Phil 98 Logical Empiricism syllabus

Doug Blue
blue@g.harvard.edu
Emerson 005

1 Course Information

The Vienna Circle—a group of philosophers, scientists, and mathematicians who met regularly in cafés in the Austrian capital to discuss the philosophical foundations of the sciences—inherited and transformed a conception of *a priori* knowledge from Kant by way of Bolzano and others. Committed to empiricism, and using mathematical logic, the Circle—the original logical empiricists/positivists—developed theories of meaning and ontology which eschewed speculative metaphysics for the purposes of elucidating scientific concepts. This course will explore the evolution of logical positivism from its historical roots through the Carnap-Quine debate of the mid-twentieth century.

Philosophy is often criticized for being disengaged from—and hence irrelevant to—scientific thought. We will see through our study of logical empiricism what philosophical engagement with the sciences looks like.

Required Text

The Semantic Tradition from Kant to Carnap: To the Vienna Station by J. Alberto Coffa. Cambridge, 1991.

Recommended Texts

Logical Positivism, ed. A. J. Ayer. Free Press, 1959.

Dynamics of Reason by Michael Friedman. CSLI, 2001.

Reconsidering Logical Positivism by Michael Friedman. Cambridge, 1999.

Exact Thinking in Demented Times by Karl Sigmund. Basic Books, 2017.

Course Requirements The course will use Dustin Locke's Levels System. You start at Level 1 in the following rubric and advance to Level 2 by getting a "Complete" grade on the Level 1 assignment, and so on.

(**Level 1**) Insufficient Progress=F, Almost=F, Complete=F

(**Level 2**) Insufficient Progress=D, Almost=C-, Complete=C

(**Level 3**) Insufficient Progress=C+, Almost=B-, Complete=B

(**Level 4**) Insufficient Progress=B+, Almost=A-, Complete=A

You have **seven** opportunities to progress through the four levels, which consist of the following assignments:

Level 1 is a three-page paper,

Level 2 is a six-page paper,

Level 3 is a 10-minute in-class presentation on either (i) the logical positivist interpretation of a philosophical topic or (ii) a criticism of logical empiricism,

Level 4 is a six-page paper.

Your final course grade is determined by **in class participation** (10%) and your **level grade** (90%), the grade you get at whichever level you end up on before you run out of attempts.

2 Tentative Schedule

(* indicates required reading)

Sept. 9 Introduction & Kant

Ayer, Introduction

Sept. 16 Attacks on Kantian Intuition

*Coffa, Ch. 1-3

Kant, *Critique of Pure Reason*, Preface to Second Edition and Introduction (esp. §IV-VI)

Kant, *Prolegomena to Any Future Metaphysics*, "Cognition" and "The Main Transcendental Question, First Part"

Sept. 23 The Logicists on Meaning

Coffa, Ch. 4-6

Frege, *Begriffsschrift*

*Frege, *Foundations of Arithmetic* §1-3, 17, 87-89

*Frege, "On Sense and Reference"

Russell, "Logical atomism," in the Ayer volume

*Russell, "On Denoting"

Sept. 30 The Foundational Crisis & Poincaré's Conventions

*Coffa, Ch. 7

Coffa, Ch. 8

Friedman, "Poincaré's Conventionalism and the Logical Positivists"

*Poincaré, *Science and Hypothesis* Ch. 3-5

Oct. 7 Logical Empiricism I: Relativity Theory & the Apriori

Coffa, Ch. 9

*Coffa, Ch. 10

*Reichenbach, *The Theory of Relativity and a Priori Knowledge* Ch. I, IV-VII

Schlick, "Critical or empiricist interpretation of modern physics?"

Oct. 14 No Class (University Holiday)

Oct. 21 Logical Empiricism II: Meaning & Metaphysics

*Carnap, "The Elimination of Metaphysics through Logical Analysis of Meaning," in the Ayer volume

*Carnap, *Pseudoproblems in Philosophy*

Coffa, Ch. 11-12

*Schlick, "The Turning Point in Philosophy," in the Ayer volume

Oct. 28 Logical Empiricism III: Unity of Science

*Carnap, "Logical Foundations of the Unity of Science"

*Carnap, "Testability and Meaning"

Coffa, Ch. 13-15, 18-19

*Neurath, "Protocol Sentences," in the Ayer volume

Nov. 4 *Logical Syntax* & the Principle of Tolerance

*Carnap, "From Epistemology to Logic of Science"

*Carnap, "What is Logical Syntax?"

*Carnap, "The Task of the Logic of Science"

Carnap, *Logical Syntax of Language*, Part V. A. On the Form of the Sentences Belonging to the Logic of Science

Coffa, Ch. 16-17

Friedman, "Tolerance and analyticity in Carnap's philosophy of mathematics," in *Reconsidering Logical Positivism*

Gödel, "Is mathematics syntax of language?"

*Quine, "Lecture on Carnap I"

Nov. 11 Presentations

Nov. 18 The Carnap-Quine Debate

*Carnap, "Empiricism, semantics and ontology"

*Quine, "On What There Is"

Quine, "Carnap and Logical Truth"

*Quine, "On Carnap's Views on Ontology"

Nov. 25 Carnap-Quine Continued

*Carnap, "Meaning and Synonymy in Natural Languages"

*Quine, "Two Dogmas of Empiricism"

*Quine, "The Scope and Language of Science"

Ricketts, "From Tolerance to Reciprocal Containment"

Dec. 2 Denouement

*Stein, "Was Carnap entirely wrong, after all?"