



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Philosophy of Social Science

2526-2-E4001N095

Learning objectives

Introducing:

- a) a minimal set of basic logical-epistemological tools;
- b) The basic notions involved in counterfactual causal analysis.

Primary aim of this class is not the acquisition of some practical skills but the acquisition of philosophical knowledges and methods which are fundamental to understanding issues on causation in the social sciences. Obviously all the skills involved in this task are practiced, such as critical thinking, foundational analysis, complexity awareness, ecc. Likely, learning outcomes are a theoretical skill, i.e. a reflexive attitude towards causal ascriptions grounded on the awareness of the risks of fallacies in causal reasoning.

Discussion of complex examples and case studies will improve critical awareness, communication skills, and learning skills

Knowledge and understanding

knowledge of the basic problems of causal analysis

understanding of complexity and the problematic nature of every possible solution to these problems

Applying knowledge and understanding

Ability to identify basic problems of philosophy of causation to concrete examples and to apply alternative solution to these problems-

Making judgements

Ability to identify fallacies of causal reasoning and prevent them..

Communication skills

Mastering of the technical vocabulary and application to case studies.

6. Learning skills

Ability to follow the perspective developments of philosophical debate on causation.

Contents

Part one of the class presents the basic tools to be employed in epistemological and methodological analysis: mainly, the basic logical notions and the basic rules of inductive and deductive reasoning.

The second part applies these tools to the philosophical analysis of the counterfactual theory of causality as presented by David Lewis in his main essays on the topic.

As is well known, causal analysis is an essential part of scientific endeavor and also of the solution of practical problems in everyday life. The course seeks to clarify the more general concepts and problems that form the background of this type of analysis, then focusing on the philosophical part of the theory most widely accepted today: the counterfactual theory of causation.

Detailed program

Part one: what is a deductive inference; formal rules of inference; connectives (and, or, if-then, etc.); quantification and quantifiers; Inductive and abductive reasoning; order theory (sketch).

Part two: regularity vs counterfactual theory of causation; truth of a counterfactual; counterfactual dependence of sentences; causal dependence of events; causal dependence and causality; backward counterfactual and backward causation; Reversibility

Prerequisites

None

Teaching methods

The class amount to 21 two hours lessons (42 hours).

All of them are theoretical lessons, although all of them will be concluded with an interactive discussion of the issues presented.

6 two-hours-lessons will be online lessons.

Assessment methods

Student answer to some close ended questions concerning first part are discussed preliminarily. Then, an extended discussion of issues concerning second part takes place.

There are no ongoing assessment as the teacher will carefully test students understanding during lessons.

Understanding of complexity of causal ascription is evaluated according to the following criteria:

1. Pertinency of the answers to questions
2. Clarity and consequentiality
3. Terminological precision
4. Completeness and text comprehension
5. Depth of issue understanding and originality.

Criteria are in a priority ranking and each is a necessary condition of the following ones. E.g. If the answer is non relevant at all, clarity and logical consequentiality (as much as anything else) cannot be tested.

Textbooks and Reading Materials

1. All powerpoints and other files available online at the end of the course.
2. Lewis, D., "Causation", *The Journal of Philosophy*, Vol. 70, No. 17, Seventieth Annual Meeting of the American Philosophical Association Eastern Division (Oct. 11, 1973), pp. 556-567.
3. Lewis, D., "Causation as influence", *Journal of philosophy* vol. 97 (4):182-197 (2000)

Suggested readings:

<https://plato.stanford.edu/entries/causation-counterfactual/>

<https://plato.stanford.edu/entries/david-lewis/> (only 3.1, 3.2, 3.3, 5.2).

Sustainable Development Goals
