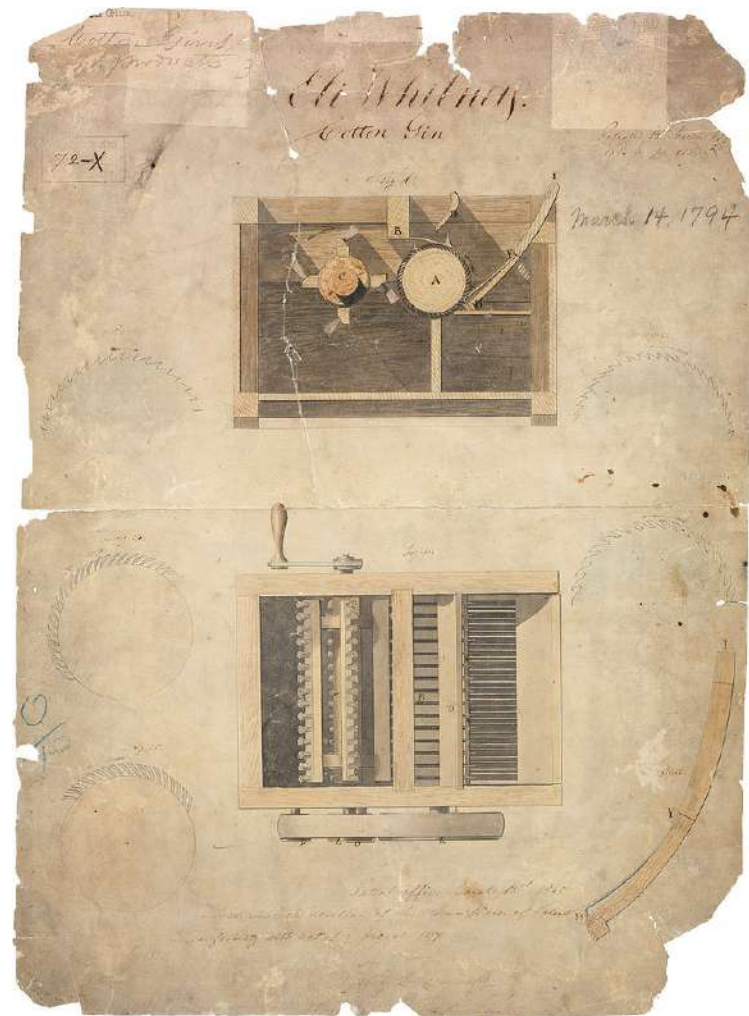


Agenda

Standardization,
bodies, & society

1. Technology, society, and bodies
2. Group discussion

- ⋮ **Technological determinism (TD)** is the idea that *technological change drives social change*.
- ⋮ TD is fundamental to many **Marxist** analyses in which material conditions shape class relations.
- ⋮ TD relies on the idea that technologies embody certain **essential features** (a positivist or realist stance)



Original 1794 patent for Eli Whitney's cotton gin, a device that maintained the profitability of chattel slavery in the United States

Social construction of technology (SCOT)

- ‡ Trevor J. Pinch and Wiebe E. Bijker (1984)
- ‡ All technology is subject to *interpretive flexibility*.
- ‡ The use and inherent meaning of a technology depends on the *relevant social group(s)* that use the technology.
- ‡ Existing 'problems' afford many different technical solutions.
The 'best' solution depends on social/cultural/political context of the relevant social group.
- ‡ Technologies can be used for different purposes.
Can cause conflict over the 'appropriate' use of a technology.



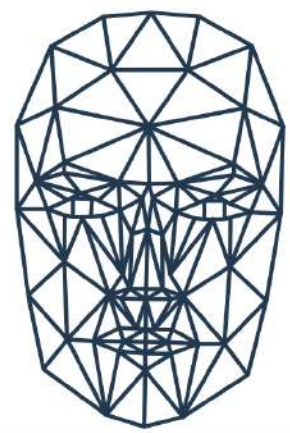
Fig. 2. Bicycle (Hochrad) von 1880.



Fig. 3. Rover (Niederrad) von 1886.

SCOT: Technologies do not drive society

- ∴ If technology is completely flexible in its interpretation, then it cannot be a driving force of history
- ∴ Oppressive technologies (e.g.) are at most a *reflection* of underlying social and cultural patterns
- ∴ *(Contrast with this coming Thursday's reading (Winner 1980), who argues that technologies can have inherent political characteristics)*



Facial recognition technology

State surveillance



Consumer security



Entertainment



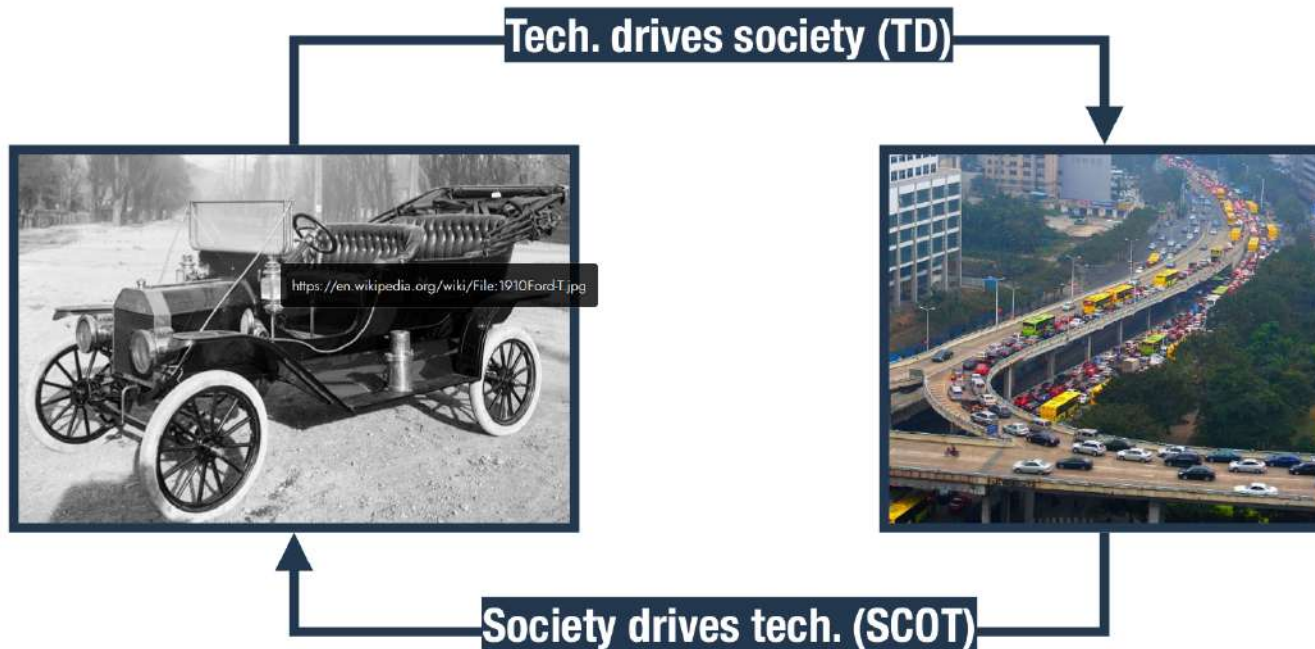
Technology and society *co-constitute* each other

- Technology conforms to social systems

E.g. AI and race (Benjamin 2019)

- Social systems are influenced by technology.

E.g. genetic testing on race and identity (TallBear 2013)



SCOT and standardization of bodies

- Technology is tied fundamentally to how we understand our selves and our bodies.

Race and gender (Herzig 1999)

- The meaning of human hair and its relationship with race and gender (and class) is *inextricable* from the technologies for the alteration, removal, and measurement of body hair.

Disability (Woods and Watson 2004)

- What is understood as a 'normal' versus 'abnormal' body is bound to the existence *and implementation* of technologies. (e.g. glasses, wheelchairs)