ETHICS

Main question : What is right and what is wrong?

- Branch of phylosophy, studies the human behaviour

Other features :

→ Is it constant? Does it change depending on field of application? Is it common to everybody?

- It changes over time
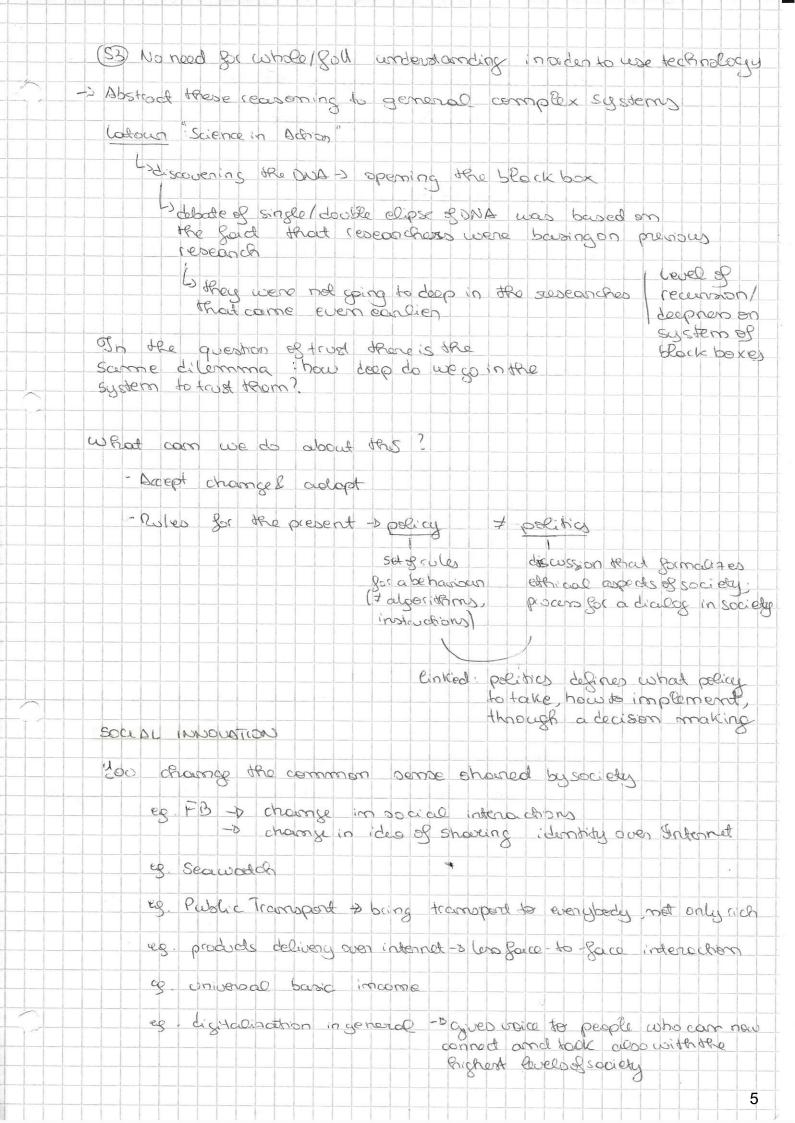
    eg. Voting rights for women
    (Is it right or wrong that women can vote?)
    the answer changed in last 100 years

- Collective agreement (society agrees on sth being right/wrong)

    Can you scale down to individual level?
    → MORALS : moral compass is individual, "instantiation" of ethics

    eg. Abortion debate → there is not yet a standard, it's an open question
                                ↓

┌─────────────────────┐
│ Technology   │   { Why now this debate? → TECHNOLOGY (pill)
│ raises new   │
│ Ethical questions   │   Why do actions happen in a certain period?
└─────────────────────┘   eg. Feminists bee movements in 1800s
                                and not in XVII century?

                                ↓

        EQUALITY {   The society changed and the role
        (GENDER)   of the woman as well (there
                      was a war), and it became more
                      equal to the role of men

                                ↓

                      Still technological advances
                      of industrial revolution
                      made it possible and
                      raised new ethical questions

- Helps us express value judgements
                                ↓

                      Do we see something as
                      valuable/relevant
                      or not?

                      eg. new business, lots of money,
                      but ethically unacceptable

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Why do we care about ethics?

- Because innovation is disruptive and brings change, also in our ethical values.

  - eg. Uber which substituted in some cities taxies; the taxi drivers have a licence, which is attached to a value.
    With Uber, which allows drivers to carry people around w/o that licence, its value changed

  - eg. innovation in warfare

- Also customers may make a decision to buy / not buy your product based on their ethical value

- Reputation (CSR)

COMPUTER ETHICS

Computer adds one more dimension → cybercrimes

It is easier to steal information and intellectual property rights / privacy

Problematic aspects, that you see in artifacts, actions and also in realm of computing, even more tangible
{
- it has lots of power
- usage of info to in a good or bad way
- digital divide : not all people have access
- fake news : hard to falsify
- hard to quantify & qualify
}

Someone argued that this is not a new dimension (power leads to actions, so it's still in the field of actions)
↓
ACTIVE DEBATE
new field vs reframing

Examples of ethical problems

- PRIVACY

FB owning data, reading of messages

eg. Whatsapp → encryption, but metadata

Answers to this

[
- Yes, I can read
- No, I can't read, no, but authorities can
- No, but I have metadata → lot of value extracted
]

each has some implications
(Backdoor for authorities?)

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- COPYRIGHT

  eu EU new guidelines for copyright

    → Link tax : website pays external website when link is clicked
    → Move responsibility from individual to company (eg youtube)

  Who has to pay?

- COMMUNITY over Internet

  Culture / Legislation related aspect → what information is accepted?

  When someone cho p publishes info which is "unacceptable",
  what should happen with it? Remove? Priority of laws of country
  or of laws of country of server?

- AUTOMATIC PILOT (Cars- Airplane)

  - Self-driving cars on public streets; allow machines to take
  decisions?
    ↳ We are already doing that : actor network theory

  Technology shape what we can / cannot do

  - Airplane → autopilot can't be overtaken, pilots are
                      not trained w/o it anymore
              → What if there is an unforeseen situation?

- INTERNET ACCESS

  - Cost of infrastructure

  - In some places people are not "socially" ready
                                        (eg. fake news)
- GOVERNMENT CENSORSHIP

What makes an innovation good?

  → Address at least ethical questions that we know now

  → Retroactive aspect: What will happen in the future?

          Make sure no damage, or at least quick to update policy

Is technology neutral? (neither good nor bad, depends on usage)

  → Idea for neutrality: machines cannot make decisions

  → Idea against neutrality: technology is conceived with a clean
                          intention, which is either good or bad

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Technological unemployment:

- Does the usage of machines reduce # job positions? { Past: industrial revolution

- Algorithmic procedures done both by humans and machines   Future: AI

- What will be next step? Will we be able to create "creative" machines?

Are there emotional machines?

Take emotional behaviour of persons, put it into machines
  ↳ irrational behaviour, no common sense

↳ NO → machines work on rational numbers
↳ Yes → programmer embeds his bias
     ↳ replication of human brain on current knowledge

Yes ACTING RATIONALLY → follow rules of reasoning that we know at the moment (will they be the same in future?)
   ↳ based
      → only on models that we have now, based on current emotions that we embed in the reasoning:
      So machines act emotionally, because this is not rational
      if it is not the best   common sense
                        Someone disagrees

Purely rational behaviour is an illusion
                                          this mismatch poses the basis for the ethical questions

NEUTRALITY OF TECHNOLOGY   EX Designer's Intent (also mismatch with view of who uses it)

Object has a function, reflecting the intent of its designer's (security belt)

Machines as well → technology is not neutral

Biased intent → remove biases

"From Kant to ISO"

  Roboethics   : pipeline of thoughts that go from Kant to standard and generally from philosophy to engineering, but in time:
  Clash   → common sense of a product, is not so common anym.

Trust the machines → do we have a choice? (trust man who designed it)
         ↳ what if machines exhibit behaviour that we don't understand?

S2 we should ←
prove
formally
every intended
behaviour
            ↳ S1 add one level of human judgement
               ↳ but refrains technological evolution

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(S3) No need for whole/full understanding in order to use technology

→ Abstract these reasoning to general complex systems

Latour "Science in Action"

↳ discovering the DNA → opening the black box

↳ debate of single/double elipse of DNA was based on the fact that researchers were basing on previous research

↳ they were not going to deep in the researches that came even earlier

Level of recursion/ deepness on system of black boxes

In the question of trust there is the same dilemma : how deep do we go in the system to trust them?

What can we do about this ?

- Accept change & adapt

- Rules for the present → policy   ≠ politics

| |
| set of rules for a behaviour (≠ algorithms, instructions) | discussion that formalizes ethical aspects of society, process for a dialog in society |

linked: politics defines what policy to take, how to implement, through a decision making

SOCIAL INNOVATION

too change the common sense shared by society

eg. FB → change in social interactions
→ change in idea of sharing identity over Internet

eg. Seawatch

eg. Public Transport → bring transport to everybody, not only rich

eg. products delivery over internet → less face-to-face interaction

eg. universal basic income

eg. digitalisation in general → gives voice to people who can now connect and talk also with the highest levels of society

Generally: Social innovation affects a socially vulnerable segment
(Narrow   of society population to improve their life
view)
        eg. Bill Gates foundation : purify water

            · food raising

            · accessible infrastructure

(Societal : Affect everyone, not just who is more vulnerable
challenges)
            eg. vaccination

                · access to digital technology   -nuclear fusion for climate

                · online learning

                · public transport

(Systemic   · Empower population to address challenges
Transformation)
                eg. Universal Basic Income : empowerment

                    · voting rights

                    · emancipation

                    · awareness campaigns

| CSR - Corporate Social Responsibility |

    Companies doing social actions → establish policies for ethical beh.
    (either mandatory or optional)

        eg. marathon for collecting money

    Policy making   at a business level , not only EU → more tangible