Epistemology and Ethics of Business Analytics
Ethics – Week 3

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Overview

1. *understand* the core aspects of ethical arguments, based on an understanding of validity in propositional logic.
2. *apply* core arguments for objectivity in ethics to the management of technology.
3. *analyse* core questions concerning the ethics of data gathering and the ethics of influence in the management of technology.

- Lecture 1: Objectivity in Ethics
  - Is ought fallacy
  - Arguments against relativism/subjectivism
- Lecture 2: Data ethics I: Gathering data legitimately
- Lecture 3: Data ethics II: Using data legitimately

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Recap of previous lecture

- Business analytics* := using *customer data* to maked informed business decisions

- Egoistic and moral reasons for business analytics

- Ethics of data gathering (last week), using data (this week), storing & protecting (excluded)

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Recap of previous lecture II

- Key values in gathering consumer data
  - Informed consent
  - Privacy

- Criteria for consent: Informed, voluntary, decisionally capacitated

- Privacy: control acces to your information

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Recap of previous lecture III

- Ethical limits to gather data through attention-based markets
  - Individual & social harms
  - Impair cognitive freedom

- A/B testing
  - Legally and morally gray area
  - Biomedical principles apply

- Owning data (excluded)

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Influencing consumers

- General
  - Adjusting influenc based on general insights into human decision making

- Specific
  - Personalised targeting based on available information about the specific user
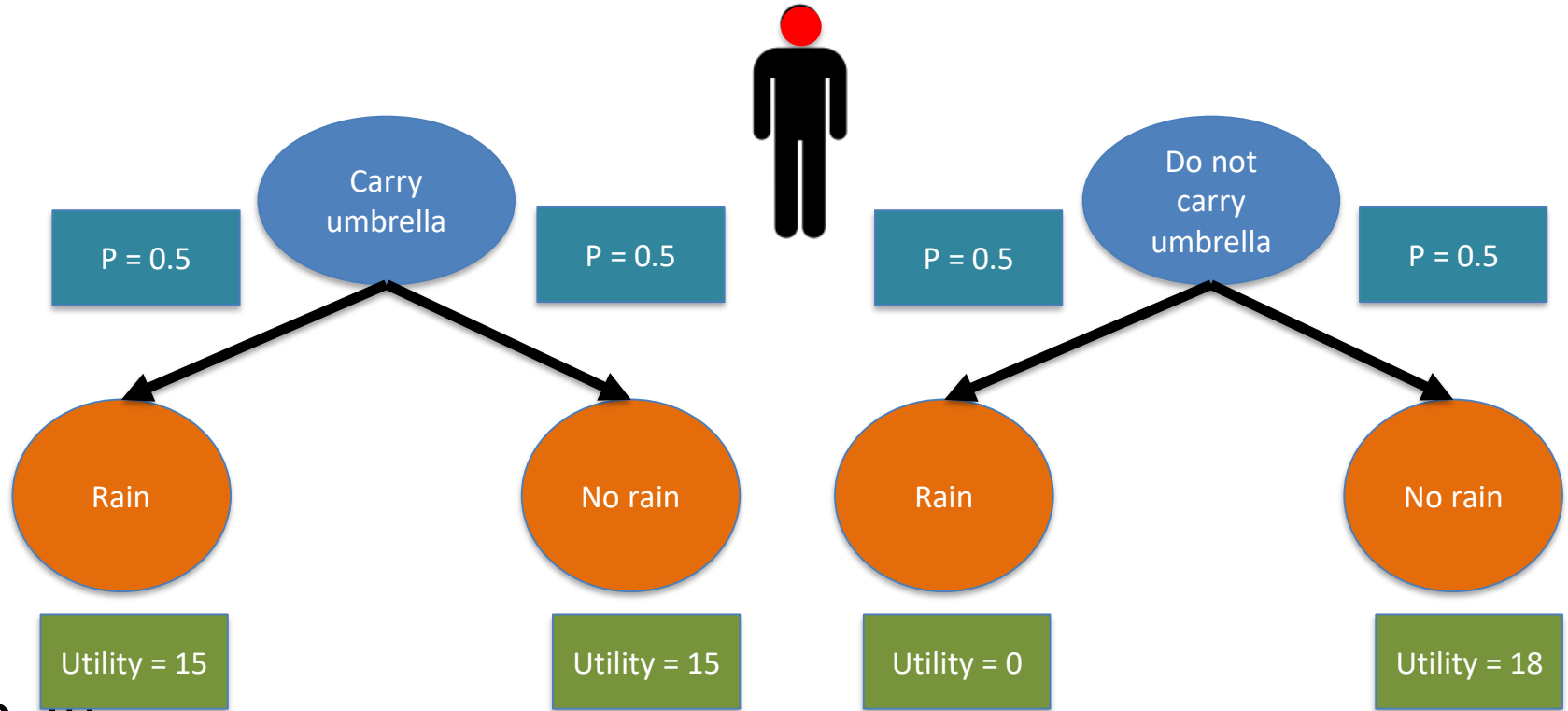
Deliberate behaviour and decisions

- What to do?

- To decide := to settle the question of ‚What to do?' consciously (:= using working memory).

- The long-standing focus of philosophers, economists, etc.

Elaborate forms of deliberative behaviour

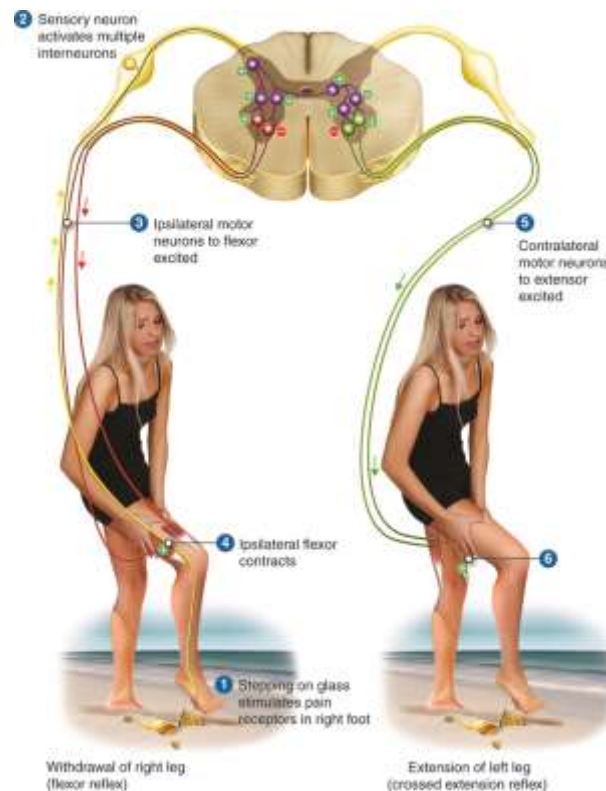# Representing (ideal) deliberation: Rational choice theory

Snap decisions

Non-deliberate behaviour

- Not explained by a decision
  - Reflex
  - Habit
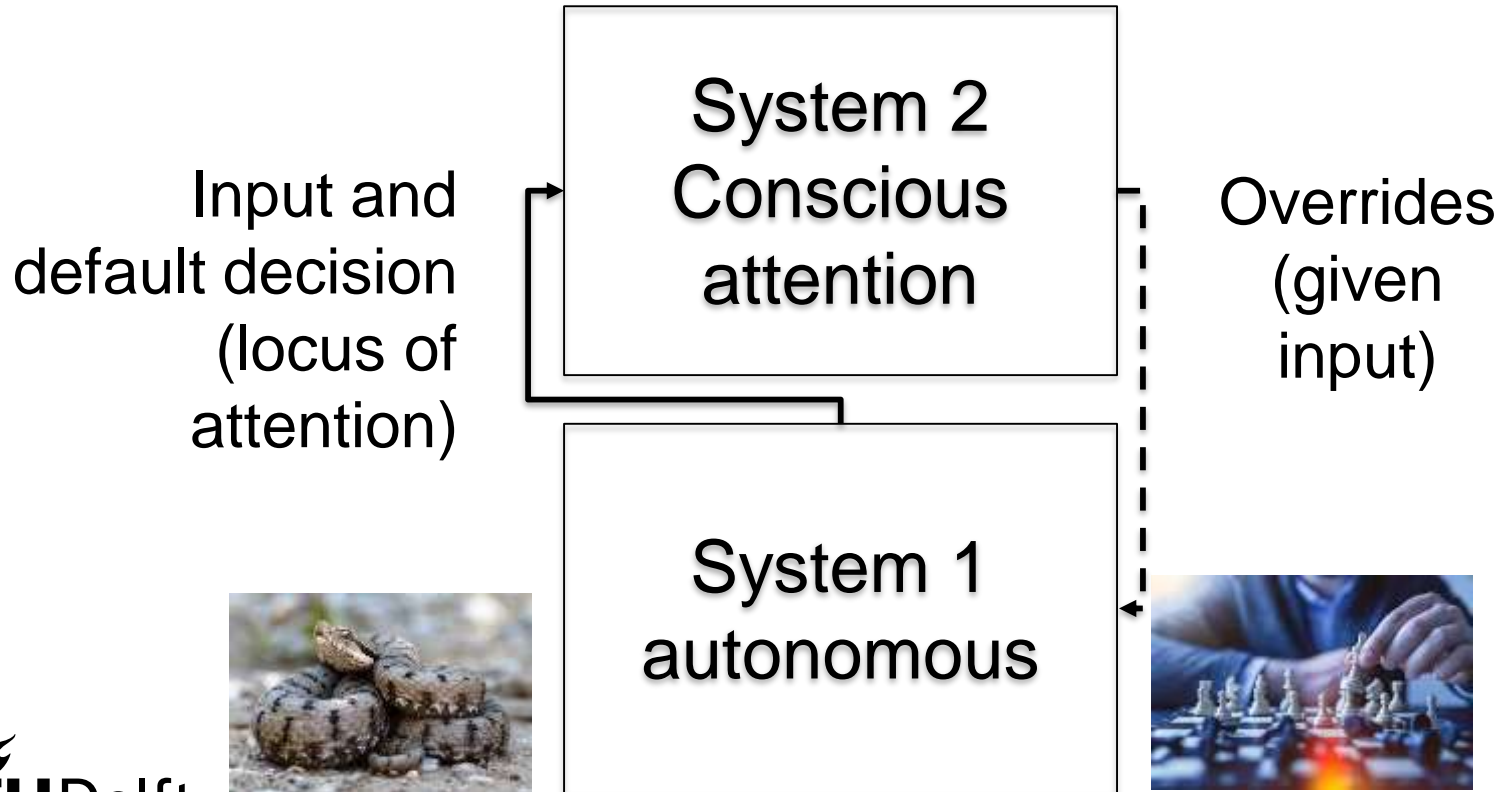
Complex behaviour: deliberate + non-deliberate

The limits of deliberate behaviour

- *Maximal* deliberation …
  - What are my options?
  - What are my goals?
  - What is each goal's value?
  - How good is my method to evaluate my goals?
  - Should I deliberate?
  - …
- … ends in infinite regress (Arpaly & Schroeder 2012)
- So, how can we decide at all?

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System 1 and System 2 processing

Input and default decision (locus of attention)

System 2
Conscious attention

Overrides (given input)

System 1 autonomous

System 2 good, System 1 bad?

"Perhaps the most persistent fallacy in the perception of dual-process theories is the idea that Type 1 processes (intuitive, heuristic) are responsible for all bad thinking and that Type 2 processes (reflective, analytic) necessarily lead to correct responses" (Evans and Stanovich 2013, 229, internal references suppressed).

- Logic   (System 2 leads to errors)
- Recognising your parents   (System 1 works well)

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Stone-age minds in a modern world

- Cognitive load
- Intoxication
- ….

- ‚Playing the wrong script'
- …

System 2
Conscious
attention

System 1
autonomous

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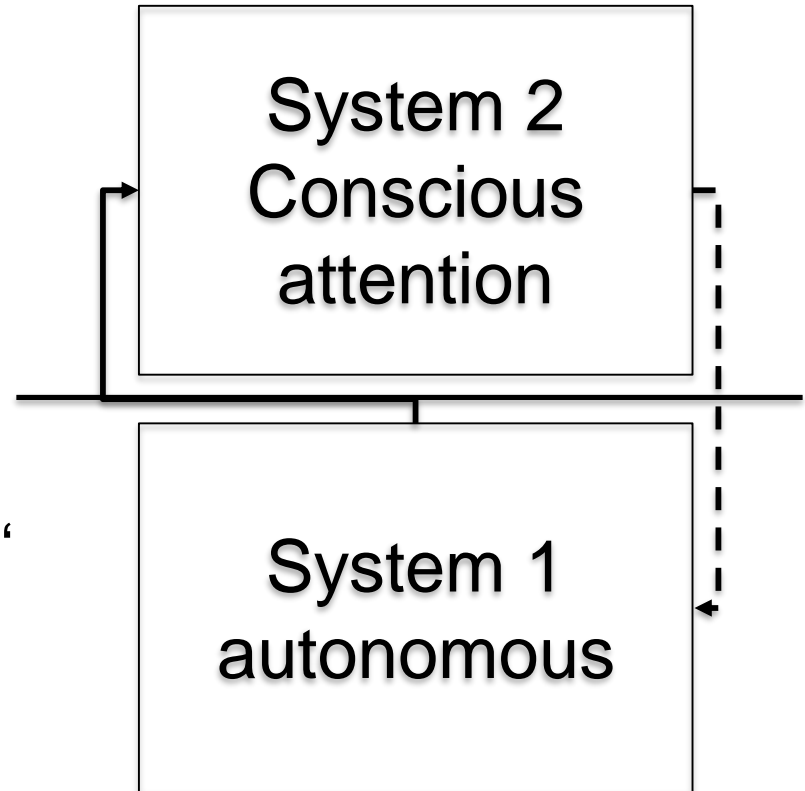
Adapting general patterns

- Default or not?
  - Opt-in for organ donation
  - Opt-out of organ donation

- More deaths?
  - Shark attacks
  - Airplanes

- Which medicine?
  - A: 10% mortality
  - B: 90% survival

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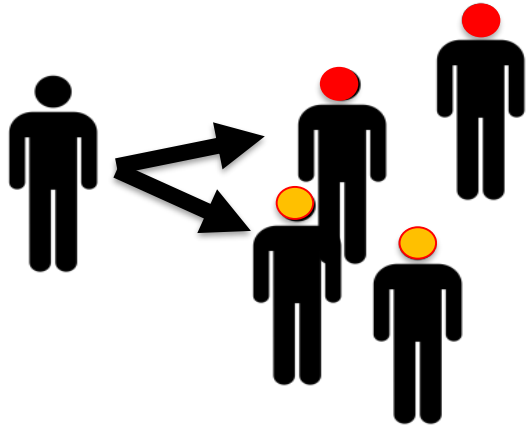# User-friendly design for system 1 processing

Exploiting human-decision making by design

Leveraging ‚digital footprints'

- Age & gender from web-browsing (Hu et al 2007)

- Gender, sexual orientation, religious beliefs, ethnicity from Facebook likes (Kosinski et al 2012)

- Small evidence that targeting is effective in commercial setting (little to no evidence in political setting)

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Aggravating factors: Personalisation

- Individual level differences in ‚persuadability'

Extravert Ad — Dance like no one 's watching (but they totally are).

Introvert Ad — Beauty doesn't have to shout.

- Data analysis to identify ‚persuasion profiles'
- Dynamic environment to adjust ‚message' to audience

Break, 15min

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Student survey

- Please check email

- TBM Evaluatie <Evaluatie-TBM@tudelft.nl>

- 10min

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The ethics of influence

- Evaluate the **consequences** of a given influence (Mathur 2021)
  - Economic harm
  - Privacy intrusion
  - Cognitive burden
  - E.g. organ donation default
- Distinguish **types** of social influence
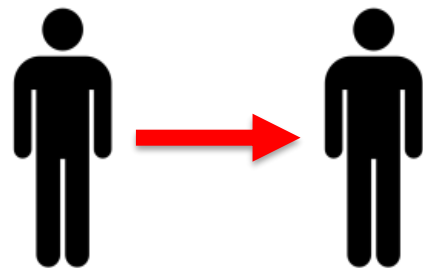 - Evaluate their effects
  - Rights-violations

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Types of social influence

Persuasion

Coercion

Manipulation

Deception
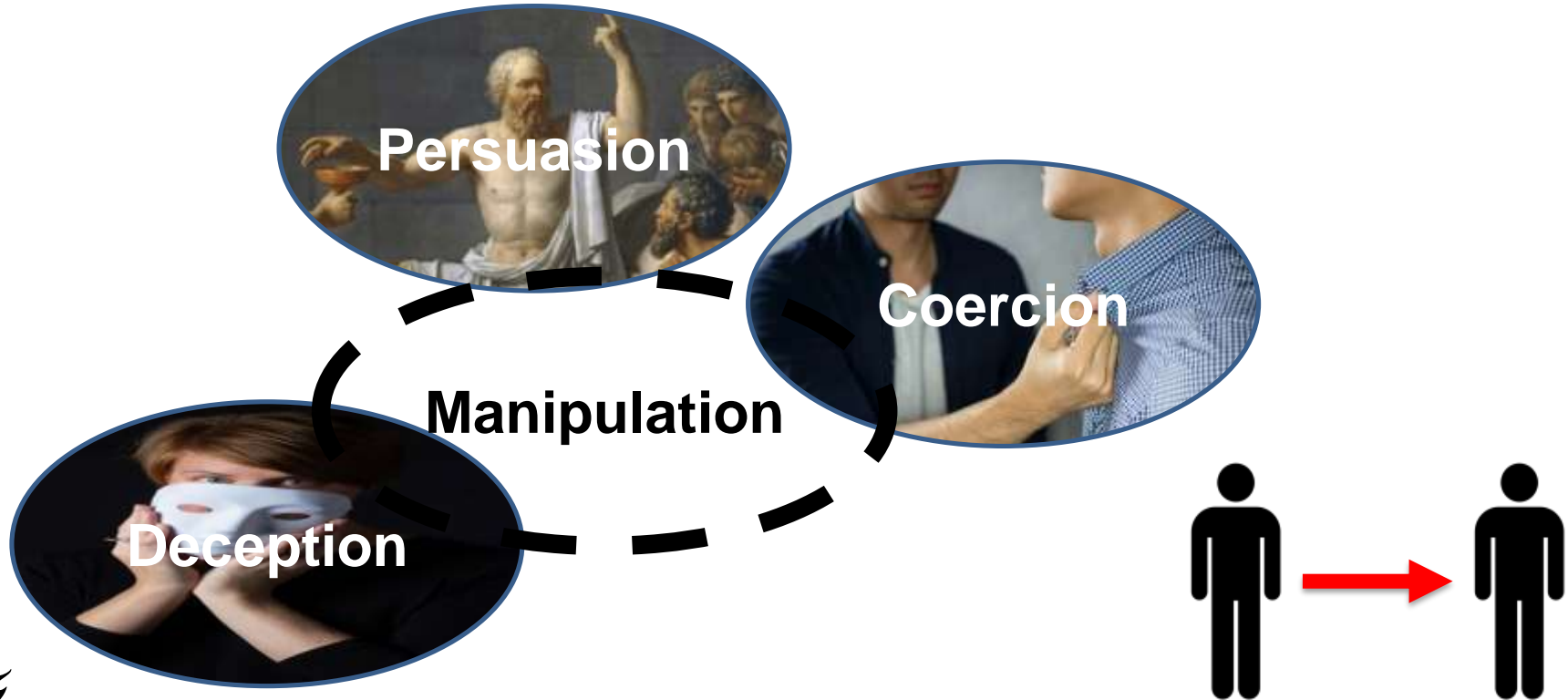
What is manipulation?

- Legal pressure
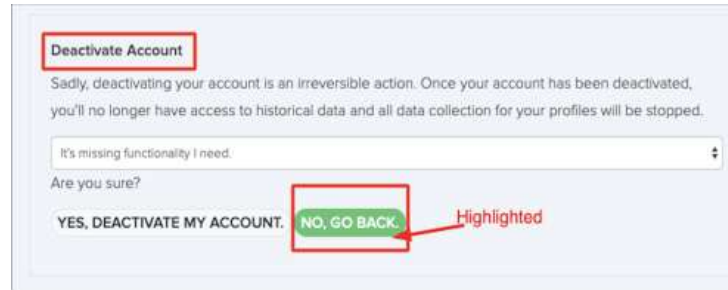- Unclear boundaries – concepual loss
- Moral significance of a common core

The covert influence view of manipulation

- Manipulation := intentionally and covertly influencing [someone's] decision-making, by targeting and exploiting their decision-making vulnerabilities.

- Covertly influencing someone—imposing a hidden influence—means influencing them in a way they aren't consciously aware of, and in a way they couldn't easily become aware of were they to try and understand what was impacting their decision-making process (Susser et al 2019)

Against the covert influence view

- Covert influence not necessary for manipulation


- Covert influence not sufficient for manipulation

Against the covert influence view

- Perhaps *if covert influence is used in such a way that it* „**targets and exploits** the victim's decision-making **vulnerabilities**."

- But System 1 != a vulnerability

- And what counts as exploiting?

- Proposal: Using system 1 in a situation where it ‚misfires'

- Suggests another view of manipulation…

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The indifference view of manipulation

- Manipulation := the attempt to have an effect on someone by doing X and the choice of X is not explained by the manipulator's judgement about X's propensity to support the target's deliberation (Klenk 2021).

- The manipulator is **indifferent about revealing reasons** to the target

- Manipulators chose X for being effective

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Illustrating the indifference view

Explained by indifference?

Y   N

Manipulation   Not manipulation

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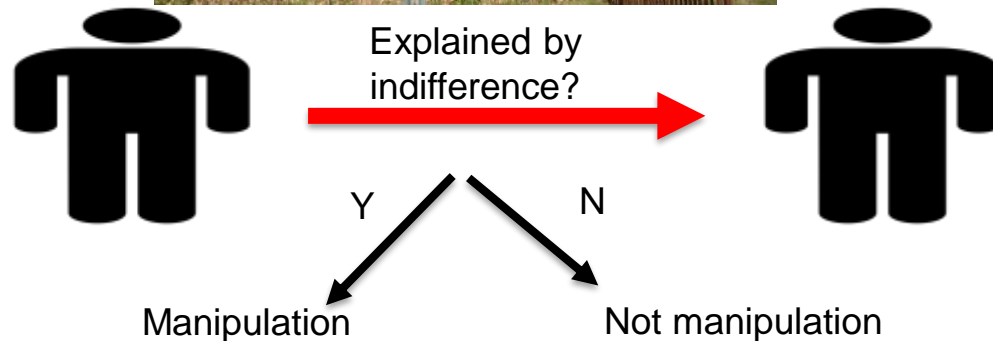
Illustrating the indifference view
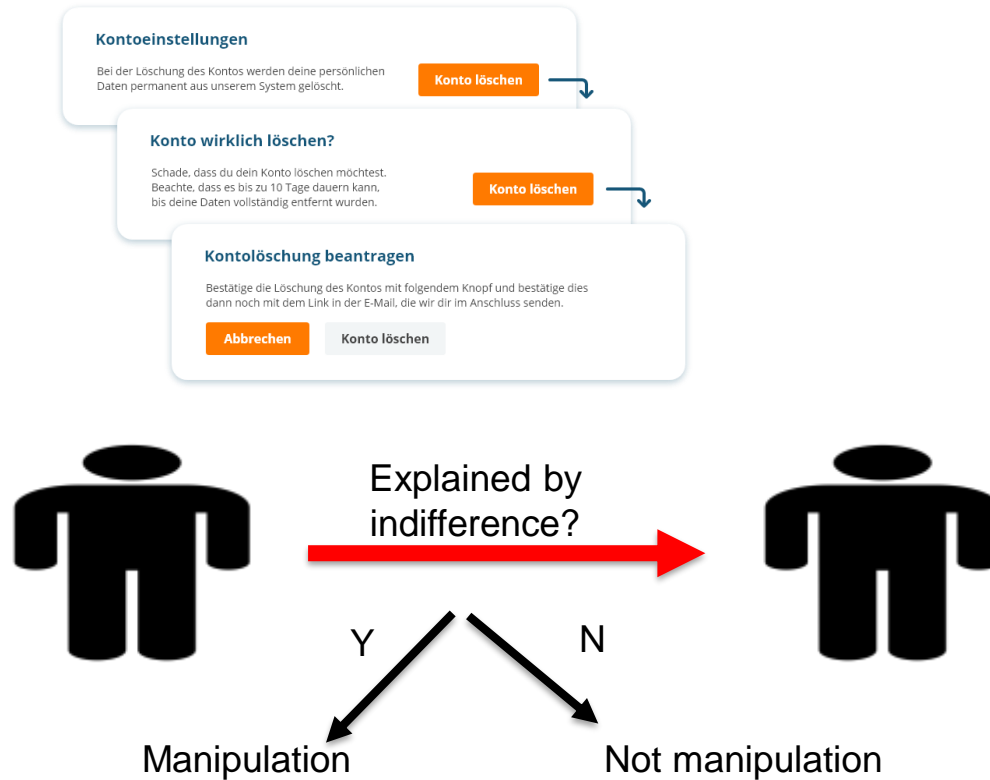
Against the indifference view and open questions

- Mixed motives
  - People's behaviour explained by many motives
  - Must the aim to reveal reasons be exclusive?
- Unclear ideals
  - What must explain one's choice of influence?
  - What is it to *reveal reasons*?

General open questions about online manipulation

- Empirical evidence on effects
- Conceptual demarcation + relevant empirical results (experimental philosophy)
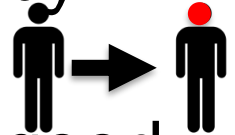- Ethical and political evaluation
- Regulatory and design responses

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Recap

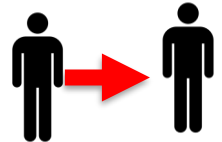1. Human decision-making
   - System 1 crucial, not always bad
2. Exploiting human decision-making by design
   - ‚Activating' system 1 sometimes good, sometimes bad
3. The philosophy of online manipulation
   - Argument for indifference view

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Master theses

- Good influence
  - AI
  - Health
  - Design

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Final steps to complete the course

- No lecture, tutorials next week

- Lectures uploaded next

- Reflection 4 (reflect on your reflection 3 from the beginning of the ethics course)
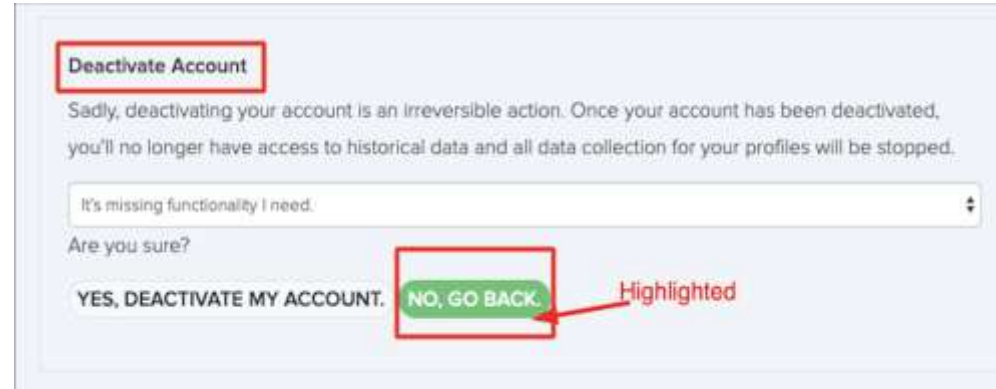
- Exam

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Backup

The trickery view of manipulation

- There are certain norms or ideals that govern beliefs, desires, and emotions.
- *Rational* deliberation := in line with these ideals
- Manipulation := the attempt to get someone's beliefs, desires, or emotions to violate these norms, to fall short of these ideals (Noggle 1996).
- System 1 processing *required* for rational deliberation
- Both System 1 and System 2 processing can fail

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Against the trickery view

- The attempt to trick is not necessary for manipulation:
manipulation without bad intention

Against the trickery view

- The attempt to trick is not necessary for manipulation
  manipulation as an omission of social support