

# Methods in Philosophical and Critical Thinking

Instructor:  
Carlo Martini

T.A.:  
Rami Koskinen

## 01.INTRODUCTION



## **Why philosophical and critical thinking?**

- “The method of philosophical inquiry is problematization, explication and argumentation.” Ilkka Niiniluoto (translated)
- Philosophy as meta-science
  - Target of inquiry: valid inference
- Philosophical argumentation requires some specific tools of thought

# What we will study in this class

Schedule of classes & list of required readings		
1. Introduction	OPTIONAL READINGS: Copi et al., <i>Introduction to Logic</i> – Chapter 1 Moore and Parker <i>Critical Thinking</i> – Chapter 1	March 10, 2015
2. Analyzing Arguments	Copi et al., <i>Introduction to Logic</i> – Chapter 2 Exercises 1 (Arguments): March 16, 2015	March 12, 2015
3. Formal Logic – The Propositional Calculus	Lemmon, <i>Beginning Logic</i> – Chapter 1	March 17, 2015
4. Formal Logic – The Predicate Calculus	Lemmon, <i>Beginning Logic</i> – Chapter 3 Exercises 2 (Proofs): March 23, 2015	March 19, 2015
5. Logical Form and Language	Stanford Encyclopedia of Philosophy: Logical Forms	March 24, 2015
6. Fallacies and Biases	Copi et al., <i>Introduction to Logic</i> – Chapter 4 Exercises 3 (Fallacies): April 13, 2015	March 26, 2015
7. Fallacies and Biases: – Applications	OPTIONAL READINGS: Baron, J., <i>Thinking and Deciding</i> – Chapters 1 and 2.	March 31, 2015
8. Reflective Equilibrium and Intuitions	Daniels, N., 'Wide Reflective Equilibrium and Theory Acceptance in Ethics' Knobe, J., 'Experimental Philosophy'	April 02, 2015
9. Thought Experiments	Hjggqvist, S., <i>Thought Experiments in Philosophy</i> – Chapters 5,8,9	April 07, 2015
10. Formal Logic – Modality	Girle, R., <i>Modal Logics and Philosophy</i> – Chapters 1,2,3 Exercises 3 (Fallacies): April 13, 2015	April 09, 2015
11. Causal Reasoning	Copi et al., <i>Introduction to Logic</i> – Chapter 12	April 14, 2015
12. Probability	Hacking, J., <i>An Introduction to Probability and Inductive Logic</i> – Chapters 3 and 4 Exercises 4 (Analyzing Arguments): April 20, 2015	April 16, 2015
13. Fallacies of Probability	Hacking, J., <i>An Introduction to Probability and Inductive Logic</i> – Chapters 5 and 6 Exercises 5 (Probability): April 23, 2015	April 21, 2015
14. Game Theory	Binmore, K., <i>Game Theory. A Very Short Introduction</i> – Chapters 1 and 2 Exercises 6 (Recap): April 27, 2015	April 28
15. Exam		April 30

## What is an argument?

- An argument consists of assumptions, premises and conclusions
- The goal of an argument is to convince the hearer of the fact that if she accepts the premises, if she is to be rational, she must also accept the conclusion.
- The claim/conclusion = what is to be accepted
- Premises = things/factors on which acceptance is/should/has to be based on.
- (Background) Assumptions = Claims that have to be accepted in addition to the premises for there to be a legitimate argumentative connection between the premises and the conclusion

## Principle of charity

- Interpretation is always based on the assumption that speaker/writing is rational, has reasonable beliefs and that he has produced the text/talk for some purpose in mind.
- This is not an attitude based on politeness, but rather a general prerequisite of successful communication: only by assuming that the recipient follows the principle of charity can the writer/speaker rely on the fact that, in principle, the recipient can understand what the speaker is after.
- In argumentation analysis PoC implies that you should reconstruct the argument to be as strong as possible.
- It does not follow, however, that you should make the argument rational at any cost. PoC simply implies that interpreting the text as contradictory requires strong grounds. This strategy of a interpretation cannot be the norm.
- Understanding beliefs does not entail their acceptance!
- CoP also does not imply that you should challenge arguments based on their strong points alone.

## Locating the argument

- The biggest challenge in argument evaluation is to locate the argument
- To find the claim, the premises and the assumptions of an argument, one often has to consider:
  - Style or genre of the text?
  - What is the target audience?
  - What is the larger context?

## Contextuality

- We cannot know what an argument is about, if we do not first know the relevant context-dependent background assumptions.
- Superficially identical arguments can, in principle, be different arguments, depending on their context.
- The same premises can support different, even contradictory conclusions if the background assumptions are different.
- How do we know the context?
  - Common sense
  - Additional information (not always possible in writing)
  - Study of the language

## **Argument Analysis**

1. Find the main claim/conclusion and the immediate grounds for its acceptance.
2. Figure out the meaning of the main claim/conclusion and its grounds.
3. Find the other claims/conclusions and their grounds. Clarify.
4. Trace the relations between these “sub-arguments”
5. Find the hidden background assumptions and bring them out until all other background assumptions can be considered trivial.

## Identifying the Main Claim

- Often not easy.
- Argumentative text often has many obvious claims
- The main claim is not necessarily explicitly shown.
- The other parts of the argument is to support the main claim by providing grounds, explicating, commenting, explaining meaning, repeating etc. for the main claim.
- Some verbal identifiers for claims:
  - Thus, Therefore
  - From which we can infer
  - It follows that
  - So
  - Clearly/Obviously (strangely common)

## Identifying the premises

- Premises provide answers for the question: “Why Should I accept X?”
- Some verbal identifiers:
  - Because...
  - Due to...
  - For the reason that...
  - Follows from...
  - First, second...
  - Since...

## Identifying the premises

- Therefore/test for “Is X a ground for Y?”
- If “If X, therefore Y” seems to have the same meaning as the initial expression, then X is at least intended for a ground for Y.
- Examples:
  - The streets are very slippery. Lari should not drive a bicycle.
  - \*The streets are very slippery, therefore Lari should not drive a bicycle.
  - \*Lari should not drive a bicycle, therefore the street are very slippery.

## Premises and explanations

- Explanation takes the claim as granted and answers *why* and *what* questions in a way that makes the truth of the claim *understandable*.
- The purpose of a premise is to make the claim acceptable or believable. Premises answer the question: *why should I believe/do X?*
- Compare: “My car won’t start because there is something wrong with the spark plugs” and “There must be something wrong with the spark plugs since my car won’t start”

# Grounds and explanations

	Argument	Explanation	Description
<b>Parts</b>	1. Claim 2. Grounds/Premises 3. Background assumptions	1. Explanandum (what is to be explained) 2. Explanans (what explains) 3. Background assumptions	Claim
<b>Answers the question</b>	Why should the claim be accepted?	Why something happened/is someway/?	What is something like?
<b>Task/purpose</b>	Provide support for the claim	Make understandable	To describe

## Identifying Background Assumptions

- Background assumptions form the connection between the grounds and the claim.
- They answer the question: “Why do the grounds support the claim?”
- “Mary can not be a team leader, because she has not even worked a year”
  - Ground/reason: First year employees can not be team leaders (and Mary is...).
- Background assumption 1: first-year employees don't have the experience.
- Background assumption 2: people without the experience can/should not be made team leaders

## Identifying Background Assumptions

- An argumentative text never explicitly shows all of its background assumptions. This is why argument analysis always uses reconstruction and this requires the use of the PoC, imagination and logic.
- Often people just don't mention the background assumptions. Sometimes they are not aware of them and sometimes they are intentionally left out.
- What does it mean that there is a connection between the claim and the grounds/premises?
- Guideline: background assumptions should connect the claim and the grounds so that the claim would *logically follow* from the grounds.
- **Central question** for finding background assumptions: What has to be accepted for the claim to follow logically from the grounds?
- The claim can always follow from the grounds in multiple ways. PoC entails that this be done by the most reasonable way possible: I.e. in terms of internal consistency and believability.