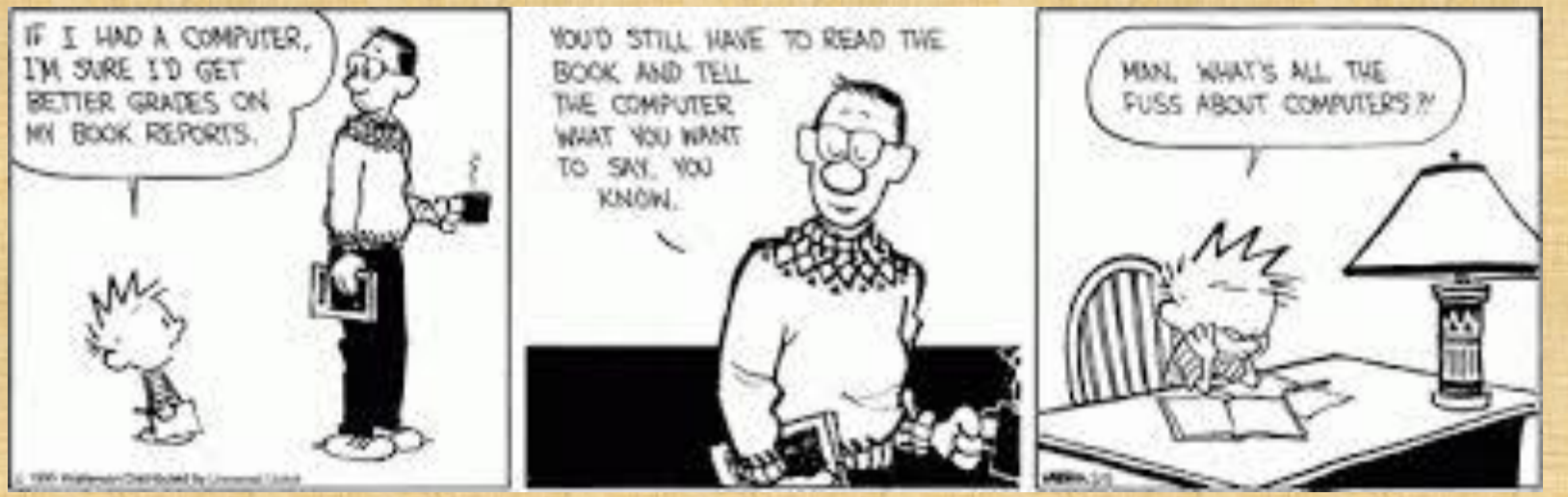
Philosophy and Ethics for Computing and Information Science

IMI0003 / Fall 2021 / 3 ECTS



http://www.gocomics.com/calvinandhobbes/2015/3/5,c 1995 Watterson

Luca Consoli

What is the course about?

'The philosophy of computer science is concerned with those **ontological**, methodological, and **ethical issues** that arise from within the academic discipline of computer science as well as from the practice of software development. Thus, the philosophy of computer science shares the same philosophical goals as the philosophy of mathematics and the many subfields of the philosophy of science, such as the philosophy of biology or the philosophy of the social sciences. The philosophy of computer science also considers **the analysis of computational *artifacts*, that is, *human-made* computing systems**, and it focuses on methods involved in the design, specification, programming, verification, implementation, and testing of those systems.'

https://plato.stanford.edu/entries/computer-science/

Take home messages for today

- How is the course structured?
- What do you need to do in order to pass this course?
- What do we need to reflect systematically on the ethical (and philosphical) aspects of your field(s) of study?

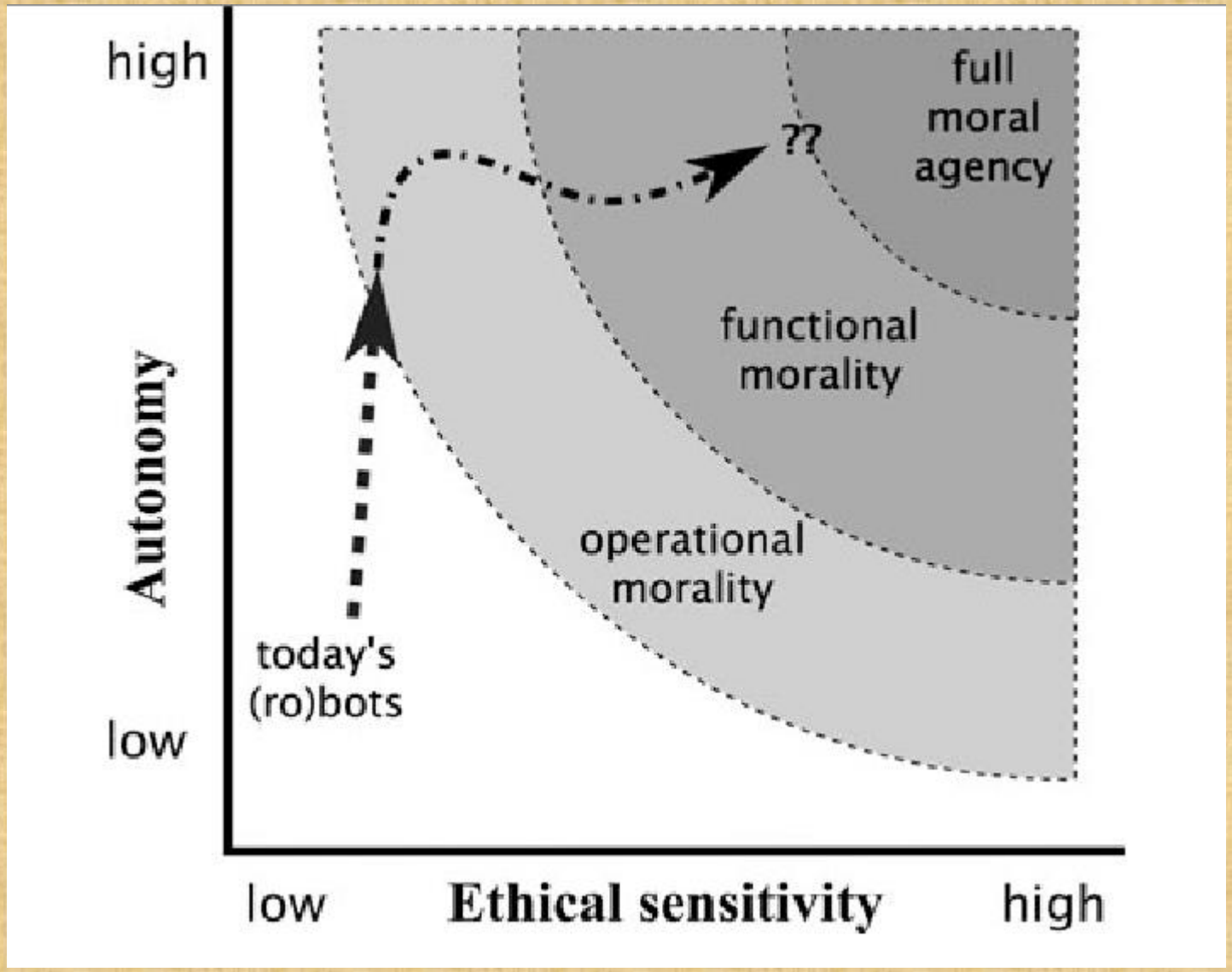
Leitmotif of the course

From passive objects…

(Moral) agency

…to active objects and (almost) everything in between

Wallach, 2013


high
Autonomy
low
full
moral
agency
??
functional
morality
operational
morality
today's
(ro)bots
low
Ethical sensitivity
high

Before ethics of computing science…

…we need a general introduction to (normative) ethics

METAETHICS
VERSUS
NORMATIVE ETHICS

METAETHICS	NORMATIVE ETHICS
Metaethics is the study of the nature of ethics	Normative ethics is the study of ethical action
Analyzes the meaning of moral language and metaphysics of moral facts	Evaluates standards for the rightness and wrongness of actions
More philosophical in nature as it analyzes the nature of ethics and morality	More practical in nature

Visit www.PEDIAA.com

Topics

- ICT & the human nature
- Ethical theories
- Ethics of ICT
- Philosophical issues (Mind / body, AI,…)

Aims

The student will:

- be acquainted with a number of philosophical and ethical theories, both in general and applied to his/her object of study;
- be able to recognize the implicit presuppositions in a number of scientific advances of his/her object of study;
- be able to reflect on the normativity of his/her object of study;
- be able to articulate his/her reflection in a number of short papers and a research paper.

- Assignments: students will have to write 2 short group essays and a group final term paper (summative).
- Assignments: students will have to submit 1 individual assignment (formative)
- Assignments will be made available (and must be submitted) via Brightspace
- There is no final examination planned.
- The short essays are meant to develop specific skills which will be needed in order to write the final term paper.
- Short essays have a weight of 50% in determining final grade, the other 50% is given by the grade of the final paper.
- All assignments must have a grade equal of higher than 6,0 in order to be considered as a ‘pass’.
- Students will get the possibility of turning in amended versions of the assignments in case of failing them.

Deadlines

- Assignment 1: 28-11-2021 (but see under)
- Assignment 2: 19-12-2021 (but see under)
- Final assignment:
  1) 30-01-2022
  2) 10-04-2022

Deadlines for assignments 1 and 2 are not strict. This means that you are allowed to set another deadline, but **you must communicate this to the lecturer by email.**

Deadline for the final assignment is **strict** (no delay allowed)

If you already submitted assignments in the past 2 years the grades are still valid this year

Online resources

- https://plato.stanford.edu/entries/computer-science/
- https://cse.buffalo.edu/~rapaport/Papers/phics.pdf

Ethical Theories: Introduction

With thanks to Roderick T. Long
Auburn Dept. of Philosophy

Subjectivism in Ethics

Ethical subjectivism is the idea that moral opinions are based on our feelings and nothing more. On this view, there is no such thing as "objective" right and wrong.

What Are Ethical Theories?

Explain what makes an action right or wrong

Ethical theories vs. particular ethical judgments

Analogy with scientific theories and observations

Ethics ≠ Morals!!

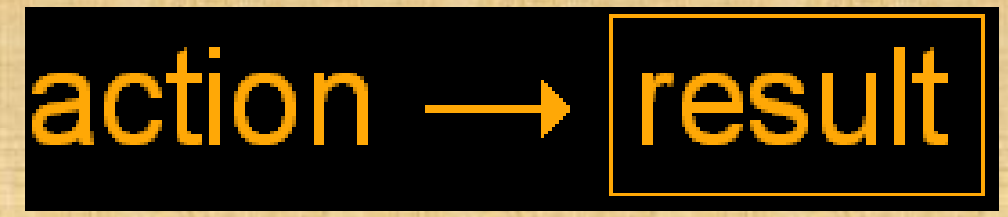
Ethics ≠ Law!

Some Kinds of Ethical Theory

- Consequentialism
- Deontology
- Virtue Ethics
- Contractarianism
- Natural Law
- Relativism

Consequentialism

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



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)

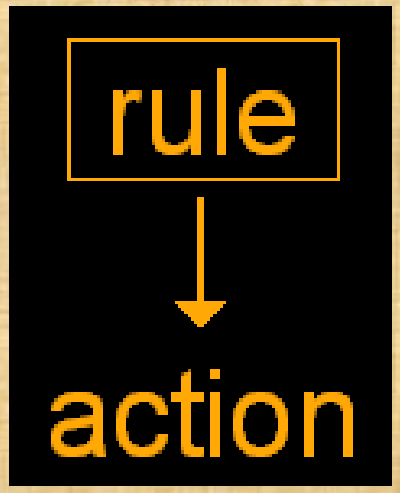
Two Ethical Egoists

Benjamin Tucker (1854-1939)

Ayn Rand (1905-1982)

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.)

A form of relativism?

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

Universalizability: 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

Ends, not mere means: 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.

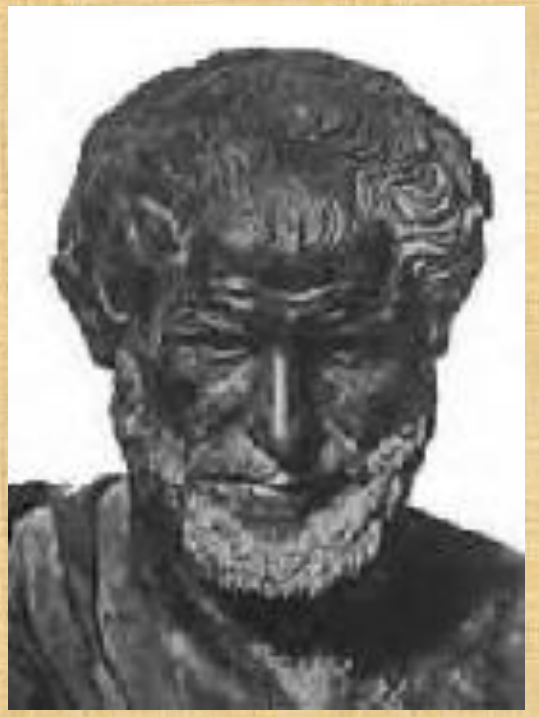
Virtue Ethics

The rightness/wrongness of an action is determined by the *character traits* it expresses

Emphasize what kind of *person* you should be

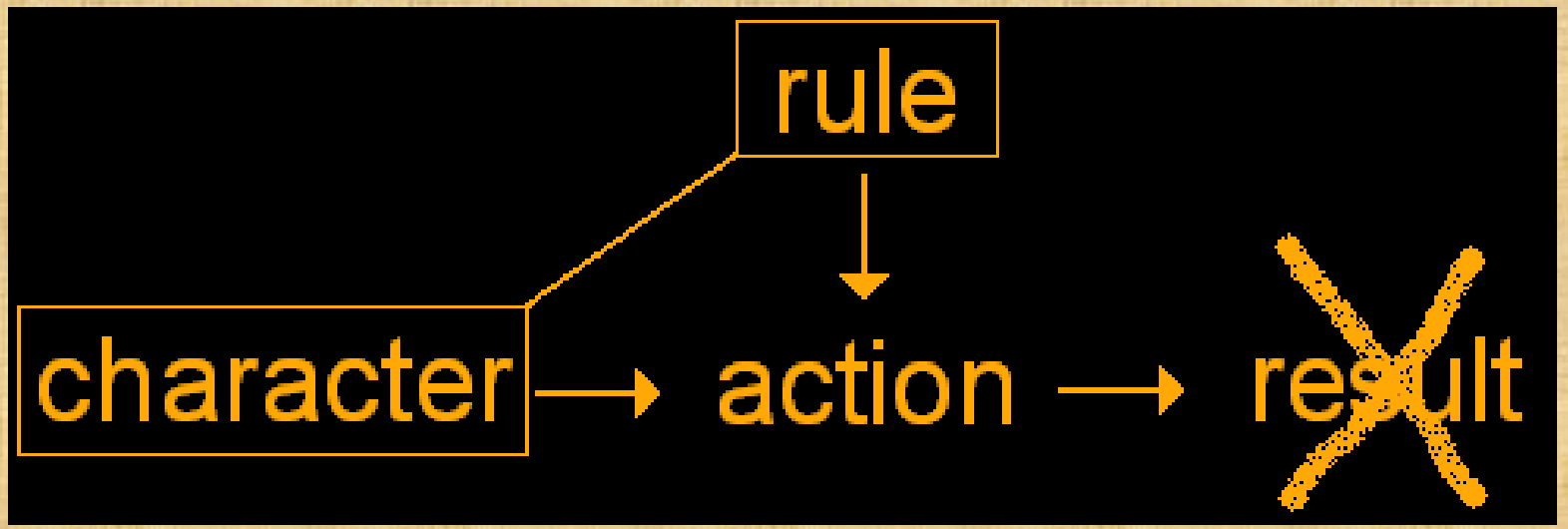
Virtue Ethics

Examples: Aristotelianism, Confucianism



Virtue Ethics

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



Next week sneak preview

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