

# Data Ethics and Entrepreneurship (DEE)

Dr. Gert Meyers (TILT, Tilburg University)



# Course goals

- CG 1. translate abstract concepts in ethics into practical tools for reasoning and decision making.
- CG 2. reflect about the social, legal and environmental impacts of their work as data science entrepreneurs.
- CG 3. express their opinion (through presentation, debate, and in writing) on real-life ethical dilemmas with which data science entrepreneurs are confronted with, balancing the social, legal, ethical and environmental demands with regard to data science entrepreneurship

# What? How? When?

- **Lectures** Mondays 13.45-15.30, MDB 3.02
  - Schedule in the Syllabus
- **Debating Skills training** Tuesday 19/3
- **Debating sessions** will take place on campus, on dedicated Mondays (8/4, 15/4, 22/4, 29/4) following the course schedule.

# Debating teams

- At the start of this course, you will have to enroll for a Debating team via canvas. These teams remain the same for the whole course.
- Establish a team with a diverse range of relevant skills, experience, talents and strengths!



# Debating Skills Workshop

- Debating workshops are planned, on **Tuesday March 19<sup>th</sup>**. You can subscribe to the workshop via the Skills Journey page on Canvas.
- The learned skills are very useful during this course and the rest of your life!



# Assessment

The course will be graded on three components:

- 1) Debating (20%). will be graded based on participation in the debates.
- 2) Individual assignment (30%). This component will entail writing a blog post ( $\pm 750$  words). **(deadline: March 25<sup>th</sup>, 2024, 9.00 A.M., more information next week)**
- 3) Final Exam (50%). Closed book, via testvision, on the course materials (classes and literature on canvas)

Resit opportunity (50% - 80%): Friday July 12<sup>th</sup> from 09.00-12.00 A.M.

# The DEE-Team





# The A-Team







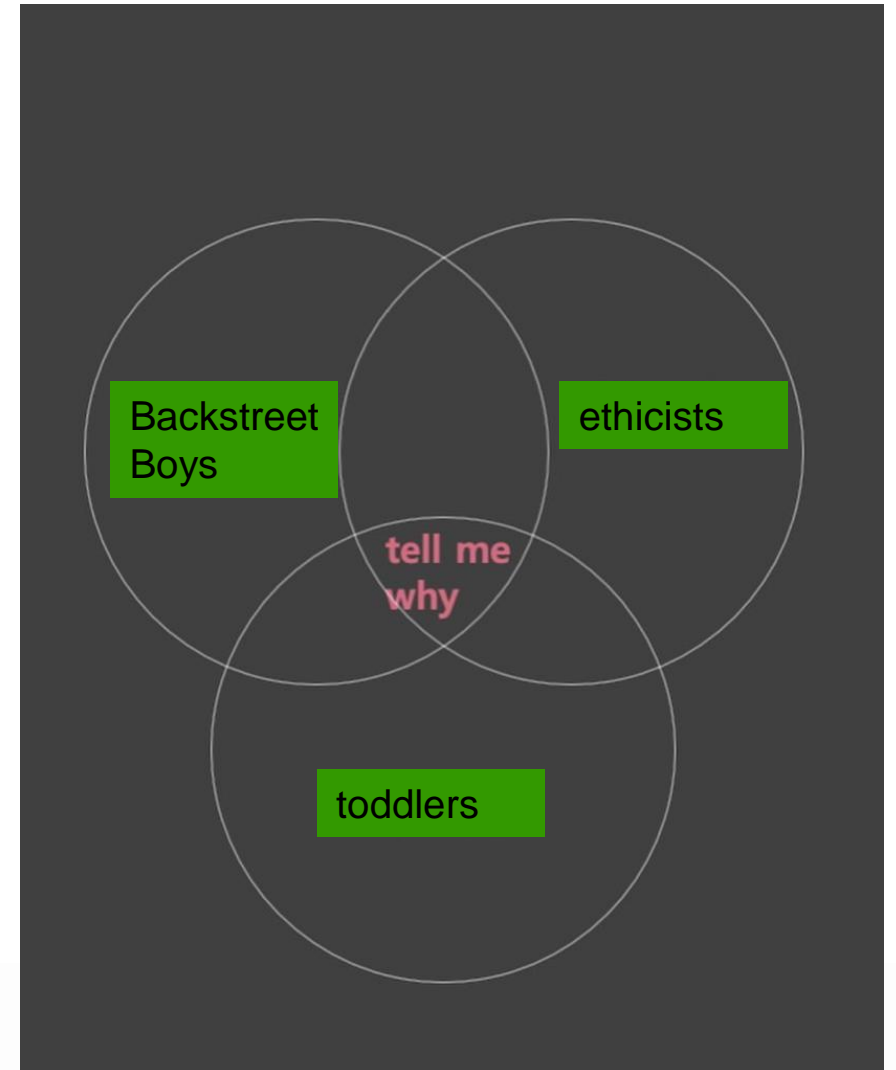
# Questions on the course 'formalities'?

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# Overview of today's class

- What is ethics?
- What is ethically significant?
- Law & ethics
- Data science & Ethics
  - The politics of technology
  - Data ethics



# What is (normative) ethics?

- Discipline in philosophy working on the question:
  - How to act?
  - This question is too broad
  - For example: How to act in traffic (politely, safely,...)? How to eat (healthy, politely, ...)?





# What makes actions ethically significant?

- Actions that make a difference to chance of having a good life
  - Cf. Riding on the right side of the road.
- Human choice
  - Cf. Earthquake
  - But: what about extreme weather due to climate change?
- More than merely good intention
  - Cf. The 'like' button on social media

# Exercise

1. We are now in the Netherlands.
2. One ought to eat soup with a fork.
3. You should not come to class unprepared.
4. Wealth inequality in the Netherlands is high.
5. One should not torture or kill fellow human beings.
6. The importance of privacy is growing in digital societies, yet less valued in practice.

What are the normative/descriptive statements?

What are moral statements?

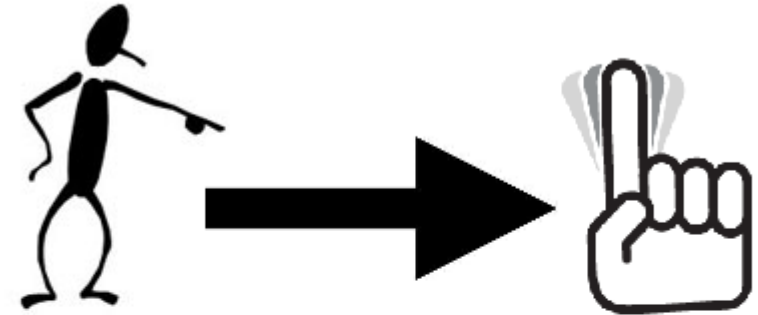
# Normative and descriptive ethics

- Normative ethics
  - “How ought the algorithm be arranged for a good society?”
- Descriptive ethics
  - “How are algorithmic arrangements generating ideas of goodness, transgression, and society ought to be?”



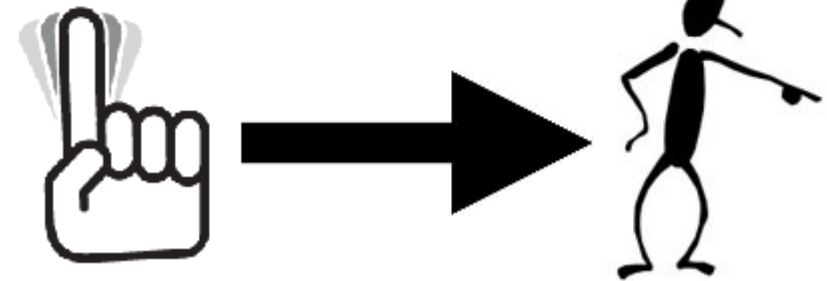
The Naturalistic Fallacy:

"is" implies "ought"



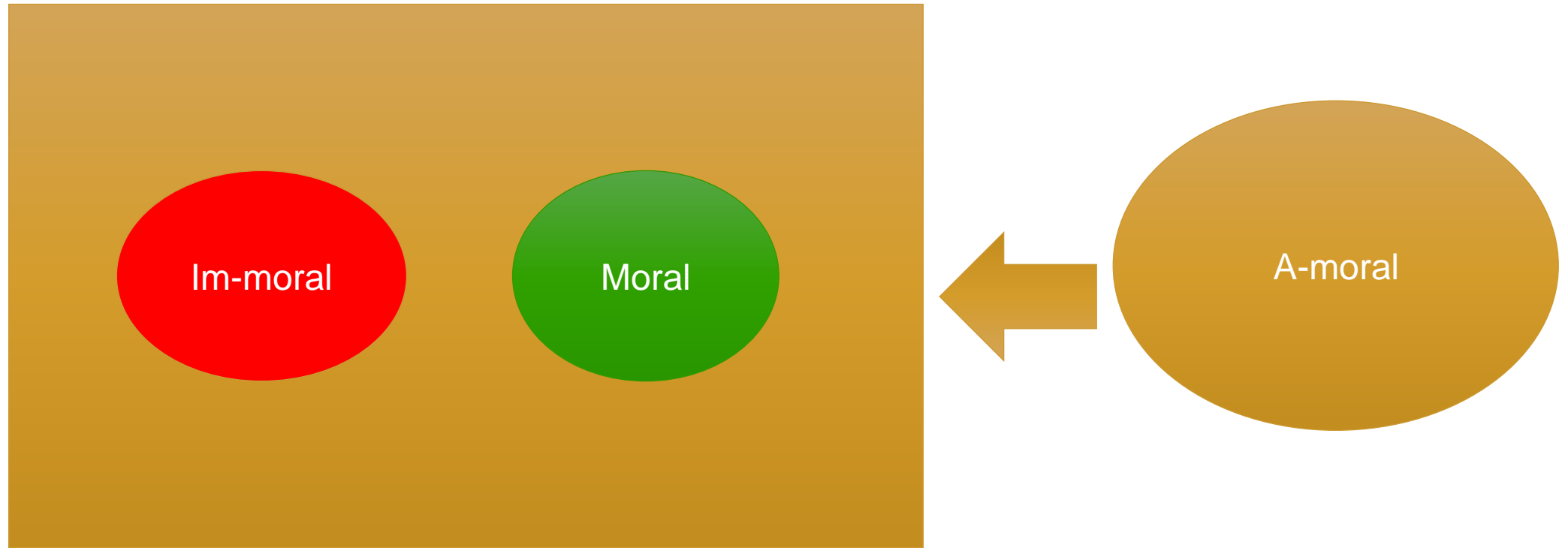
The Moralistic Fallacy:

"ought" implies "is"





# What are we interested in today?



## Law

- Systematic set of rules that govern society as a whole and its members
- Set of rules (directives, regulations, national laws,...)
- Government in charge
- Explicit and transparent, written down
- Legally binding. Punishment (fine, jail,...)

## Ethics

- Ethics is a branch of philosophy
- Guidelines, principles, values
- Individuals (professionals) in charge
- Implicit and opaque, abstract
- Not legally binding, but social repercussions

# Three levels of ethics in data science





# Let's raise hands

- Technology is politically neutral, it can be applied for good and for bad.
- Algorithms are politically neutral, it can be applied for good and for bad.

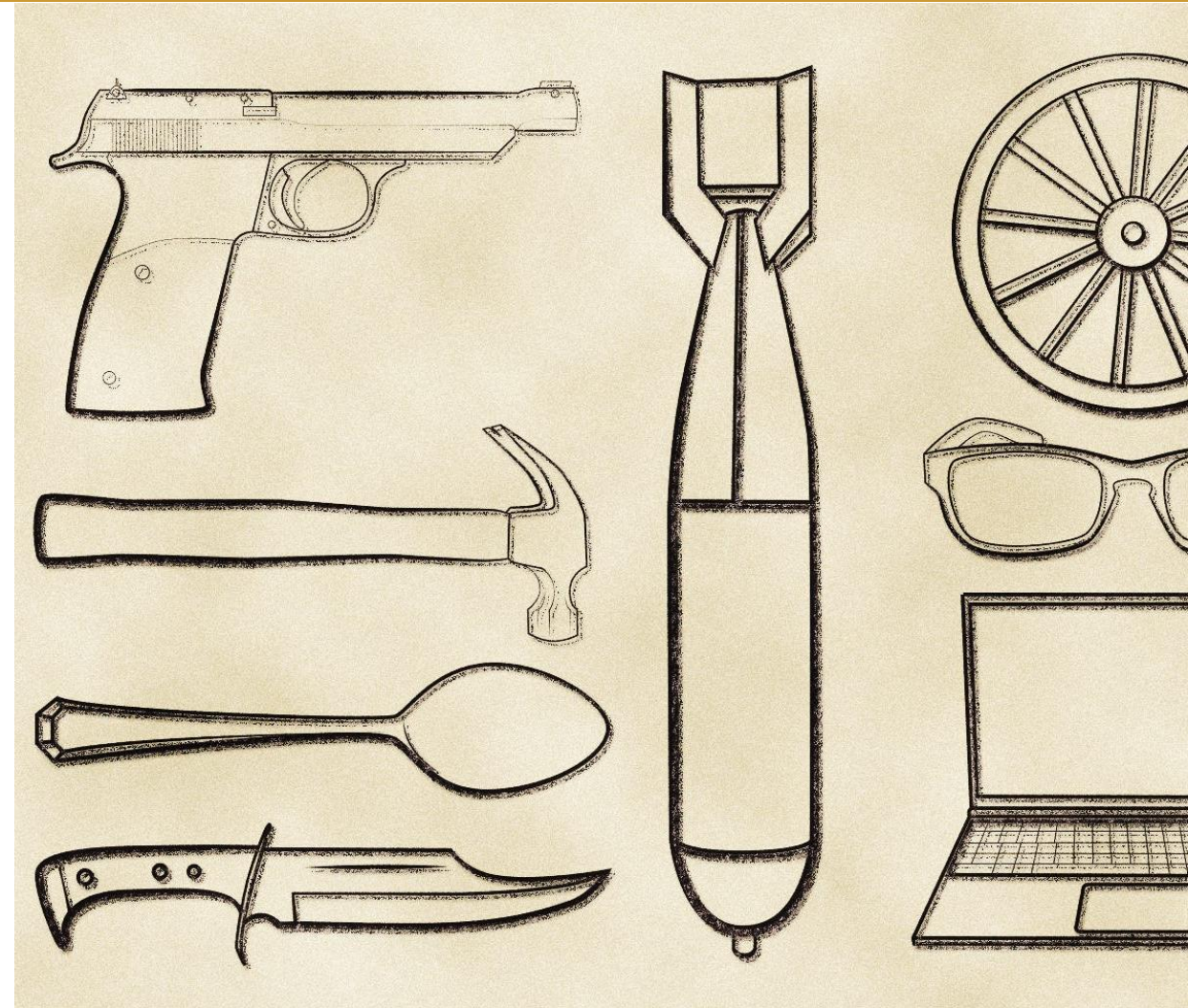
# Do artifacts have politics?

- 1980 (44 years old)
- Not an 'easy' text
- Why do I make you study this?
- Influential claim
- Politics/ethics
- Ask the question while reading:
  - Does the claims still hold?
  - Do the examples still hold?
  - Can you find contemporary examples?
  - What about data science & new technologies?



# Do artifacts have politics? (2)

- “In controversies about technology and society there is no idea more provocative than the notion that technical things have political qualities” (p.121)
  - Technology is neutral
  - Social determination of technology
- Things do matter!
  - Artifacts have politics!
- Note: definition of technologies: artifacts/hardware (p.123)





**IF GUNS DONT KILL PEOPLE,  
PEOPLE KILL PEOPLE**



**DOES THAT MEAN THAT TOASTERS  
DONT TOAST TOAST, TOAST TOAST  
TOAST?**

[memegenerator.net](http://memegenerator.net)

1. **Forms of order:** ‘instances in which the invention, design, or arrangement of a specific technical device or systems becomes a way of settling an issue in a particular community’
  1. Beyond (un-)intended consequences
  2. Inherently political technologies





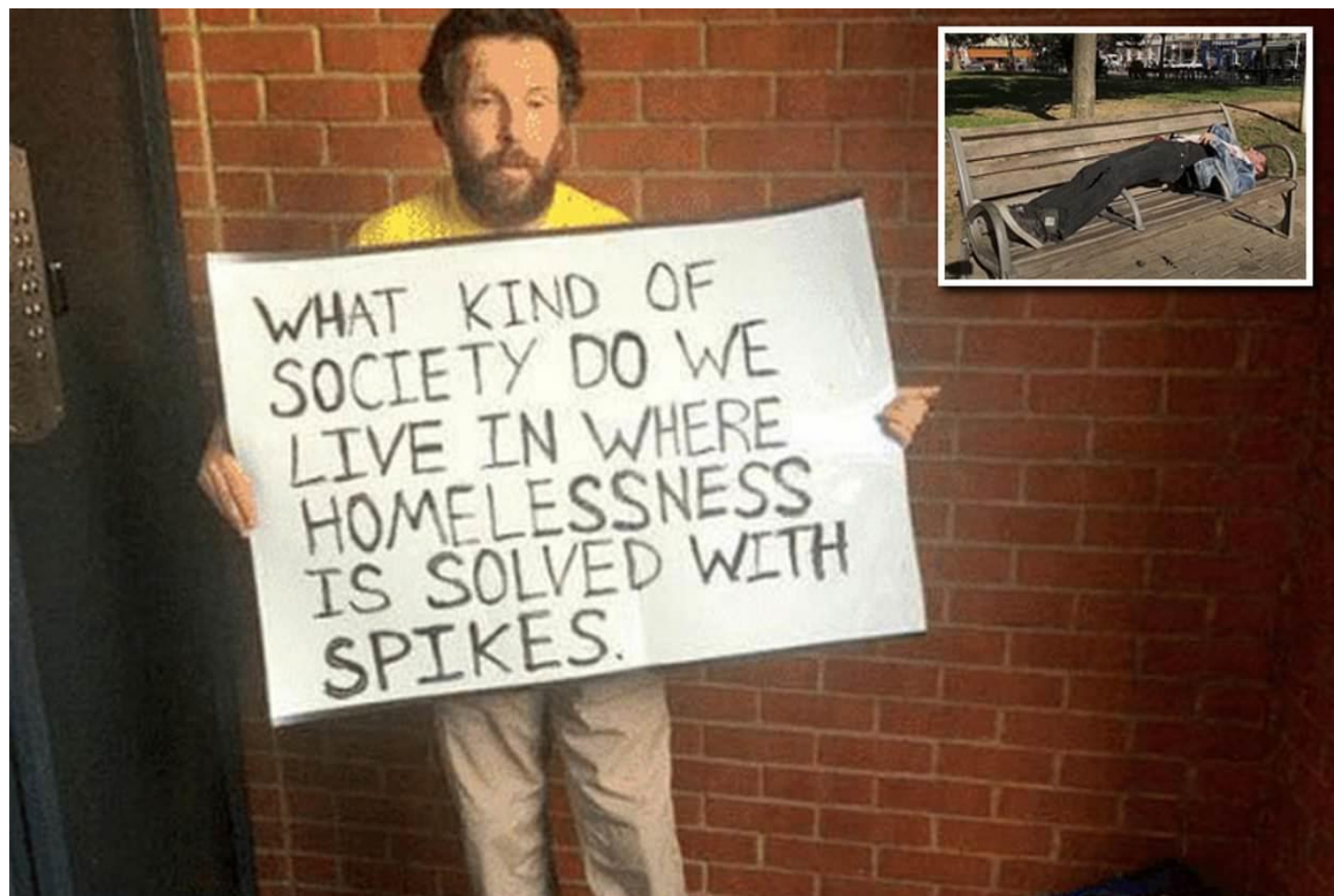






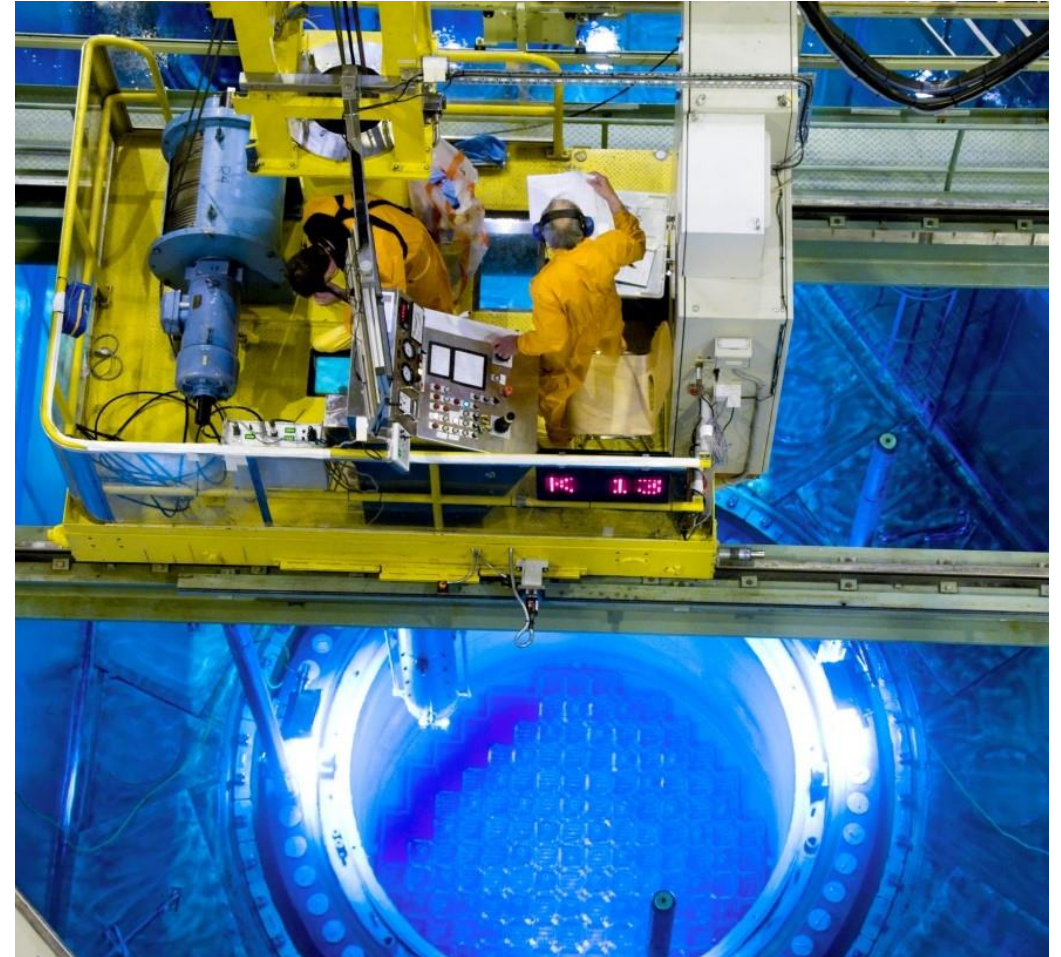






# Do artifacts have politics? (3)

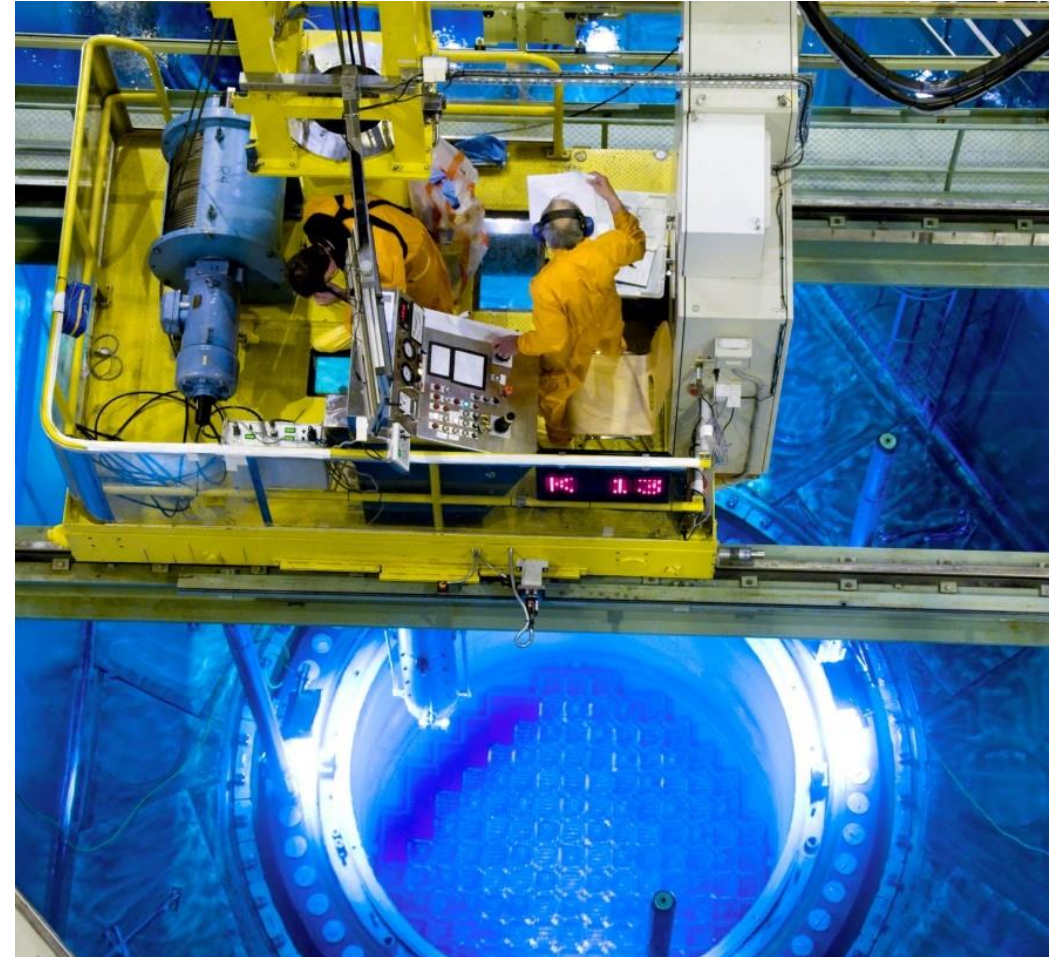
1. Forms of order
2. **“Inherently political technologies**, man-made systems that appear to require, or to be strongly compatible with, particular kinds of relationships”





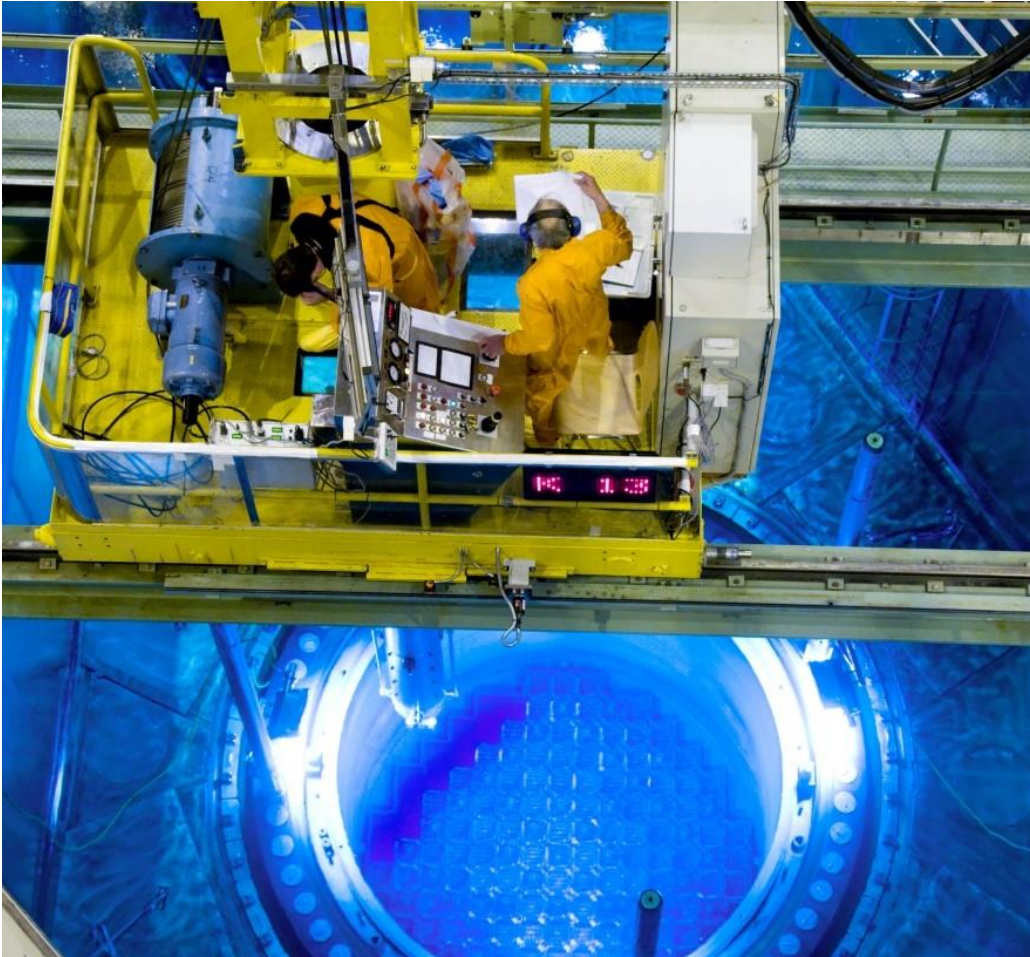
# Do artifacts have politics? (4)

- “The idea we must now examine and evaluate is that certain kinds of technology do not allow such flexibility, and that to choose them is to choose a particular form of political life.





# Do artifacts have politics? (5)



# Let's raise hands

- Technology is politically neutral, it can be applied for good and for bad.
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# Data Science as Political Action: Grounding Data Science in a Politics of Justice

1. “I’m just an engineer”
2. “Our job is not to take political stances”
3. “We should not let the perfect be the enemy of the good”
  1. Definition of ‘social good’
  2. Pursuing an incremental “good” can reinforces oppression

How can Data Scientists Ground Their Practices in Politics (self-study)

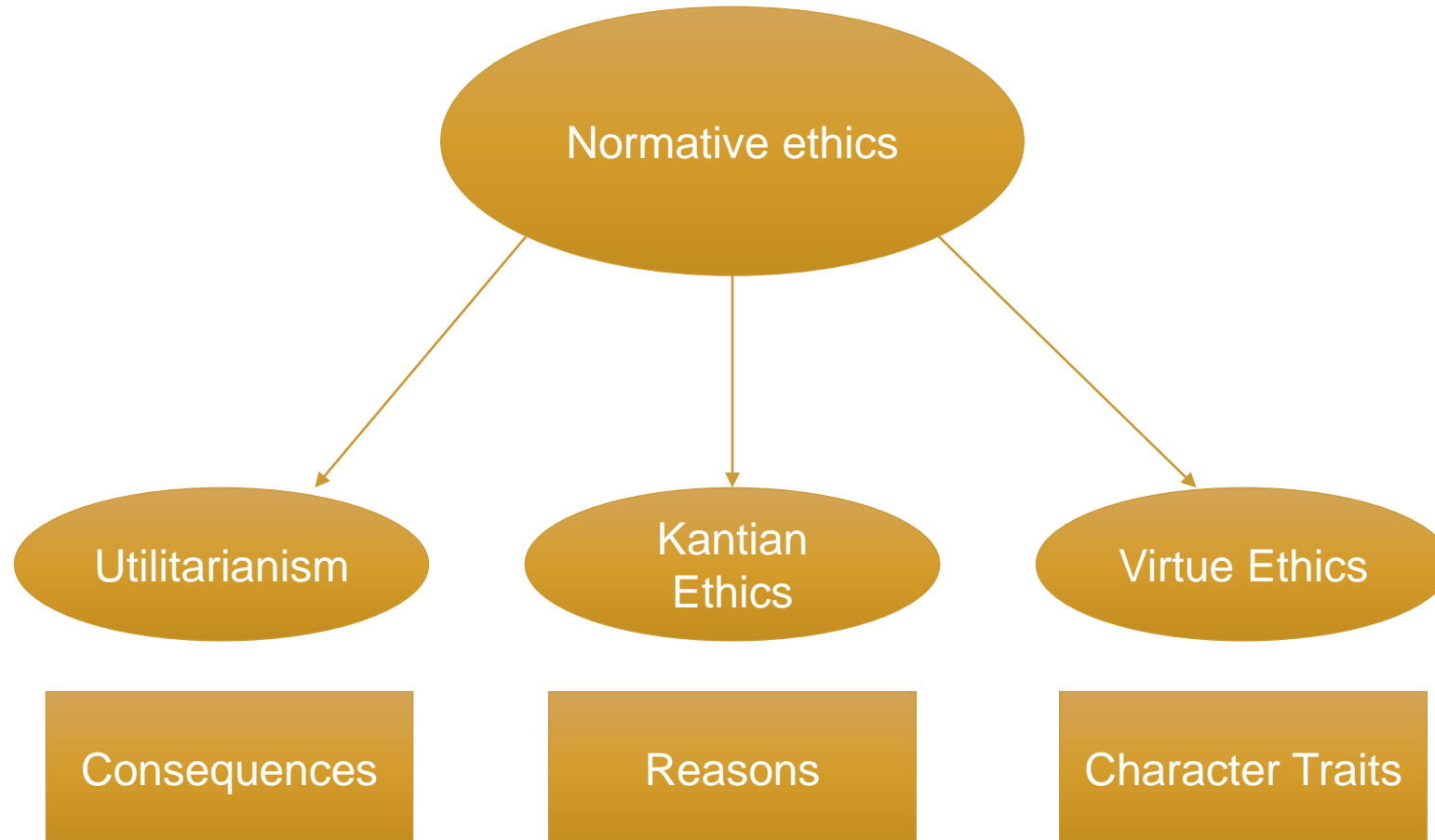


# What makes actions ethically significant?

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# The next weeks



# Next week: utilitarianism & self driving cars

- Ibo van der Poel & Lamber Royakkers (2011). Ethics, Technology, and Engineering an introduction. </courses/15045/files/2858313?wrap=1>
- Aarian Marshall (2018). What can the trolley problem teach self-driving car engineers? <https://www.wired.com/story/trolley-problem-teach-self-driving-car-engineers/>Links to an external site.
- Sven Nyholm & Jilles Smids (2016). The Ethics of Accident-Algorithms for Self-Driving Cars: an Applied Trolley Problem? <https://link.springer.com/content/pdf/10.1007%2Fs10677-016-9745-2.pdf>Links to an external site.
- Edmond Awad et al. (2018). The Moral Machine Experiment. <https://www.nature.com/articles/s41586-018-0637-6>Links to an external site.
- Register for debating teams
- Read the syllabus
- Study module 1 texts: one-time opportunity to ask questions next week
- Study module 2 texts: come prepared