Being Human in the Twenty First Century: How Social and Technological Tools Are Reshaping Humanity

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Themes

- When does technology diminish our humanity?

- Can we detect when this happens? How will we evaluate?

- What makes us human?

- When and how do humans become programmable?

Three parts

1. **Humans and Tools:** "We shape our tools and, thereafter, our tools shape us." John Culkin (1967).
   – Framing the themes and the difficulty of evaluating claims of tech dehumanization
   – Techno-social engineering <u>of</u> humans
   – Past, present, future examples (Workplaces, Schools, Mass media, Nudges, ICT, IoT …)
     • Isolated, independent, discrete → interconnected, interdependent, continuous

2. **Human focused Turing type tests**
   – Intelligence tests, including common sense and irrationality
   – Free will, autonomy, predictability
   – Relational / social (i.e., *Can Humans Not-Relate*?)
   – Qualia / Subjective Experience
   – Others

3. **Micro and Macro Applications**
   – Micro: Activity/Fitness Tracking
   – Micro: Electronic Contracts
   – Micro: Relationship Management
   – Micro: Emotion Management
   – Many others … ranging from memory to sensory perception
   – Macro Policy: Path of Nudging
   – Macro Tech: Technological reconstruction of our shared environments and us: Internet of Things, ubiquitous sensor networks & Big Data enabled automated systems of, about, around, on and in us; persistent and systematic techno-social engineering (or more palatably, nudging)
   – Macro Values / Philosophy: Hedonism/Welfarism vs. Human Flourishing / Capabilities

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Welcome to the Experience Machine n.0

- **Plugging into the Experience Machine**

- **Humanity's Techno-Social Dilemma**

- **What is Humanity?**
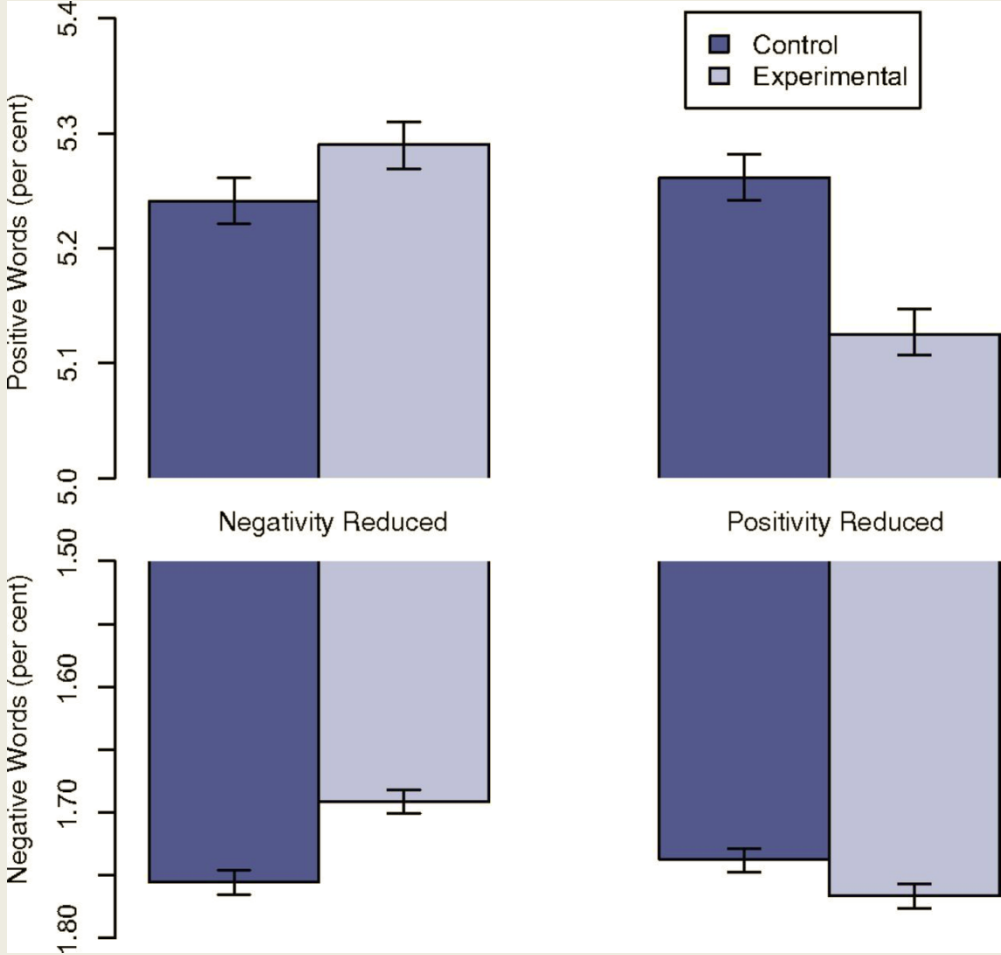
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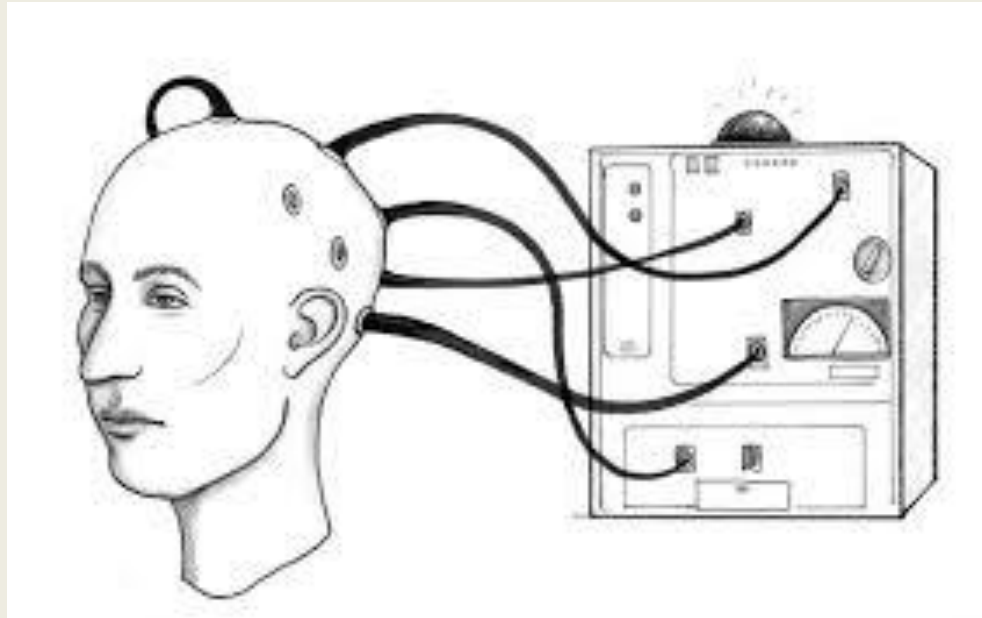
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  - Tragedy of the commons allegory

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- **What is Techno-Social Engineering?**

Facebook Emotional Contagion Experiment

1. Is deliberate emotional manipulation by Facebook a problem of *process* (no informed consent for the subjects) or *substance* (emotional manipulation)?

2. If it is a problem of inadequate *process*: Is IRB review a solution? What about informed consent? What does that mean to you? Pretend you're negotiating a one-to-one contract with Facebook. What exactly would you agree to? Would clicking "I agree" when you sign up for the service be enough?

3. If it is a problem of *substance*, can you explain the problem without reliance on adjectives like creepy? Can you articulate what exactly is wrong with emotional manipulation by Facebook?

4. Is it acceptable for Facebook to induce or suppress the emotional contagion of your friends?

5. Suppose Facebook tests, develops, and optimizes its emotional manipulation capability to help people to make better decisions? Would it be acceptable for Facebook to induce or suppress impulsive purchases (or at least, clicks)?

6. Suppose Facebook optimizes its emotional manipulation capability specifically to minimize emotional interference with rational decision making. Would this nudge people to make *better* decisions? Would people nudged in this fashion act like machines? Would they be (or could they be) any less human?

7. Suppose Facebook optimizes its emotional manipulation capability and lets users choose the settings—dial up some happiness! Would you use it?

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3. It is a problem of *substance*. How can we identify and evaluate when socio-technical engineering of our emotions crosses a line?

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8. There is no reason to think the technology will be limited to a social networking environment. (It isn't now anyways.) How does the analysis change when Facebook [or whoever else] extends the optimized emotional engineering tech to other environments – e.g., workplace, home, public spaces … IoT, Big Data, automated systems

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Fitness Trackers in Schools

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Dear Parents/Guardians,

Your child has been selected to be among the first group of students to participate in an exciting new initiative made possible by our recent $1.5 million PEP Grant.

We have added ACTIVITY WATCHES to the K-12 physical education program so that we can assess how the PEP grant impacts students' physical activity in [the school district]. We are periodically selecting groups of students at random to wear activity watches on their wrists to track daily activity time.

One of the goals of our program is to see that students get the recommended amount of physical activity each day (60 minutes). As part of a quality physical education program, the use of activity watches can motivate students to challenge themselves to become more physically active.

For the students selected to participate in this first group, we will be distributing activity watches starting January 13th for students to wear before, during, after school and over the weekend until Tuesday, January 21st. We ask that students do not take off the watch once it's on their wrist. They should sleep, even shower with the watch in place. There are no buttons to push or need to touch the watch, as it is pre-programmed to record and store each day of activity time.

At the end of the 9 days, each family will be able to access a report of their child's activity, and you are welcome to consult with your child's physical education teacher about what you learn and ways to further support your child's physical health and fitness. In addition, the group's combined information will be used to provide baseline data on student physical activity in [the school district].

In closing, I invite you to join me and your child's physical education teacher in motivating your family to participate in physical activity together. If you should have any questions about this new technology, please do not hesitate to contact your child's physical education teacher.

Yours in health,
Supervisor of Health, Physical Education and Nursing Services

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Pavlok

Engineering Humans with Contracts

South Park Episode:

Guard: You can't agree by accident. There's a fail-safe built in. Even if you click on "Agree" another little window pops up that says "Are you sure you agree?" and you have to click on "Agree" again.

Woman: Uh, what are you going to do to us??

Guard: Everything that you agreed to in the iTunes conditions.

Kyle: We didn't read them!

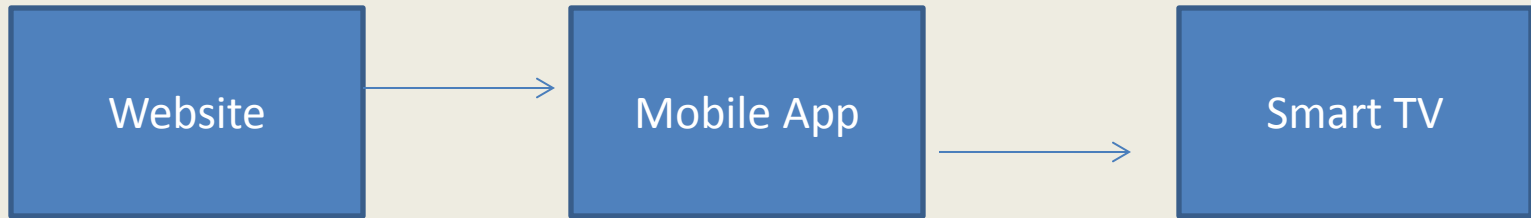**Guard**: Heh! Riiight. Who just agrees to something they don't read?

Instead of saying:

☐ By checking this box, you are confirming that you have read and agree to the terms and conditions of this site.

This would be more truthful:

☐ By checking this box, you are confirming that you are pretending to have read the terms and conditions of this site, because it's kind of ridiculous for us to expect you to read 12 pages of legalese, let alone understand it, and despite the fact that you're a tiny bit nervous that this could incriminate you at some point in the future, you're pretty sure it won't because you're more or less convinced that we just have this here so that it would be hard for you to sue us in the event that either of us did something stupid, and you're not worried about that because you feel like you're a reasonable person and won't do something against our terms and conditions, and even if you did we probably wouldn't even notice, plus a lot of people would leave our service if we tried to screw them over, so just check this box, I mean, you went through all of the trouble of filling in all the forms above, and it would be a real waste to just turn back now.

Do we behave rationally?

Doghouse Diaries
"Applicants need not apply."

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Website  →  Mobile App  →  Smart TV
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Consider how the architecture is used across contexts. Same stimulus. Same response?

Same consequences? What's the same? What's different? Does it matter?

For further analysis, see Frischmann & Selinger, *Engineering Humans through Contract*

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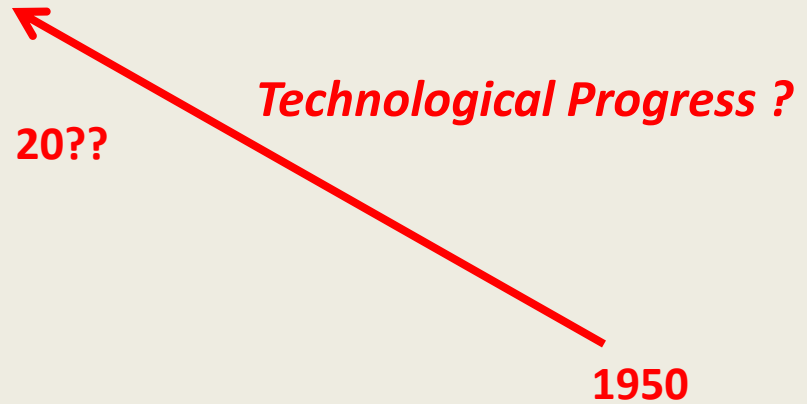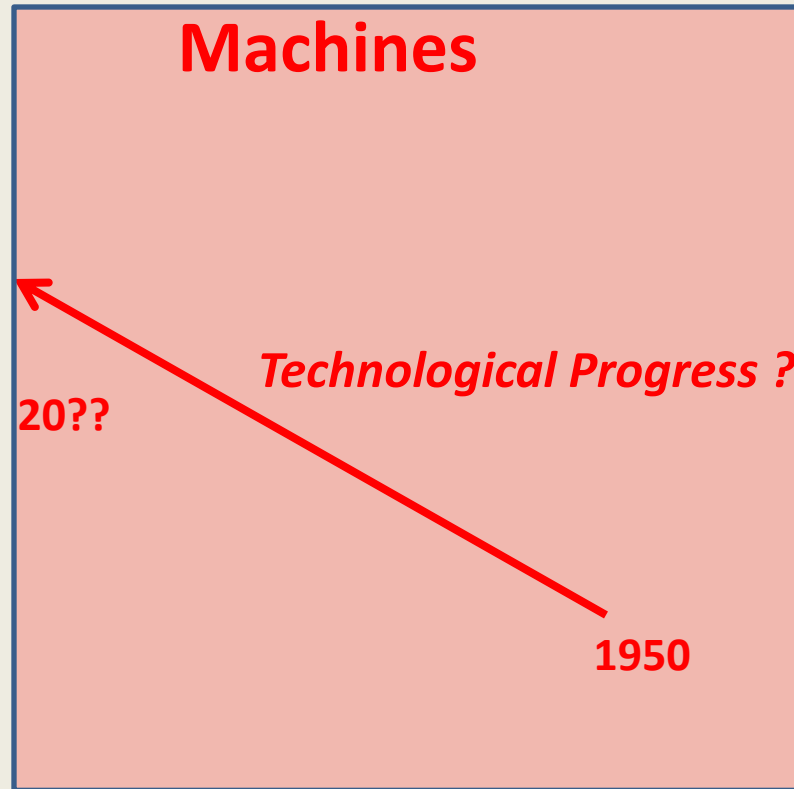
Turing Line

Humans | Machines

Turing Line

Humans | **Machines**

Technological Progress ?

20??

1950

Turing Line

Humans

Machines

Technological Progress ?

20??

1950

Environment (constructed by Turing)
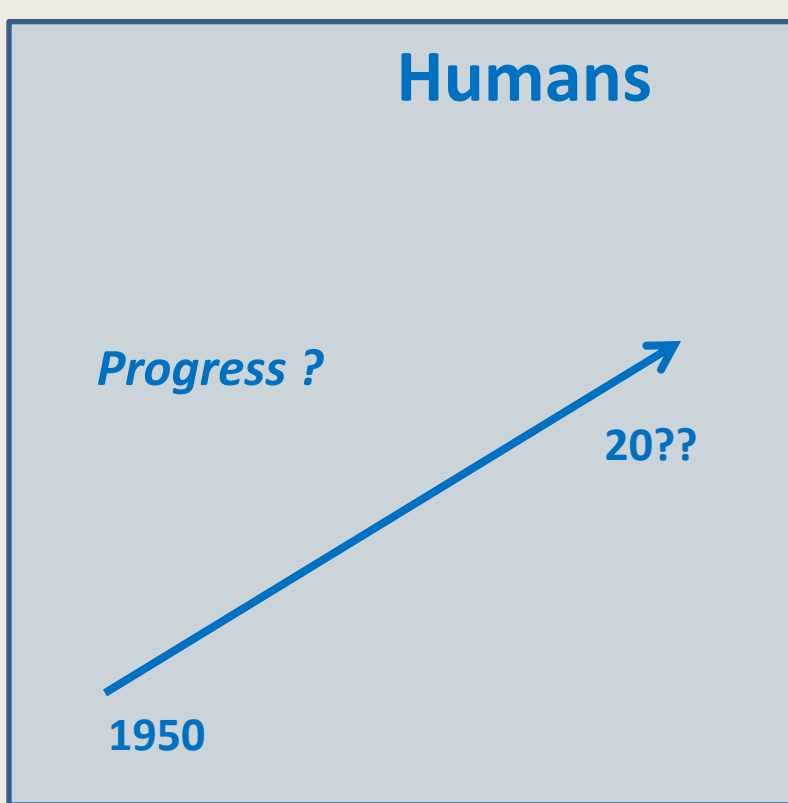
- Under what conditions and/or when are humans indistinguishable from machines?

- Can humans be programmed or constructed to be indistinguishable from machines?

- Can environments dehumanize?

- How and/or when are human beings constructed (via technology, social context, and the environment within which we live and through which our preferences and beliefs are formed) to be indistinguishable from machines?