Philosophy and Ethics for Computing and Information Science

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Take home messages for today

- What do we need to reflect systematically on the ethical (and philosphical) aspects of your field(s) of study (continuation of lecture 1)?

- How do we apply this stuff (ethical models) to concrete cases / situations in your field(s) of study (mid-term group paper)?

- Case study: the meaning of 'hacker' as a social construct

Consequentialism

The rightness/wrongness of an action is determined by its *consequences*

action ⟶ result

Consequentialism

Example: *utilitarianism*

The right action is the one that promotes the greatest happiness of the greatest number (maximizes social utility)
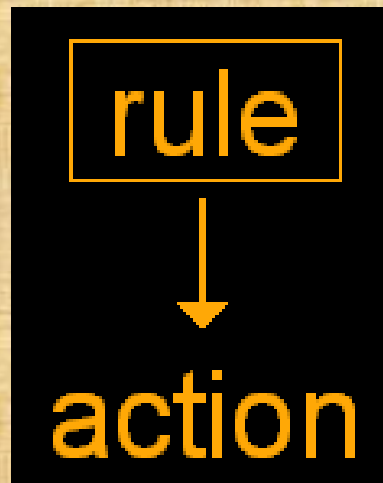
Consequentialism

Another example: *ethical egoism*

The right action is the one that promotes the greatest happiness of the *agent* (maximizes the *agent's* utility)

Deontology

The rightness/wrongness of an action is determined by *inherent* features of the action itself, or by an inherently valid *rule*

Deontology

If an action is of the wrong kind, it is forbidden, *no matter how good its consequences are*

Rejects both Utilitarianism and Ethical Egoism

"The end doesn't justify the means."

Divine Command Ethics

What makes an action right is the fact that *God commands it*.

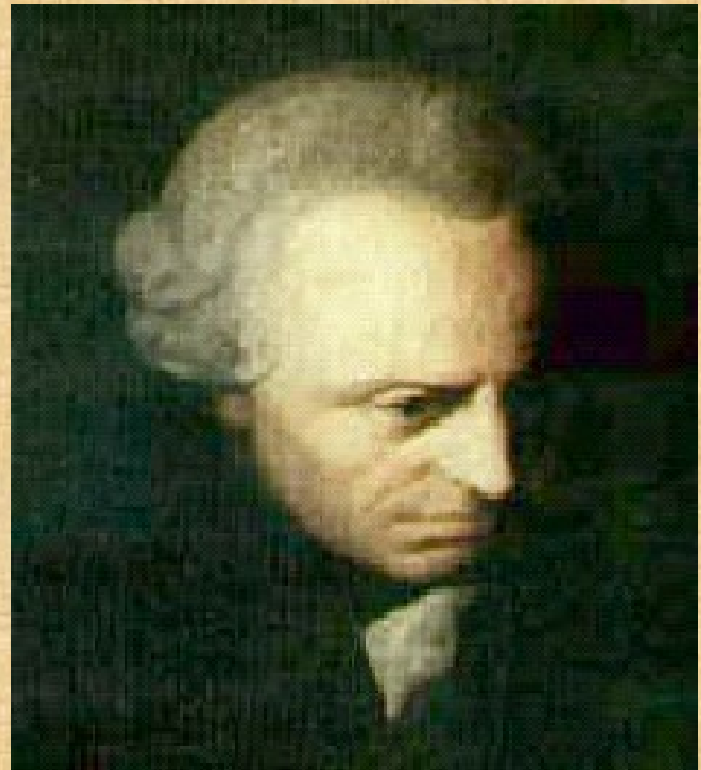(As opposed to the view that God commands things because they are right already.)

How to 'decide' on the authority?

Deontology

Example: _Kantianism_

Right actions must be _universalizable_ and must treat rational agents as _ends, not mere means_ (trade-offs forbidden)
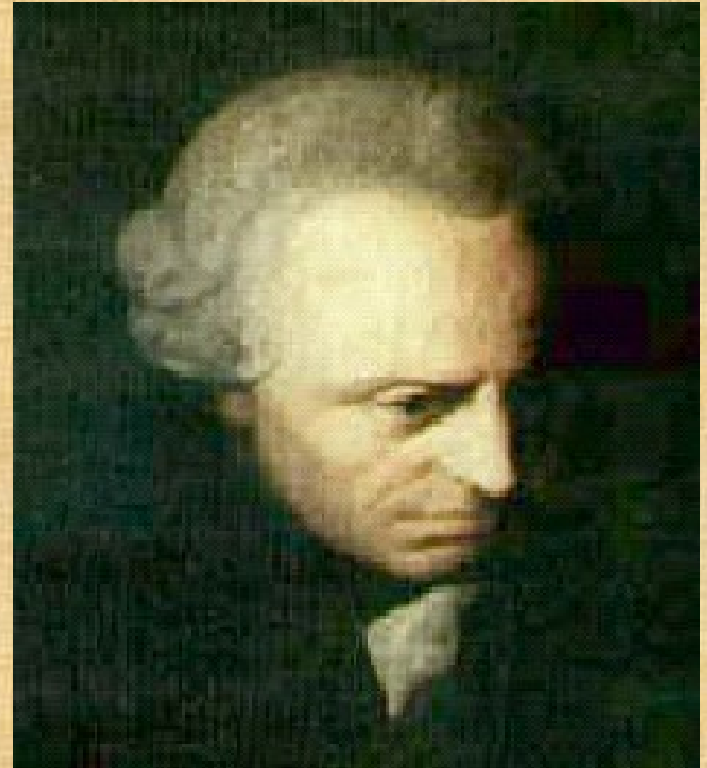
Immanuel Kant (1724-1804)

Kant's Deontology

<u>Universalizability</u>: must be possible to will the principle of your action for *everybody* without inconsistency.

Lying violates universalizability because lying presupposes and exploits a general practice of telling the truth
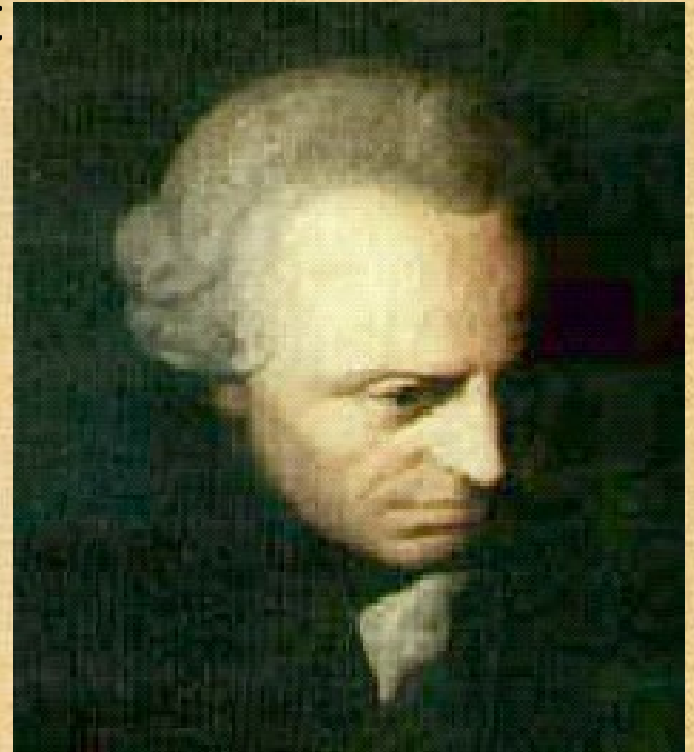
Kant's Deontology

<u>Ends, not mere means</u>: don't treat rational agents (others or yourself) as mere objects to be used or exploited.

Personhood is the basis of ethical value and can't be subordinated to other values.

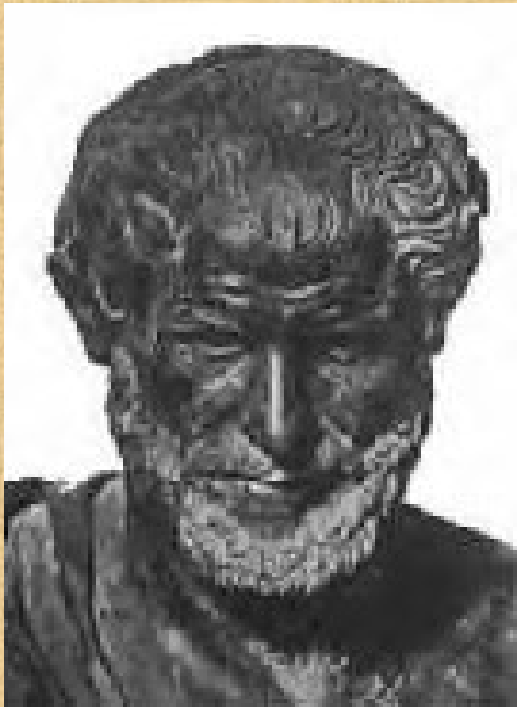Mustn't sacrifice the few even to benefit the many.

Virtue Ethics

Emphasizes what kind of *person* you should be. The notion of **character** is central, in contrast to **action** (as it is the case in both deontology and consequentialism)
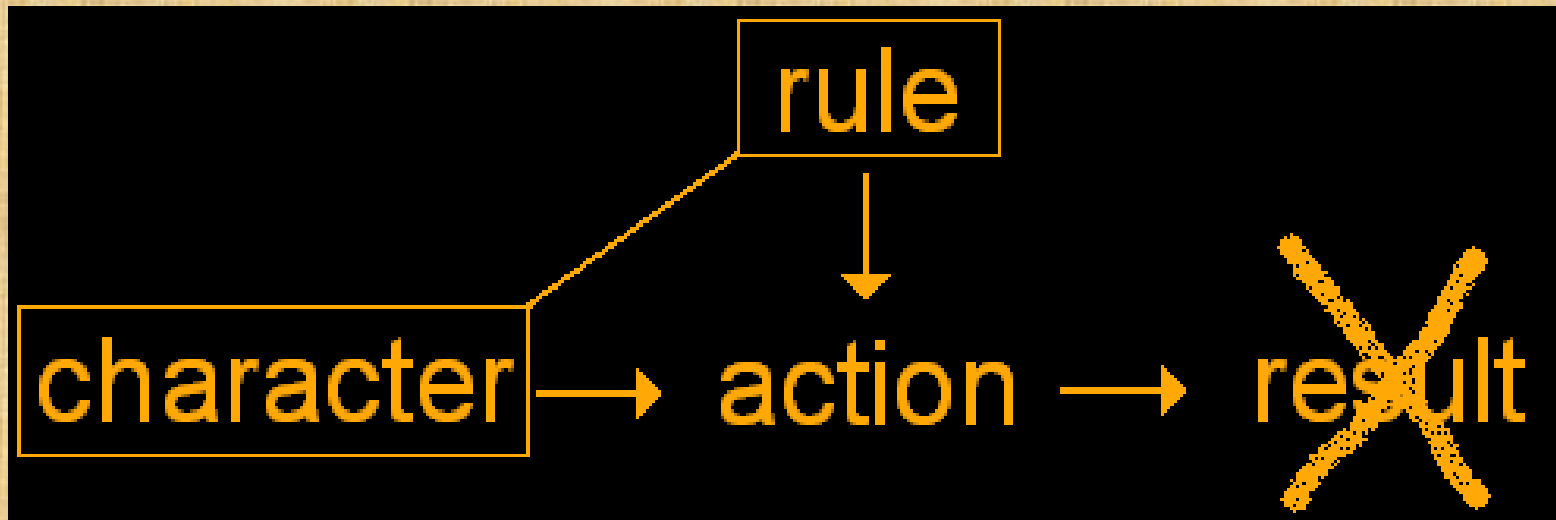
character → action

Virtue Ethics

Examples: Aristotelianism, Confucianism

Virtue Ethics

Virtue-ethicists tend to side with deontologists against consequentialists – though not always

Aristotelian Moral Virtue

'The goal of the Good Life is **Happiness** (eudaimonia) as attained through **Wisdom, Virtue, and Pleasure**'

- Aristotle (384 BCE – 322 BCE)

- Part of a complex theory of the universe, human nature, and the idea of the Good

- Heavy emphasis on the importance of **practice**: virtues are acquired, not innate

- Virtue consists in choosing the middle between excess and defect (courage example)
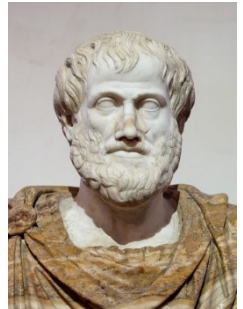
Virtue Ethics: up- and downsides

- Virtue ethics too has upsides and downsides

- Virtue Ethics
  ◦ Positive:
    ◦ Emphasis on everyday moral life, as such close to reality
    ◦ Practice is part and parcel of virtue: you are allowed to fail!
  ◦ Negative:
    ◦ Relativistic: for who decides what constitutes a virtue?
    ◦ Relativistic: which situation requires what response?
    ◦ Possibly classist: those in charge decide on what constitutes a virtuous character

# Individual formative assignment (ideally, write it between weeks 3 and 4)

- Answer in max 1 A4 words the following 2 questions:

  -What are the main takeaways from the course until now?

  -Are there things up to now that are unclear / not relevant according to you / etc.?

- Deadline: **27-11-2024**

Mid-term paper (group assignment, summative)

We have been discussing ethics in the course. For the first assignment I ask you to find a current topic within your field that presents interesting (according to you) ethical features and to write a short paper (max 2-3 pages) about it, in which you shortly describe the case, identify the central ethical issue and analyze it by making use of what has been discussed in the course up to now.

Deadline: 03-12-2024

Hackers or crackers?
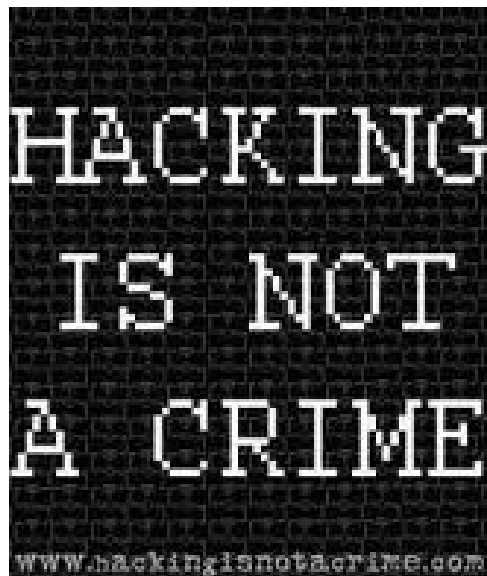
Luca Consoli, 11-11-2024

Literature

- Hackers and the contested ontology of cyberspace (Nissenbaum, 2004)
- Hacking vs. hacktivism (Taylor, 2005)

The digital arena

- In the digital arena there is a lot of public discussion
- Agents stride to promote their views on the role, use and meaning of concepts and tools
- There is also a 'hidden' discussion going on
- Question: is the discussion about 'what is a hacker' public or hidden?

The 'classical' hacker

- S. Levy, *Hackers: Heroes of the Computer Revolution* (1984)
  - MIT, 50's
  - Hacker: a brilliant (and quirky) programmer interested in the workings of computers
  - Out of the box
  - No bogus criteria
  - To hack: to find a way

The 'classical' hacker

- 'true' hackers (50's and 60's)
- Hardware hackers (70's)
- Game hackers (80's)
- Then something happens…

- Hacktivists? (see second part)

The 'classical' hacker

- P. Himanen, *The Hacker Ethic and the Spirit of the Information Age* (2001)
  - Hackers ethics as an alternative to the industrial-capitalist protestant work ethics
    - Enthousiasm
    - Creativity
    - Sharing

The culture of hacking incorporates political and moral values as well as technical ends

Still hacking?

'Hackers': anti-social, possibily dangerous individuals who attack systems, damage other people's computers, compromise the integrity of stored information, etc.

Or cracking?

- Question: aren't these 'crackers'?
  - Cracker: a person who breaks into, or otherwiseviolates the system integrity of remote machines, with <u>malicious</u> intent

•In the 'public eye, the concept of 'cracker' has not caught up, the 'category' of 'hacker' has rather shifted in meaning.

Why is that?

- The 'obvious' explanation: we see hackers as villains because they now <u>are</u> villains

- The less obvious explanation: the shift in meaning is the result of a <u>conscious</u> movement to demonize and portray hackers as abnormal

- The 'third way': the shift in meaning is the result of a 'manipulation of the ontology of cyberspace'

Two opposite tendencies

- The history of the Internet is a fight between 'anarchy' and 'normalization'

- The Web got more and more 'domesticated', and this in turn brought familiar practices and the associated norms and institutions

- The 'classical' hacker (or rather, the 'classical' meaning of hacker) represents a 'anarchistic threat' to corporate and institutional normalization

Social ontology

- Social ontology: social entities and facts, in addition to natural ontology
- Examples: money, marriage
- What is the social ontology of cyberspace?
  - Hacker: agents who willfully defy the rules

Hackers as 'bad actors'

- With the institutionalization of cyberspace comes a socal ontology
- This changes the role of hackers from self-identified subculture to bad actors
- Their actions get another normative connotations (they do not need to be different actions!)
- This is the 'hidden' discussion to which we referred at the beginning

Category shift

- Classification and standardization serve not only epistemological but also political ends
- Necessity to push hackerism out of the accepted institutional norms
- Established institutions have tried to increase the distance between hackers and the rest of us by means of an ontological transformation that reconceives hackers as deviants, and hence fair targets for repression and punitive action

Conclusions I

- Hacking is now imbued with a normative meaning whose core refers to harmful and menacing acts

- The ontological shift is convenient for those who seek to establish control in the new order and economy of cyberspace

From hackers to hacktivists

- Hacktivism: the combination of hacking techniques with political activism

Thesis of the paper: hacking has failed to develop its radical potential
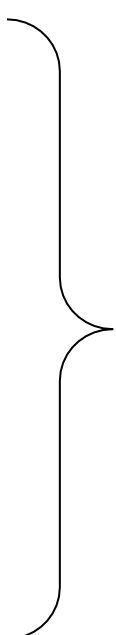
Why?

The limits of hacking

- Technologically focussed and politically insular
- Celebrations of computer systems for their own sake
- Has become the pursuit of technological means as an end in itself
- Hacktivism has put back a normative element into the objectified computer code

Technological focus

Back to 'hackers generations':

– True hackers

– Hardware hackers

– Game hackers

No articulated political position

– Hacker/cracker

– Microserfs

– Open source movement

– Hacktivism

Parasitic character of hacking

- Gunkel (2001): hacking as parasitic activity, with 'political stasis' as a consequence
- Dependent on the 'health' of the system <u>and</u> on outside manipulation by those seeking to redirect the social impact of hacking (see thesis Nissenbaum)

- Hackerism: to 'reprogram the systems of rationality' **without** a definite view of <u>social</u> goodness of badness

- Hacktivism: to 'reprogram the systems of rationality' **with** a definite view of <u>social</u> goodness of badness