Workshop
Preparation for the Exam Paper

Reflections on IT
15th of March 2016

Structure

Structure

- PART 1: Looking back
  - What happened so far?
  - Positioning of the different lectures & approaches
- PART 2: Essay Preparation
  - Formalities
  - Literature Search
- In between: Writing exercises
  - Freewriting
  - Tell your neighbour
  - Structuring
  - Literature Research
  - Making a plan for how to continue

PART 1: What happened so far

Course Overview

L1: Introduction (Vasiliki & Christopher)	L7: Workshop
L2: Conceptions of Technology (Vasiliki)	L8: Surveillance (Christopher)
L3: Post-Phenomenology & Technology (Finn Olesen)	L9: The Relevance of Algorithms (Vasiliki)
L4: Laboratories and non-human actors in STS (Christopher)	L10: Big Data (Judith)
L5: Computer Ethics (Judith)	L11: Hacker Culture & Copy Right (Judith)
L6: Values in Design (Judith)	L12: Overview (Judith)

Course Overview

L1: Introduction (Vasiliki & Christopher)
L2: Conceptions of Technology (Vasiliki)
L3: Post-Phenomenology & Technology (Finn Olesen)
L4: Laboratories and non-human actors in STS (Christopher)
L5: Computer Ethics (Judith)
L6: Values in Design (Judith)

First & second lecture

- Philosophy of Science:
  - The study of how scientific knowledge is produced, substantiated and used in society
  - How do you differentiate between pseudoscience and science?

- A brief run-through of the dominant approaches in the history of philosophy of science:
  - (Logical) Positivism
  - Popper's principle of falsification
  - Kuhn's paradigms

- Philosophy of Technology:
  - Focus on understanding technology's relation to morality, politics, society, culture and metaphysics

- A recent discipline with increasing relevance in the digital era

- Conceptions of technology:
  - Ontological distinction between natural things and artifacts
  - Technology as applied science versus technology as a tool to do science & generate knowledge
  - Leads to the discussion of ..
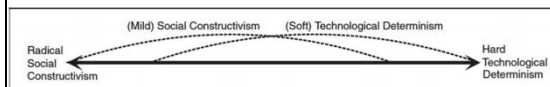

- Technological Determinism:
- The development of technology proceeds in an autonomous manner, determined by an internal logic independent of social influence;
- Technological change determines social change in a prescribed manner.

Versus

- Social Constructivism:
- The development of technologies is the outcome of negotiations between various social groups, rather than the product of a technology-inherent logic.

Technological Determinism
vs
Social Constructivism

(Mild) Social Constructivism   (Soft) Technological Determinism
Radical Social Constructivism ←→ Hard Technological Determinism

- Society shapes technology
- Technology open to interpretation
- Focus on social
- Micro focus
- How is technology?

- Technology shapes society
- Technology is autonomous
- Focus on material
- Macro focus
- What is technology?

Course Overview

- L1: Introduction (Vasiliki & Christopher)
- L2: Conceptions of Technology (Vasiliki)
- L3: Post-Phenomenology & Technology (Finn Olesen)
- L4: Laboratories and non-human actors in STS (Christopher)
- L5: Computer Ethics (Judith)
- L6: Values in Design (Judith)

Third lecture
(Post)phenomenology

- Away from the positivistic belief that natural science is the only way to obtain truth and towards describing experiences and actions as they appear to us.

- Core concept: Intentionality
  - Experience requires the existence of a relation between the experiencer and what is experienced.
- Heidegger's being in the world:
  - We are always already in the world, we exist in a lifeworld with 3 different kinds of being:
    - Human being/being there (da-sein)
    - Ready-to-hand (verhanden-sein)
    - Present-at-hand (zuhanden-sein)

Don Ihde and Peter-Paul Verbeek

- Technology shapes the way in which reality is present to human beings.
- Both in how they perceive it, but also the frameworks in which they interpret it.

- Two dimensions of perceiving:
  - Micro perception – sensory experience
  - Macro perception – cultural context

- Transformation
  - Low/High contrast - e.g. glasses and telescope.

- 4 ways in which humans relate to technology:
  - Embodied relation
  - Hermeneutic relation
  - Alterity relation
  - Background relation

Course Overview

- L1: Introduction (Vasiliki & Christopher)
- L2: Conceptions of Technology (Vasiliki)
- L3: Post-Phenomenology & Technology (Finn Olesen)
- L4: Laboratories and non-human actors in STS (Christopher)
- L5: Computer Ethics (Judith)
- L6: Values in Design (Judith)

Fourth lecture – Latour

- "Give me a Laboratory and I will raise the World" (1983):
  - Specific effects happen within specific settings (= the laboratory)
  - If you want *x*, then *y*.
    - → "if you wish to solve your anthrax problem you have to pass through my laboratory first." (146) (element of power)
  - *"I insist on these two points: something happens to the bacillus that never happened before"* (146)
  - "He who is able to translate others' interests into his own language carries the day." (144)
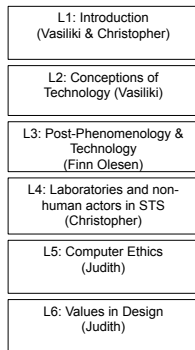

Latour (Actor-Network Theory (ANT))

- A Collective of Humans and Nonhumans (1999):

- The Philosophy of Technology of the Gun:
  - Guns kill people. (Guns are dangerous.) (Gun are things that do/influence/have a tendency *to do* something)
  - No, people kill people. (Guns are neutral.) (Guns are things that *do nothing* in themselves)
  - Latour asks the question: "Which of them, then, the gun or the citizen, is the *actor* in this situation?" (179)
  - Latour's answer: "*Someone else* [is the actor, namely] (a citizen-gun, a gun-citizen)" (179)
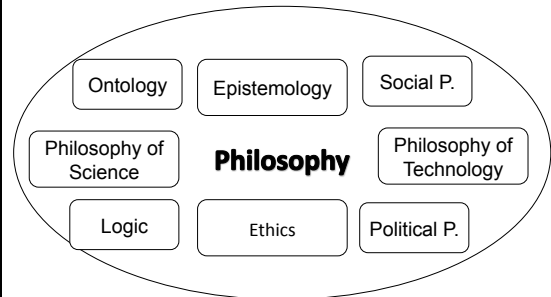

Latour (Actor-Network Theory (ANT))

- A Collective of Humans and Nonhumans (1999):

- If a **human's intent**/a human will 'to kill' uses the gun as an instrument, then the gun does nothing.
- If the "**gun's intent**, the gun's will, the gun's script have superseded those of Agent 1 (human); [then] it is human action that is no more than an intermediary." (178)

- But, Latour argues: Human lives and actions are always *mediated* by things, which are technical.

- Things creates forms of mediation. (see text for types of mediation)
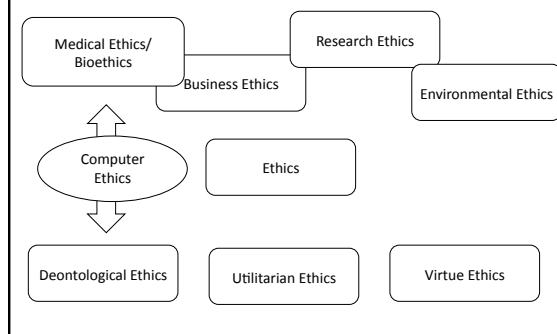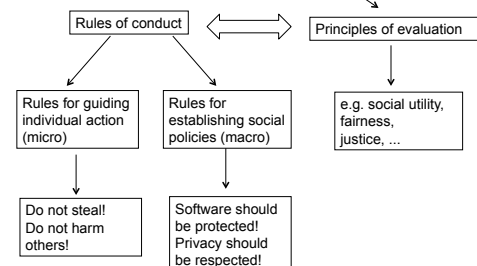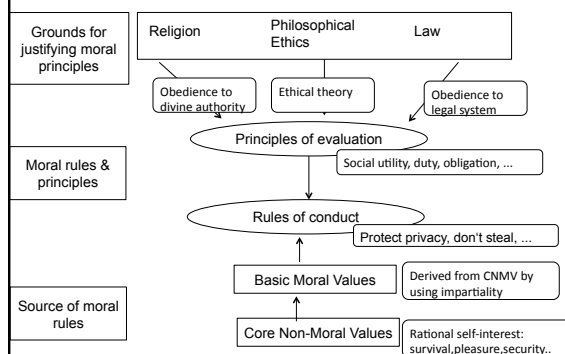- "Technical is a Good Adjective, Technique is a Lousy Noun" (190)

Course Overview

- L1: Introduction (Vasiliki & Christopher)
- L2: Conceptions of Technology (Vasiliki)
- L3: Post-Phenomenology & Technology (Finn Olesen)
- L4: Laboratories and non-human actors in STS (Christopher)
- L5: Computer Ethics (Judith)
- L6: Values in Design (Judith)

Philosophical subdisciplines

Philosophy
- Ontology
- Epistemology
- Social P.
- Philosophy of Science
- Philosophy of Technology
- Logic
- Ethics
- Political P.

Philosophical subdisciplines

- Medical Ethics/ Bioethics
- Research Ethics
- Business Ethics
- Environmental Ethics
- Computer Ethics
- Ethics
- Deontological Ethics
- Utilitarian Ethics
- Virtue Ethics

Tavani: Basic Components Moral System

- Rules of conduct ⟷ Principles of evaluation
- Rules for guiding individual action (micro)
- Rules for establishing social policies (macro)
- e.g. social utility, fairness, justice, ...
- Do not steal! Do not harm others!
- Software should be protected! Privacy should be respected!

Tavani

- Grounds for justifying moral principles
  - Religion
  - Philosophical Ethics
  - Law
  - Obedience to divine authority
  - Ethical theory
  - Obedience to legal system
  - Principles of evaluation
  - Social utility, duty, obligation, ...
- Moral rules & principles
  - Rules of conduct
  - Protect privacy, don't steal, ...
- Source of moral rules
  - Basic Moral Values
  - Derived from CNMV by using impartiality
  - Core Non-Moral Values
  - Rational self-interest: survival, pleasure, security..

Ethical Theories

- Different assessment of cases in different ethical theories:
  - Utilitarianism (Mill & Bentham)
  - Deontological Ethics (Kant)
  - Virtue Ethics (Aristotle)

- Examples: a) same outcome, different reasoning:
  - We should protect privacy, because….
  - We should not steal, because ....

- Examples: b) different outcome:
  - Virtual child pornography is permissable/not permissable

Moor (1985)

- What is computer ethics?
  - Premise: CT as special technology, which raises special ethical issues
  - New capabilities
    - → New choices for action
    - → New/changing values?

- → Policy vacuum: no policies/inadequate policies
- → Conceptual vacuum: e.g. what is a computer programme?

- Role of CE:
  - propose conceptual frameworks for understanding ethical problems involving CT, those frameworks establish facts & enable policy guidelines

Bynum (2008)

- Development of a discipline

  - 1976: Maner's Starter Kit for CE
  - 1985: Johnson's textbook „Computer Ethics"
  - 1985 Moor's seminal article „What is computer ethics?"
  - 1990ies: CE as professional ethics (ACM, IEEE, etc)
  - Since 1990ies:
    - Conferences: Ethicomp, CEPE, IACAP, ...
    - Journals: Ethics in Information Technology, International Review of Information Ethics, ...
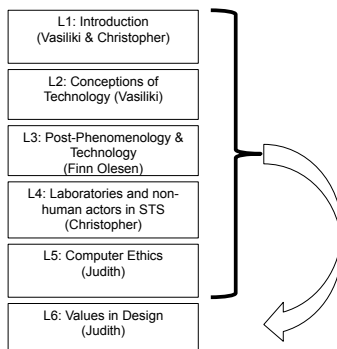
Bynum (2008)

- Example Topics in Computer Ethics
  - Computers in the Workplace: Computers/robots as threat to jobs? New jobs? Different Jobs?
  - Computer Crime: viruses, hacking, malware, issues regarding privacy, integrity, consistency, control/access
  - Privacy and Anonymity: census, tax, military, welfare, health records, ...
  - Intellectual Property: IPR & software ownership, copyright, trade secret, patents → SWU Session 11
  - Professional Responsibility: relations to employers, clients, etc.
  - Globalization: global vs. national laws, global business requirements, global education, digital divides, etc.
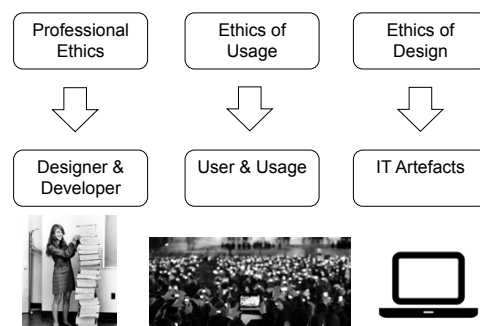 - ...

Course Overview

| L1: Introduction (Vasiliki & Christopher) |
| L2: Conceptions of Technology (Vasiliki) |
| L3: Post-Phenomenology & Technology (Finn Olesen) |
| L4: Laboratories and non-human actors in STS (Christopher) |
| L5: Computer Ethics (Judith) |
| L6: Values in Design (Judith) |

Course Overview

| L1: Introduction (Vasiliki & Christopher) |
| L2: Conceptions of Technology (Vasiliki) |
| L3: Post-Phenomenology & Technology (Finn Olesen) |
| L4: Laboratories and non-human actors in STS (Christopher) |
| L5: Computer Ethics (Judith) |
| L6: Values in Design (Judith) |

What is Computer Ethics?

Professional Ethics	Ethics of Usage	Ethics of Design
Designer & Developer	User & Usage	IT Artefacts

Philip Brey

- Embedded Values Approach

- „The embedded values approach holds that computer systems and software are not morally neutral and that it is possible to identify tendencies in them to promote or demote particular moral values and norms." (p. 42)

→ „Computer ethics should not just study ethical issues in the use of computer technology, but also in the technology itself." (p. 42)

Latour (1992):

Values in Design

Helen Nissenbaum Values in Design

Batya Friedman: Value-sensitive Design

Mary Flanagan: Values at Play

Philip Brey: Disclosive Computer Ethics

Friedman & Nissenbaum (1997)

- Goals
  - identify bias in any given system
  - develop methods of avoiding bias in systems and correcting it when it is identified
- Minimizing bias
  - **Pre-existent:** good understanding of relevant societal biases
  - **Technical:** envision it in a context of use, envision the design etc.
  - **Emergent**: envision not only a system's intended situations of use, but to account for increasingly diverse social contexts of use; anticipate probable contexts of use and design for these; where it is not possible to design for extended contexts of use, designers should attempt to articulate constraints on the appropriate contexts of a system's use.

Flanagan, Nissenbaum & Howe (2008)

Technical Mode

Empirical Mode

Philosophical Mode
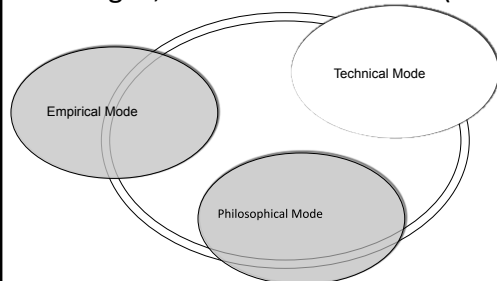
Flanagan, Nissenbaum & Howe (2008)

- Aim: providing one methodological framework for incorporating values during design processes
- Social values are evaluation criteria for software in addition to classical values such as efficiency, reliability, robustness, safety, etc.
- Interdisciplinary efforts needed: social scientists, philosophers & computer scientists working together

Flanagan, Nissenbaum & Howe (2008)
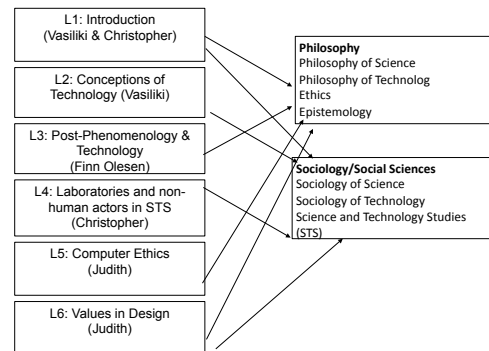
New Value:
Cooperation

New Value:
Trust

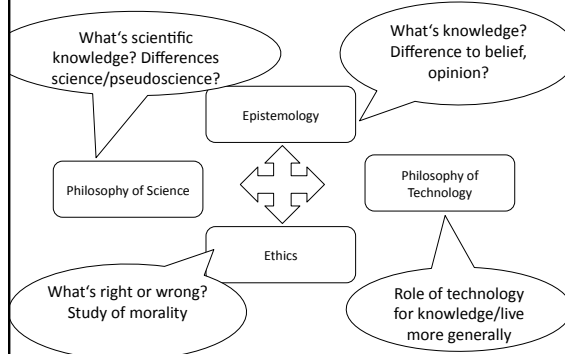---

PART 1: Positioning

A Caveat

- What follows is a strong simplification:
  - The differences and commonalities between and within the different disciplines are more subtle
  - One can't summarize disciplines with up to 3000 years of history within a single powerpoint slide...

- Take this with a grain of salt – it's meant to provide you with some orientation, not with definite classifications!

Course Overview

L1: Introduction
(Vasiliki & Christopher)

L2: Conceptions of
Technology (Vasiliki)

L3: Post-Phenomenology &
Technology
(Finn Olesen)

L4: Laboratories and non-
human actors in STS
(Christopher)

L5: Computer Ethics
(Judith)

L6: Values in Design
(Judith)

Philosophy
Philosophy of Science
Philosophy of Technolog
Ethics
Epistemology

Sociology/Social Sciences
Sociology of Science
Sociology of Technology
Science and Technology Studies
(STS)

Philosophical subdisciplines

What's scientific knowledge? Differences science/pseudoscience?

What's knowledge? Difference to belief, opinion?

Epistemology

Philosophy of Science

Philosophy of Technology

Ethics

What's right or wrong? Study of morality

Role of technology for knowledge/live more generally

Different disciplines & approaches

Philosophy of Science

- Deals with: foundations and methods of science
- Is predominantly a normative endeavour (versus descriptive)
  - It is concerned with how science should work, proposes a rational reconstruction of scientific processes
  - Branches for different sciences: e.g. philosophy of physics, biology, chemistry, psychology, ...
- Important questions (selection):
  - How to distinguish science form pseudoscience? (=demarcation problem)
  - How can you justify scientific knowledge (at all, via induction or deduction)?
  - What is the relationship between science and truth?
  - What is the relationship between theory and observation?
  - ...
- Long tradition in philosophy dating (at least) back to Aristotle
- Prominent approaches: Positivism, Logical Positivism, Popper's principle of falsification, Kuhn's notion of paradigms, Feyerabend etc.

Different disciplines & approaches

- Deals with: nature and effects of technology on knowledge, science, society, etc.

- Important questions & controversies
  - What is technology: artefact, process, …?
  - Is technology neutral?
  - Technological determinism versus social determinism

- Despite early predecessors, rather young philosophical subdiscipline (> 19th century)

- Prominent philosophers of technology:
- Classics: Ernst Kapp, Karls Marx, John Dewey, Martin Heidegger, Herbert Marcuse, Günther Anders, Hannah Arendt
  - Philosophy of technology just as one topic of interest to those philosophers (→ political & social philosophy, etc)
  - Contemporary (post)-phenomenological tradtion: Don Ihde, Peter Paul Verbeek, Lucas Introna

Philosophy of Technology

Different disciplines & approaches

- Deals with good and bad behaviour
- Ethics versus Morality
  - Morality as a code of conduct
  - Ethics as the study of moral values and moral systems
- Morality: defined as system of rules for guiding human conduct & principles for evaluating those rules.
- Purpose: to prevent harm & evils <> promote human flourishing

- Part of philosophy since its onset (> 3000 years of history)

- Numerous ethical branches: medical ethics, bioethics, environmental ethics, business ethics, computer ethics, …

- Prominent ethicists and ethical approaches
  - Aristotle's Virtue Ethics
  - Kant's Deontological Ethics
  - Mill & Bentham's Utilitarianism

Ethics

Different disciplines & approaches

- Deals with: institutions, practices & methods of science as social processes/in society

- Overlap with sociology of (scientific) knowledge, social studies of science

- Is predominantly a descriptive endeavour (versus normative)
  - It is concerned with how science works instead of it should work
- Important issues (selection):
  - How is knowledge being justified (as opposed to whether it can be/how it should be justified
  - Relationship science/society
  - Social processes within science
  - Scientific norms and their appropriation in science
- Comparatively long tradition in sociology dating (at least) back to 1920ies

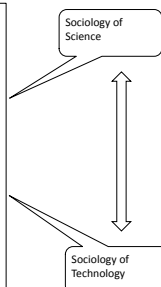- Prominent approaches: Mannheim,Fleck, Merton, Luhmann, Bourdieu, Latour, Knorr-Cetina, Foucault, (Kuhn), etc.

Sociology of Science

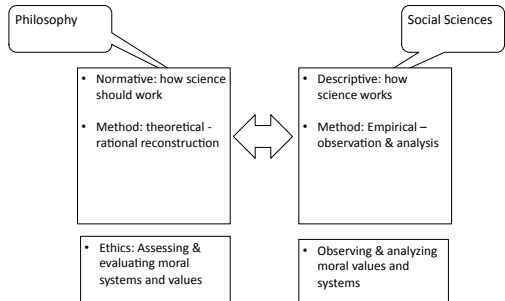---

Different disciplines & approaches

- Deals with: production, design, use of technology, effects of technology on knowledge, science, society,..

- Overlap with Science and Technology Studies (STS)

- Important questions & controversies
  - What is technology: artefact, process, …?
  - Is technology neutral?
  - Technological determinism versus social determinism
  - Agency of artefacts

- Despite earlier predecessors, rather young sociological subdiscipline (>1980ies)

- Prominent scholars: Latour, Winner, Bijker, Callon, MacKenzie, Barad, Haraway, …

Sociology of Technology

Different disciplines & approaches

- Deals with: production, design, use of technology, effects of technology on knowledge, science, society,..

- Overlap with Science and Technology Studies (STS)

- Important questions & controversies
  - What is technology: artefact, process, …?
  - Is technology neutral?
  - Technological determinism versus social determinism
  - Agency of artefacts

- Despite earlier predecessors, rather young sociological subdiscipline (>1980ies)

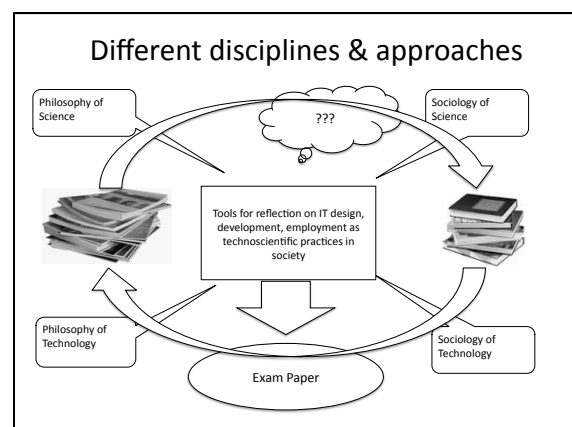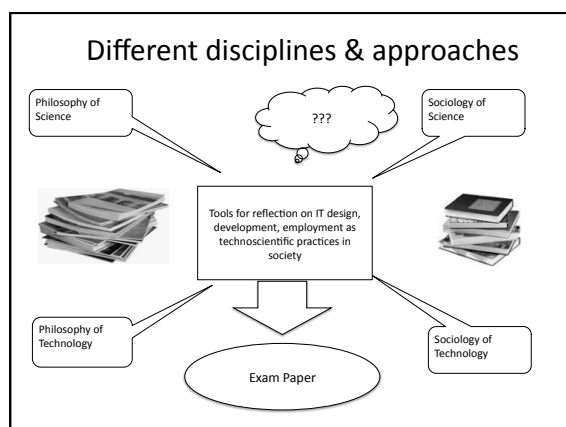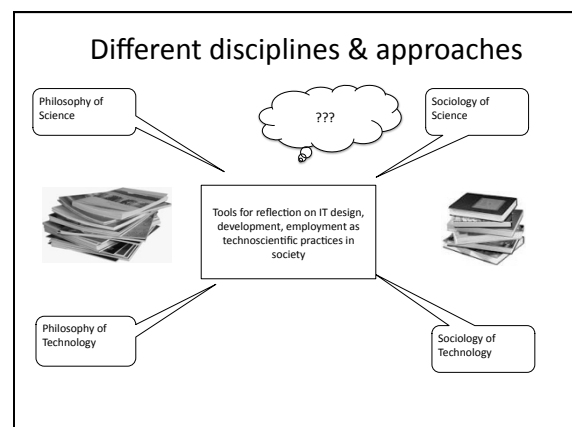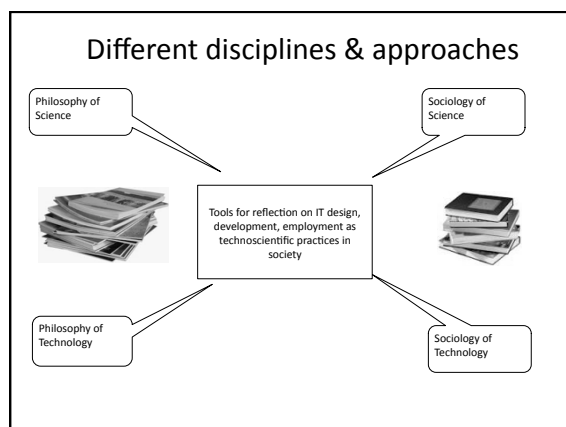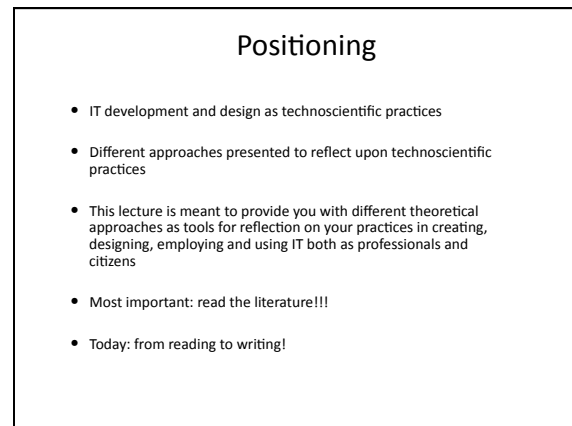- Prominent scholars: Latour, Winner, Bijker, Callon, MacKenzie, Barad, Haraway, …

Sociology of Science

Sociology of Technology

Different disciplines & approaches

Philosophy

- Normative: how science should work

- Method: theoretical - rational reconstruction

- Ethics: Assessing & evaluating moral systems and values

Social Sciences

- Descriptive: how science works

- Method: Empirical – observation & analysis

- Observing & analyzing moral values and systems

Different disciplines & approaches

Philosophy of Science

Sociology of Science

Ethics

Tools for reflection on IT design, development, employment as technoscientific practices in society

Philosophy of Technology

Sociology of Technology

Positioning

- IT development and design as technoscientific practices

- Different approaches presented to reflect upon technoscientific practices

- This lecture is meant to provide you with different theoretical approaches as tools for reflection on your practices in creating, designing, employing and using IT both as professionals and citizens

- Most important: read the literature!!!

- Today: from reading to writing!

Different disciplines & approaches

Philosophy of Science

Sociology of Science

Tools for reflection on IT design, development, employment as technoscientific practices in society

Philosophy of Technology

Sociology of Technology

Different disciplines & approaches

Philosophy of Science

???

Sociology of Science

Tools for reflection on IT design, development, employment as technoscientific practices in society

Philosophy of Technology

Sociology of Technology

Different disciplines & approaches

Philosophy of Science

???

Sociology of Science

Tools for reflection on IT design, development, employment as technoscientific practices in society

Philosophy of Technology

Sociology of Technology

Exam Paper

Different disciplines & approaches

Philosophy of Science

???

Sociology of Science

Tools for reflection on IT design, development, employment as technoscientific practices in society

Philosophy of Technology

Sociology of Technology

Exam Paper

PART 2: Formalities (Anton)

Learning Goals & Expectations

• Identify and account for key positions in the Philosophy of Science

• Account for relevant theoretical perspectives on technology with a particular emphasis on the interactions between IT, the general BA subject area, and the broader context

• Identify and analyze a problem of interest that touches upon the relationships between IT and its context (may it be of political, ethical, philosophical, historical or societal nature)

• Present relevant concepts from the curriculum accurately, and critically use these concepts in an investigation of the selected problem

Source: Course Base

Formal Requirements

- Individual papers with 10-12 pages, 7-scale grading, external censor
- Ca. 2400 characters per page (24000-28800)
  – including spaces, footnotes & endnotes
  – Excluding
    • Standard ITU front page
    • List of contents
    • Reference/Bibliography
- Electronic hand-in via LearnIT
  – Deadline: May 27th 2016

IT UNIVERSITY OF COPENHAGEN

SUBMISSION OF WRITTEN WORK

Class code:
Name of course:
Course manager:
Course e-portfolio:

Thesis or project title:
Supervisor:

Full Name: Birthdate (dd/mm-yyyy): E-mail

Format

- A4, 12 points, Times New Roman, line spacing 1.5

- Page numbers at the bottom

- Use titles and subtitles for each section (maximum of 2 levels – e.g. 5., 5.1, not 5.1.1)

Sørensen: This is not an article

- The article is a documentation and communication of your research results.
- Sørensen's (2002) lessons on how to write an article and comments from our side.

1. You need a good excuse to take a stand

- Think of articles as pieces in a big jig-saw puzzle. One of the most important aspects of research is adding and relating to an existing body of knowledge. Your good excuse to take a stand is either a body of theoretical or empirical work — or both
- Types of papers not to write:

The "great idea" paper	"I have just had this great idea! I do not know if anyone else has ever had the same idea, because I've not checked, and I'm rather new in this field. Anyway, my idea is brilliant, so I really would like to share it with you all."
The "other peoples ideas" paper	"I have just read this great book that I really like a lot. I'll just give you a short resume of the interesting points in the book."
The "software hacker" pa-per	"I have just built this great computer system. It is not based on previous theories or empirical findings. I am not very theoretical myself, but the system has a lot of fantastic features, and the interface is really neat."
The "theory hacker" paper	"I have come up with this theory; conceptual framework; model. It is not related to other theories; conceptual frameworks; models, or any empirical data for that matter. Most of the concepts have been defined differently by all the big shots in the field, but I just do not like their categories so I have invented my own."
The "multiple point" paper	"I have just completed a major research effort where I did a lot of interesting things. I think that you could learn a lot by reading this paper describing all aspects of my work."

2. Keep it simpel

- Only one point per article
  - Easier to state than to live by
  - If your article has more points, it has more to defend.

3. Essential questions to ask yourself

- What is the problem domain?
- What is the problem?
- What is the research approach?
- What have others done?
- What are the results?

4. Being a copycat can pay off

- Select a couple of brilliant papers in your field and study how they are structured, how the main point is presented, how the line of argument is laid out, etc. You can learn a lot from copying the structures of abstracts and the article as a whole.

5. Earn your right to deviate from the norm

- If you decide to deviate from the norm, your style and argument must be very clear.
- Present results in a way that makes it as easy as possible for the reader to read.

6. How to avoid writing several articles in one

- When creating a program it only has one purpose, not several.

7. Ideal versus real writing

- Ideal scenario is top-down and linear:
  – Title -> abstract -> introduction -> theoretical framework –> discussion -> conclusion

- Nobody writes like this and it may inhibit your writing process. In reality writing is messy.
- -> free writing exercise

Exercise 1: Freewriting

- Write down your tentative research question
- Start writing on that topic without putting down the pen for 7 minutes
- Just don't stop – if nothing comes to your mind at all, write lalalal or whatever

---

8. Polish packaging and content

- It is important to put effort into polishing the article so that it is readable.
- A good paper has been revised a lot.

---

9. Writing and Reviewing are Two Sides of the Same Coin

- Gopen and Swan (1990): "If the reader is to grasp what the writer means, the writer must understand what the reader needs."
- Research communities rely to a high degree on peer reviews as their major quality control instrument.

Kill your darlings!

Key Points about Exam Paper

- A paper has a main research question and a clear and logical argument

- It has a theoretical focus and refers to the relevant literature

- It demonstrates that you have an understanding of the chosen topic and are able to engage in a discussion or debate about it

- It features a solid conclusion that you are able to defend

- An essay has a beginning (introduction), middle (theoretical framework + discussion), and end (conclusion)

PART 3: Literature (Joachim)

Where to look?

Sources
- KB.dk (Live demonstration)
- Philpapers.org
- scholar.google.com
- Jstor.org
- Stanford Encyclopedia of Philosophy (web-based, free)
- Journals:
  - *Philosophy of Technology*
  - *Ethics and Information Technology*
  - *International Review of Information Ethics*
  - *Journal of Information, Communication and Ethics in Society*
  - *International Journal of Technoethics*

STS-related Journals

- Journals:
  - *Social Studies of Science*
  - *Science, Technology, and Human Values*
  - *New Media & Society*
  - *Technology and Culture*
  - *Technology in Society*
  - *Big Data & Society*
  - *Futures*
  - *Information, Communication & Society*

- List of STS-related journals:
  http://www.4sonline.org/resources/21
  –

What do I need to know?

- The context of the article
- The discussion it is a part of
- Identifiy its main argument and point
  - ("The purpose of the paper is…")
- Highlight what you need from the paper *for your own purpose*

What do I need to cite or reference?

- Use citations in your paper:
  - Introduce main point, then cite and then explain.
- Example:
  - 1. **Introduce:** Issue/main point
  - 2. **Cite**: Moore argues for "non-normative control-based definitions of privacy." (2010: 17)
  - 3. **Explanation:** It is non-normative because … It is control-based because… This means …"

- When do I make a reference and when do I cite?
- Reference: "It has been argued that privacy is a crucial value for liberal democracies to function (Moore 2010)."

Bibliography (Litteraturliste)

- Alphabetic list of the references and literature you have used.
- ARTICLE: *Author,* (year). "Title". In *Journal* or *Book*. Editor. City: Publisher: page numbers.

Akerlof, George A. (1970) "The Market for "Lemons": Quality Uncertainty and the Market Mechanism." in *The Quarterly Journal of Economics* vol. 84. no. 3: pp. 488-500.

Backhouse, Roger E. (2002) "Economic Models and Reality: The Role of Informal Scientific Methods." in *Fact and Fiction in Economics: Models, Realism and Social Construction*. Ed. Uskali Mäki. Cambridge: Cambridge University Press: pp. 202-13.

- BOOK: *Author,* (year). *Book title*. Editor. Publisher.

Hesse, Mary B. (1966) *Models and Analogies in Science*. Notre Dame, IN: University of Notre Dame.

References

You can use in-text references or footnote references:

In-text:
- As such, models are "valued for their performance and their results or output." (Knuuttila 2009: 223)
- In light of this, Paul Teller (2009: 245f) makes a sensible differentiation between …

(Author year: page) – Author (year: page)

Footnote:
- The reference goes in the footnote: "Turing 1950: 441"

General rule: Be consistent

Online-references

Name (Year). "Article"/"Chapter". In *Online Journal* or *Book*. Publisher. Date of Access, URL = <*x*>.

Boehm, Gottfried (2011). "Ikonische Differenz." In *Rheinsprung 11 – Zeitschrift Für Bildkritik 1*: pp. 170-78. Accessed 4 Jan. 2015. URL = <https://rheinsprung11.unibas.ch/fileadmin/ documents/Edition_PDF/Ausgabe1/glossar-boehm.pdf>.

Adriaans, Pieter (2013). "Information", In *The Stanford Encyclopedia of Philosophy*. Ed. Edward N. Zalta (ed.), Accessed 10 March 2016. URL = <http://plato.stanford.edu/ archives/fall2013/entries/information/>.

General rule: Make sure the reader of your essay can find the exact literature you have used.

Therefore always add information about the editor, date for article published (e.g. Published the 4 March 2016, Accessed 10 March 2016), edition, page, publisher etc.

Long citations

• Quotes longer than two-three lines should stand on their own, e.g.:

The point is that one can be an ontological realist about models while parts of the model can remain blatantly false or serve other non-truth purposes, for example modifications of the model for purposes of comprehensibility. The localisation of the pragmatic functions within a model can thus be seen as the attempt to more precisely locate the place of truth in models. Mäki's definition of a model is as follows:

Agent A uses object M (the model) as a representative of target system R for purpose P; addressing audience E; at least potentially prompting genuine issues of resemblance between M and R to arise; describing M and drawing inferences about M and R in terms of one or more model descriptions D; and applies commentary C to *identify the above elements and to align them with one another*. (Mäki 2010: 179) [my emphasis]

We address some of these points in the article (e.g. the pragmatic constraints, P and E, and the ontological constraints, M should genuinely resemble R).

Exercise 2: Literature

- Do some research regarding your reseach questions and topics
- Use some of the journals/resources mentioned before
- Take notes & save references for potentially useful papers, books, articles, etc
- Make notes about topics to be still researched further
- Produce reference for 1 book and 1 article

Exercise 3: Tell your neighbour

- Partner up with your neighbour
- Tell her/him what you are interested in
- He/She takes notes and asks questions
- He/she will give you the notes and explain what they've written down
- Keep their notes as potential input for the further development of your essay

- Switch tasks – now the talker takes notes, etc

PART 4: Structure (Anton)

Structure

1. Abstract
   - Short and precise summary of what your essay is about and what your findings are.
2. Introduction
   - The purpose of this paper is…
   - Research question
3. Theoretical framework / literature review
   - Explain your choosen theory and concepts
4. Discussion
   - Compare and discuss your theory and case
5. Conclusion

Not mandatory, but can be used as a guide/inspiration/reliance

Exercise 4: Structuring

- Read through the material gathered today
- Make a tentative structure for your essay
- Use the guidelines provided before
- Figure out what is missing
- Make a plan how to fill the missing spots

Exercise 5: Freewriting II

- Sit down again and write another 10 minutes non-stop on your research question
- Again: don't stop – if nothing comes to your mind at all, write "lalalala" or whatever
- Keep your material for further writing

Some ideas on style

- Everything should be written as simple as possible, but not simpler.
- Remember to make your premises explicit
- If a word can be left out, while keeping the meaning of the sentence, leave it out.
- Generally use formal language, rather than informal terms
- Write as clearly and econmically as possible.
- Use your concepts consistently, and if the concept may be ambigous provide a clarification.
- Reserve time for proofreading, grammatical corrections and style-revisions.

Exercise 6: Revising

- Read through the material once more carefully
- Can you use some of it?
- Can you structure it?
- What's missing?
- How can you fill the blank spots?
- What literature do you need?

Individual Feedback

Thank you for today!

Freewriting

- Write down your tentative research question
- Start writing on that topic without putting down the pen for 7 minutes
- Just don't stop – if nothing comes to your mind at all, write lalalal or whatever

Tell your neighbour

- Partner up with your neighbour
- Tell her/him what you are interested in
- He/She takes notes and asks questions
- He/she will give you the notes and explain what they've written down
- Keep their notes as potential input for the further development of your essay

- Switch tasks – now the talker takes notes, etc