



 POLITECNICO DI MILANO



# ***Computer Ethics***

***Designing morality***

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October 8<sup>th</sup> 2019



# Case: Robert Moses' overpasses





- *Robert Moses (1888-1981) was a very influential and contested **urban planner***
- *He designed several **overpasses** over the parkways of Long Island which **were too low to accommodate buses***
- *Only cars could pass below them and for that reason the overpasses complicated access to Jones Beach Island*
- ***Only people who could afford a car** – and in Moses' days there were generally not Afro-Americans – could easily **access the beaches***



## “Do artifacts have politics?”

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*“Robert Moses, the master builder of roads, parks, bridges, and other public works from the 1920s to the 1970s in New York, had these overpasses built to specifications that would **discourage** the **presence of buses** on his **parkways**. According to evidence provided by Robert A. Caro in his biography of Moses, the reasons reflect **Moses's social-class bias** and **racial prejudice**. Automobile owning whites of “upper” and “comfortable middle” classes, as he called them, would be free to use the parkways for recreation and commuting. **Poor people** and **blacks**, who normally used public transit, **were kept off the roads** because the **twelve-foot tall buses** could **not** get through the **overpasses**. One consequence was to **limit access** of **racial minorities** and **low-income groups** to Jones Beach, Moses's widely acclaimed public park.”*

(Winner 1980)



- Technological artifacts can be **politically** or **morally charged**
- We should not consider **morality** as a solely human affair but also as a **matter of things**
- **Artefacts** are bearer of **morality**, as they are constantly taking all kinds of moral decisions for people (Latour 1992)
  - Ex.: moral decision of how fast one drives is often delegated to a speed bump which tells the driver “slow down before reaching me”
- **Technological mediation**
  - Role of technology in human actions



- The phenomenon that when technologies fulfill their functions, they also help to **shape actions** and **perceptions** of **their users**
- Technologies are **not neutral “intermediaries”** that simply connect users with their environment
- They are **impactful mediators** that help to shape how people use technologies, how they experience the world and what they do
- Mediation of **perception** and mediation of **action**



- The **influence** of **artifacts** on **human perception**, that is, the sensory relationship with reality
  - **Incorporating** or **embedding technologies**: e.g. looking through a pair of glasses where the artefact is not perceived in itself but it helps to perceive the environment
  - **Representing reality** (interpretation required): e.g. reading off a thermometer that does not result in a direct sensation of heat or cold
- Structure of **amplification** and **reduction** of mediating technologies that amplify specific aspects of the perception of reality while reducing others
- By **transforming our perception**, technologies help to determine how reality can be present for and interpreted by people



- Ultrasound is not simply a **functional means** to make visible an unborn child in the womb, but **mediates** the relations between the fetus and the parents







- Number of **translations** of the relations between expecting parents and the fetus while mediating their visual contact
  - Ultrasound isolates the fetus from the female body: **new ontological status of the fetus** as a separate living being
  - Ultrasound places the fetus in a context of medical norms: it translates **pregnancy into a medical process**, the fetus into a possible patient, and congenital defects into preventable sufferings (**pregnancy as a process of choices**)
- **Ambivalent role** of ultrasound: it may both encourage abortion (prevent suffering) and discourage it (emotional bonds)



- The influence of artefacts on human action
  - **Script:** a **prescription** on **how to act** that is **built** (designed) **into an artefact** (speed bump “slow down when you approach me”, plastic coffee cup “throw me away after use”)
- **Invitation-inhibition structure:** the fact that mediating technology invited specific actions, while other actions are inhibited



- Many of our **actions** and **interpretations** of the world (also moral ones!) are **co-shaped by the technologies**
  - Telephones mediate the way we communicate with others
  - Cars help to determine the acceptable distance from home to work
  - Prenatal diagnostic technologies generate difficult questions about pregnancy and abortion
- **Moral decision-making** is a **joint effort** of **human beings** and **technological artefacts**



- Metro barriers: “Pay for public transport”
- Hotel keys (with large objects): “Return your hotel keys to the desk”
- Alcohol lock for car (car lock that analyzes your breath): “Don’t drive drunk”



- **Moralization of technology** is the **deliberate development** of technologies in order **to shape moral action** and decision-making
- Instead of moralizing other people (“do not shower too long”, “buy a ticket before you enter the subway”), humans should/could also **moralize their material environment**



- Negative reactions to explicitly **behavior-steering technologies** (speed limiters in cars)
- First there is the fear that **human freedom** is **threatened** and that democracy is exchanged for **technocracy**
  - Reduction of autonomy perceived as a threat to dignity
  - Not humans but technologies are in control
- Second there is the **charge of immorality** or **amorality** (form of moral laziness with behavior-steering technologies)
- **Technologies** differ from **laws** in limiting human freedom because they are not the result of a democratic process
  - It is important to find a **democratic way** to “**moralize technology**”



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