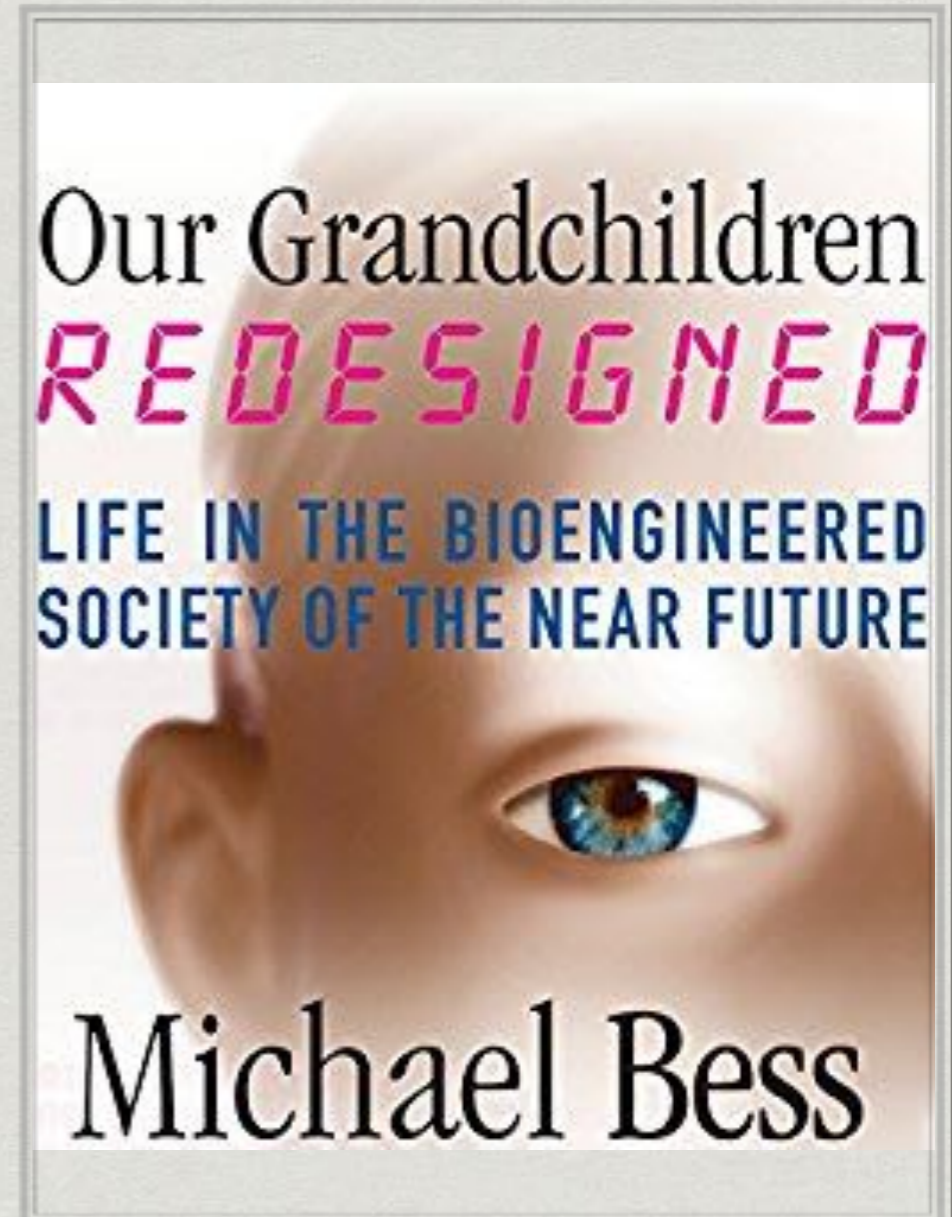
## Aircraft technology:

- \* 1903: Wright Brothers
- \* Five decades: exhilarating development (*greater distances at higher speeds*)
- \* 1960 extrapolation: supersonic/hypersonic aircraft norm by 2000
- \* Instead: “gazillions of passengers on the cheap,” meaning that performance fell flat for next 50 years.



# Lifestyle Medicine

- \* Former: “Character flaws”
- \* Shyness: “Nardil may well make your shyness melt away like ice in the sun”
- \* Dramatic rise in cosmetic surgery, diet aids, body-building devices, sexual augmentation, anti-aging remedies



**Beacon Press**  
**2015**

- \* Body Building: steroids
- \* Shortness: Human Growth Hormone
- \* Slimming: Xenical, etc.
- \* Baldness: Propecia
- \* Athletic performance: Erythropoietic, Adnrostendedione, etc.
- \* Energy: Amphetamines
- \* Sexual performance: Viagra, Cialis, Levitra

**Difference from the past** (tea/coffee/tobacco, etc.): **potency**



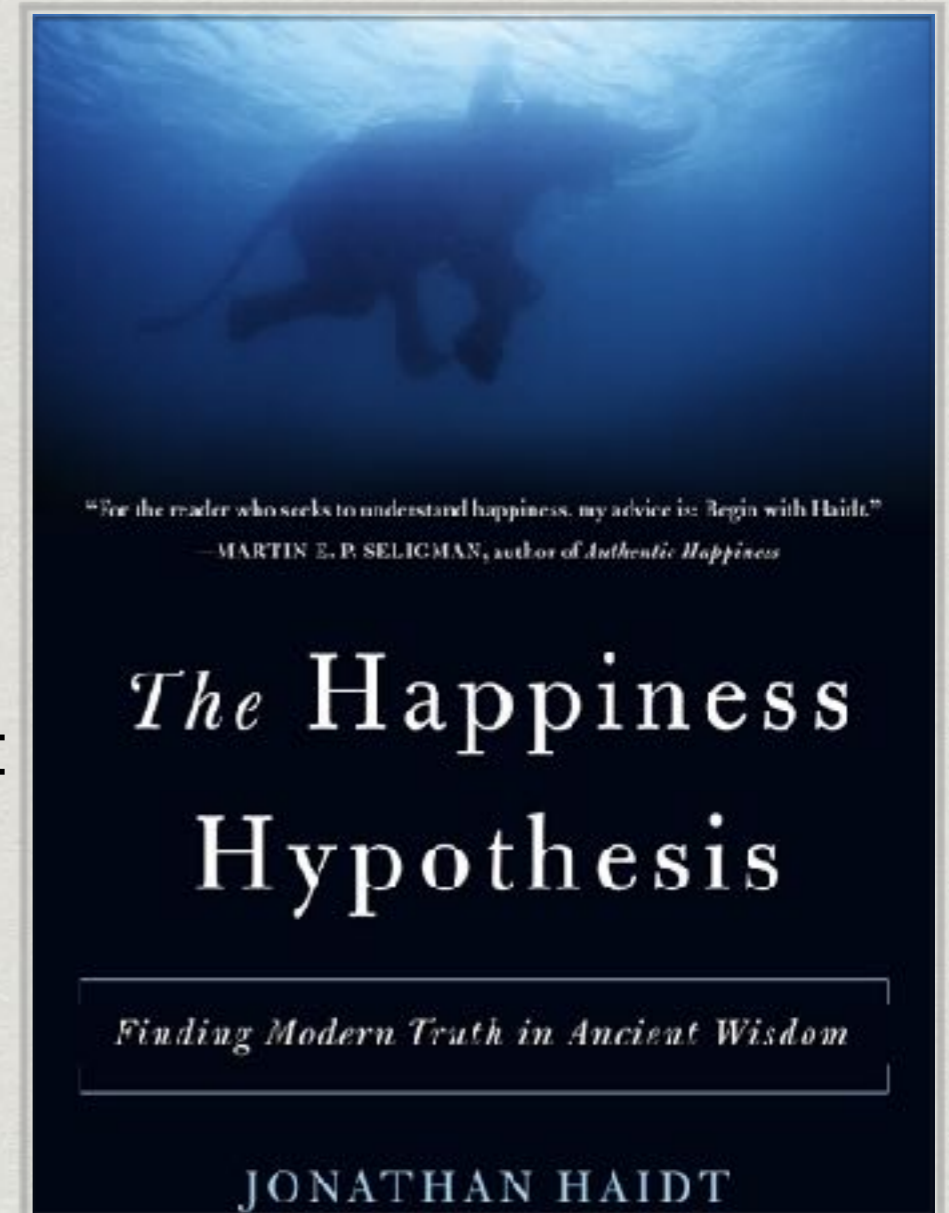
# What are sports for? (17)

- \* Performance?
- \* Teamwork?
- \* Self-discipline?
- \* Talent?
- \* Winning?
- \* Fun?
- \* Exercise?
- \* Entertainment?



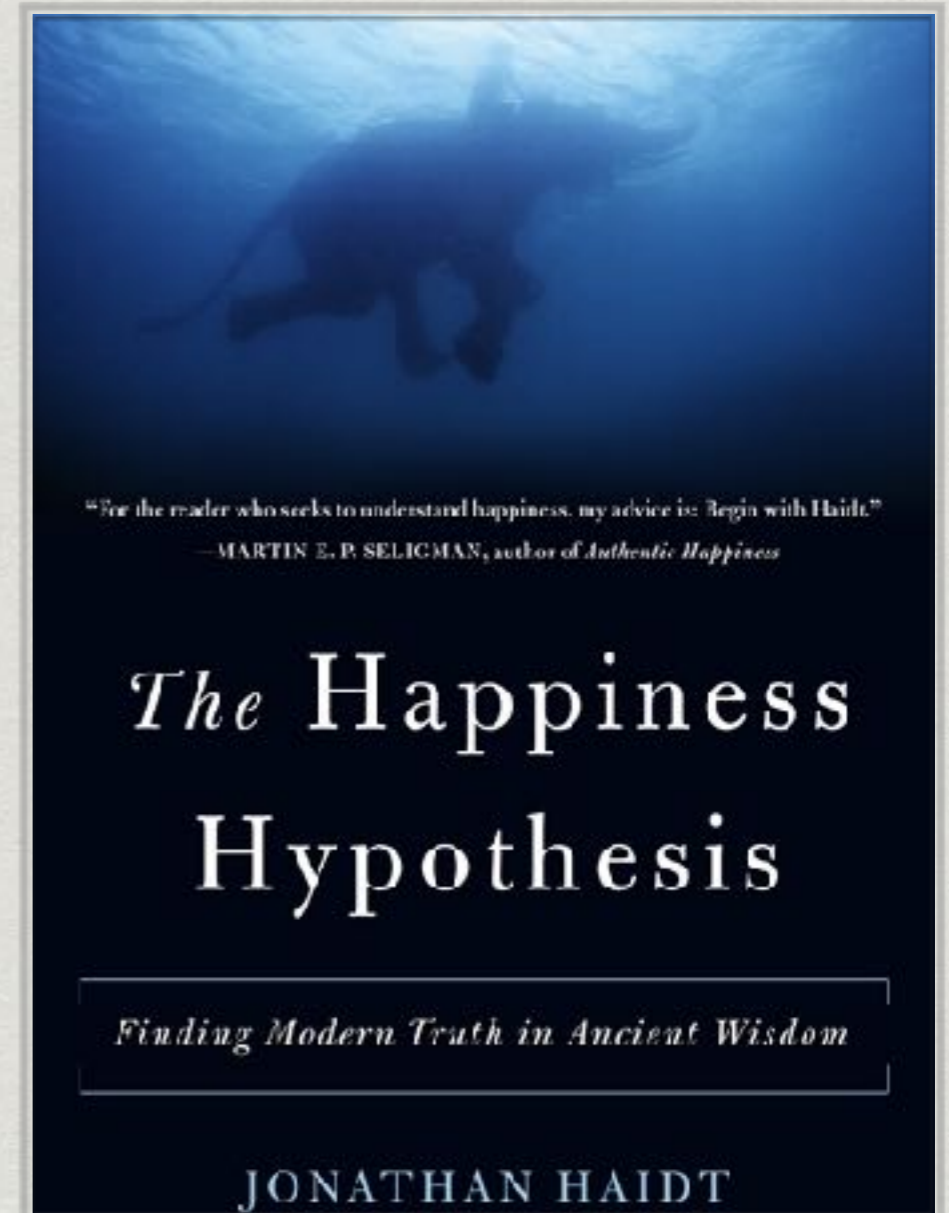
# Emotional Traits

- \* 1996: Paxil, cousin of Prozac, for 8 weeks.
- \* First few weeks: only side effects: some nausea, difficulty sleeping through the night, and a variety of physical sensations that I did not know my body could produce, including a feeling I can describe only by saying that my brain felt dry.
- \* Week five: world changed color. I woke up one morning and no longer felt anxious about the heavy work load amid uncertain prospects of an untenured professor.
- \* Like magic: set of changes I had wanted to make in myself for years—loosening up, lightening up, accepting my mistakes without dwelling on them—happened overnight.



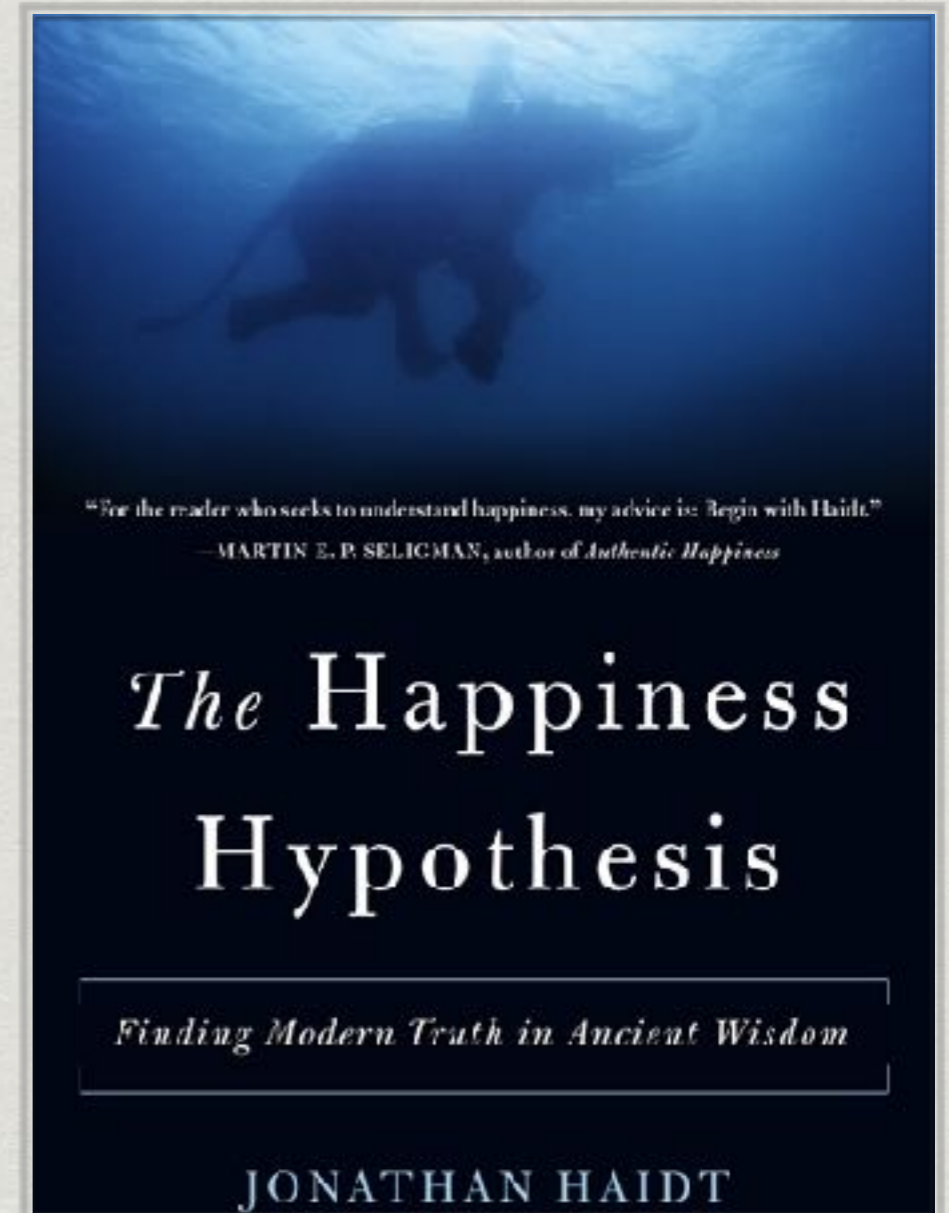
# Emotional Traits

- \* One devastating side effect: hard to recall facts and names, even those I knew well. I would greet my students and colleagues, reach for a name to put after “Hi,” and be left with “Hi ... there.”
- \* I decided that as a professor I needed my memory more than I needed peace of mind, so I stopped taking Paxil.
- \* Five weeks later: my memory came back, along with my worries.
- \* Remained: firsthand experience of wearing rose-colored glasses, of seeing the world with new eyes.



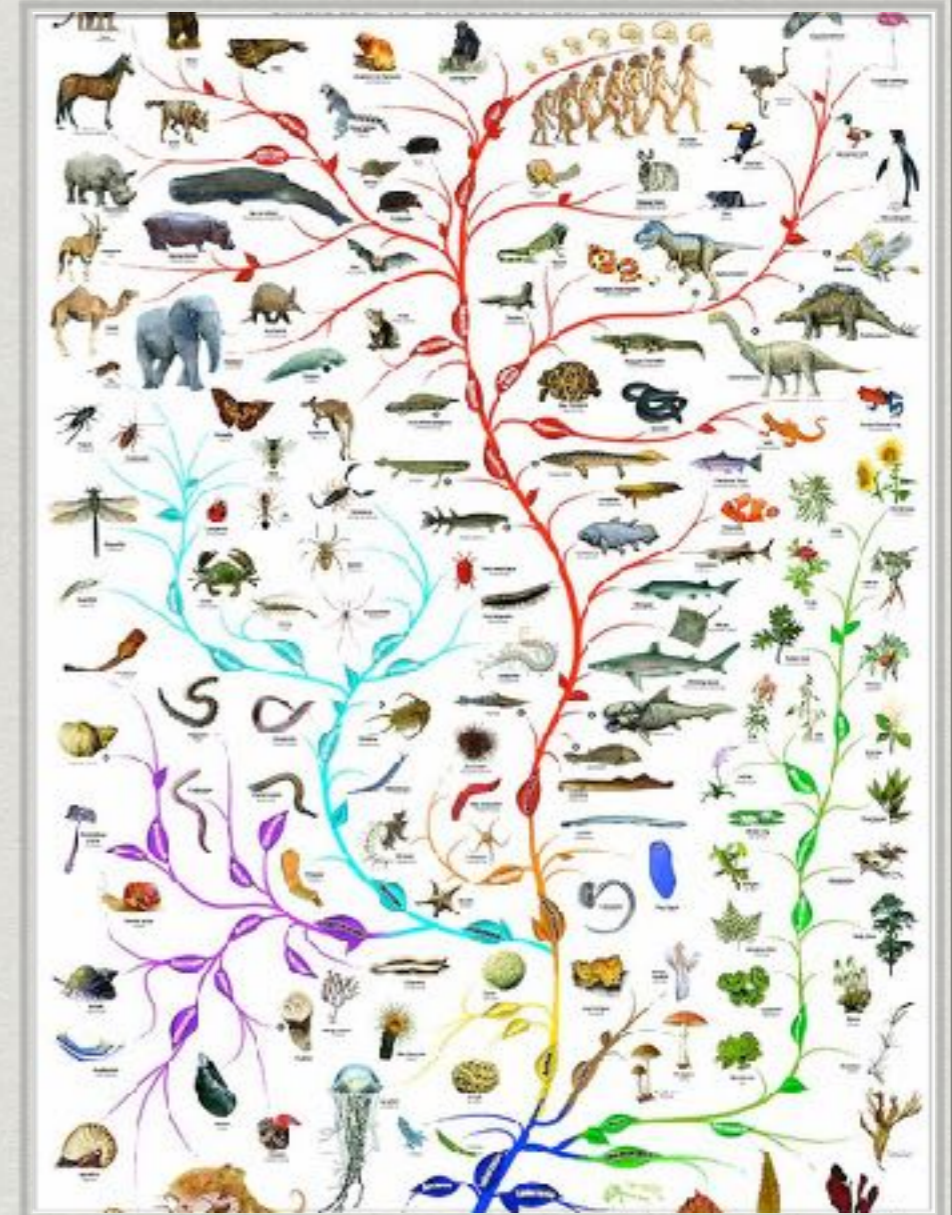
# Evolution

- \* Haidt doing just fine in his life
- \* Wanted: “better than fine”
- \* Which is the “real” me? [*Is there one?*]
- \* If there had not been side effect, Haidt affirms he would’ve stayed on the drug.



# Evolution

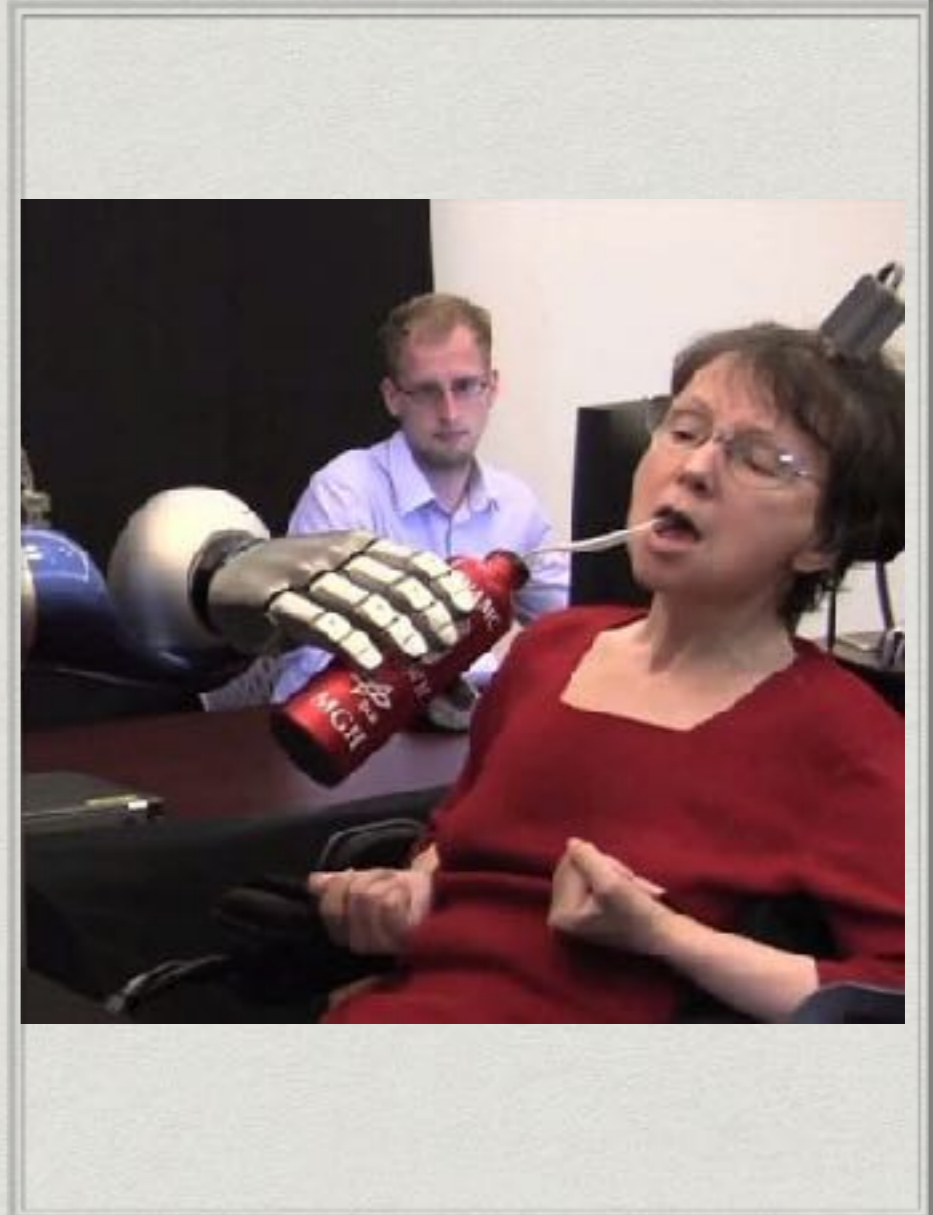
- \* Did not evolve to get old
- \* Natural selection: stay healthy until we could reproduce





# Cathy Hutchinson

- \* 1997: Paralyzed from neck down after a stroke
- \* [youtube.com/watch?v=ogBX18maUiM](https://www.youtube.com/watch?v=ogBX18maUiM) (5 min)
- \* 1st time she's been able to feed herself a drink in 15 years



2012

- \* *Session #1: Contemporary Issues: Revolutionary genome-editing technology CRISPR*
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