## Philosophy of Logic

Fall 2010 - Winter 2011 (final)

Our goal over these two quarters is to think through a series of positions on the nature of logical truth. Our central focus will be on the relevant versions of the most fundamental metaphysical and epistemological questions that arise for any domain: what is the ground of logical truth? (what makes logical truths true?), and how do we come to know these truths? Along the way, we'll run into related questions more peculiar to logic: is it necessary or contingent? is it empirical or a priori? is it normative? and even, in some cases, how is it possible to think illogically?

I have in mind here only the most elementary of logical truths -if it's either red or green and it's not red, then it must be green -- or the simplest of logical validities -- any situation in which all men are mortal and Socrates is a man is a situation in which Socrates is mortal.

The default requirement for those taking the course for a grade (other than S/U) is three short papers (750-1250 words) due at the beginning of class in the  $4^{th}$  week,  $7^{th}$  week, and  $10^{th}$  week. Each paper should isolate one localized point in the readings and offer some analysis and/or critique. (I'm happy to discuss topics and/or read drafts ahead of time, in person or by e-mail.) Other options are open to negotiation.

I assume everyone has access to copies of:

Frege, The Frege Reader. Kant, Critique of Pure Reason. Wittgenstein, Tractatus Logico-Philosophicus.

Philosophical Investigations.

There's a new, revised translation of the *Investigations* that stands to become the standard; the relatively new Guyer-Woods translation of the *Critique* has already done so (see the bibliography below). For introductory guides, you might consider Gardner's on the Critique, Morris's or White's on the Tractatus, and McGinn's and/or Stern's on the Investigations.

The rest of the assigned readings are available to enrolled students on the course EEE web page. Books marked with an asterisk in the Bibliography are on reserve for the course in Langston Library.

Please come to the first meeting prepared to discuss the Descartes reading in Topic 1.

## Topics

### 1. Descartes

Descartes, Letter to Mersenne, 15 April 1630, p. 23. Letter to Mersenne, 6 May 1630. Letter to Mersenne, 27 May 1630.

First and third meditations.
Fifth set of objections, p. 221.
Fifth set of replies, p. 261.
Sixth set of objections, ##6, 8, p. 281.
Sixth set of replies, pp. 291-2, 293-4.

Letter to Mesland, 2 May 1644, p. 235. Letter to Arnauld, 29 July 1648, pp. 358-9. Letter to More, 5 February 1649, p. 363.

Frankfurt, 'Descartes on the creation of eternal truths'.

Wilson, Descartes, §§I.7, III.3, III.5.

Extra reading:

Curley, 'Descartes on the creation of eternal truths'.

Van Cleve, 'Descartes and the destruction of the eternal truths'.

# 2. Kant I

Kant, Critique of Pure Reason, A50-83/B74-116, A298-309/B355-366, A712-738/B740-766.

Maddy, Second Philosophy, §III.2.

Extra reading:

Maddy, Second Philosophy, SI.4.

(The extra selection from *Second Philosophy* is an introduction to Kant with comparisons to Second Philosophy. As noted above, a good book-length introduction is Gardiner's *Kant and the Critique of Pure Reason.*)

3. Kant II

Longuenesse, 'Kant on a priori concepts', §§I-V.2.

Tolley, 'Kant on the nature of the logical laws'.

4. Frege I

Longuenesse, 'Kant on a priori concepts', §V.3.

5. Frege II

Next we'll be reading Wittgenstein's *Tractatus* over a period of five weeks. There won't be many pages of assigned reading for the first two sessions, but you'll need the extra time to ponder and to dip into some of the standard secondary sources.

Introductions:

Anscombe, An Introduction to Wittgenstein's Tractatus. Black, A Companion to Wittgenstein's Tractatus. Fogelin, Wittgenstein. Griffin, Wittgenstein's Logical Atomism. Morris, Wittgenstein and the Tractatus. Mounce, Wittgenstein's Tractatus: an Introduction. Stenius, Wittgenstein's Tractatus. White, Wittgenstein's Tractatus Logico-Philosophicus. Anscombe is a classic. Black is especially helpful for his lineby-line readings and the references he provides. Mounce is the most elementary. Morris and White are recent and accessible. Another useful resource, not yet in print is:

Richter, Wittgenstein's Tractatus: a Student Edition.

A few more advanced treatments:

Hacker, Insight and Illusion. McGinn, Elucidating the Tractatus. Pears, The False Prison, volume I.

6. Tractatus I: Ontology and the Picture Theory

Wittgenstein, Tractatus, Preface and 1-3.42.

We'll touch on many of the obvious questions raised by this material -- e.g. how do objects stick together into facts? -- but a hard one you might ponder ahead of time is: why must there be simple objects (or names)?

7. Tractatus II: Propositions and Logic

Wittgenstein, Tractatus, 3.5-5.143.

See if you can figure out why the form of representation can't be represented.

8. Tractatus III: More logic

Wittgenstein, Tractatus, 5.2-5.5571, 6.1-6.13, 6.3, 6.375-6.3751.

This time, we'll circle back and think about how the word-world connections are set up.

(Ishiguro, 'Use and reference of names'.)

Goldfarb, 'Objects, names, and realism in the *Tractatus'*, pp. 1-22.

Summerfield, 'Fitting versus tracking: Wittgenstein on representation', pp. 100-105, 118-133.

Extra reading:

Hacker, Insight and Illusion, pp. 73-80.

McGuinness, 'The so-called realism of Wittgenstein's Tractatus'.

Pears, The False Prison, pp. 99-114.

These worries can lead commentators in various directions. One is a kind of linguistic Kantianism (#9 below). Another is the so-called 'New Wittgenstein' (#10 below).

9. Tractatus IV: Wittgenstein as Kantian

Wittgenstein, Tractatus, 5.6-5.641.

The rough idea is that Kant asks, 'how it is possible for us to cognize the world (where by the way some of what we know about the world we know a priori)?', and Wittgenstein asks, 'how is it possible for us to represent the world (where by the way our language represents as it does independently of what's contingently true or false in the world)?' Both answer with a Copernican revolution: what we cognize is the world-asexperienced; what we represent is the world-as-represented. In Kantian terms, the world-as-experienced (represented) is empirically real but transcendentally ideal. Wittgenstein thinks the transcendental can't be expressed, so it falls away. We'll mull over the prospects for an interpretation of the *Tractatus* anywhere near this general vicinity.

Stenius, 'Wittgenstein as Kantian philosopher', Wittgenstein's Tractatus, chapter XI.

Summerfield, 'Wittgenstein on logical form and Kantian geometry'.

Morris, Wittgenstein and the Tractatus, pp. 55-58, 269-272, 275-287, 304-308.

White, Wittgenstein's Tractatus Logico-Philosophicus, pp. 26-28, 98-100.

Extra reading:

Sullivan, 'The "truth" in solipsism and Wittgenstein's rejection of the a priori'.

Williams, 'Wittgenstein and idealism'.

McGinn's book can be understood as presenting an idealistic reading (see e.g., the reviews of Potter and Zalabardo), though she herself doesn't put it this way. The closest thing I could find to an acknowledgement of this theme comes in footnote 2 on p. 266: 'There is ... the question of whether there is not something fundamentally Kantian in Wittgenstein's conception of the nature and status of logic. Thus, Wittgenstein's opposition to Frege and Russell might be seen as a vindication of a Kantian conception of logic: "General logic abstracts from all content of cognition, i.e. from any relation of it to the object, and considers only the logical form in relation of cognitions to one another, i.e. the form of thinking in general" (A55/B79).'

10. Tractatus: the new Wittgenstein

Wittgenstein, Tractatus, 6.53-7.

Diamond, 'Throwing away the ladder: how to read the *Tractatus'*.

Goldfarb, Das Überwinden: anti-metaphysical readings of the Tractatus.

Hacker, 'Was he trying to whistle it?'

Don't knock yourself out following every bit of Hacker's critique; we'll be touching on the high points.

Other central texts of the 'resolute' reading appear in Crary and Read [2000]. See also Ostrow [2002]. To see how the story of the 'new Wittgenstein' had been pushed back into a distinctive take on Frege, see Ricketts [1985], [1986a], and [1986b]. Stern [2003] gives a useful overview of interpretations of the Tractatus.

Extra reading:

Goldfarb, 'Metaphysics and nonsense'.

Ostrow, Wittgenstein's Tractatus: a Dialectical Reading, or 'Wittgenstein and the liberating word' (a precursor to the book).

Ricketts, 'Pictures, logic, and the limits of sense'.

Proops, 'The new Wittgenstein: a critique'.

---- End of Fall Quarter/Beginning of Winter Quarter ----

### 11. Carnap

Carnap, Logical Syntax of Language, §§1, 2, 16-17. 'Empiricism, semantics and ontology'. Friedman, 'Carnap and Wittgenstein's Tractatus'.

### Extra reading:

Maddy, Second Philosophy, §I.5.

12. Quine

Quine, 'Truth by convention', §§II and III. 'Two dogmas of empiricism', pp. 36-46. 'Carnap and logical truth'. 'Two dogmas in retrospect'.

Hylton, Quine, chapter 2, pp. 65-80.

Extra reading:

Carroll, 'What the tortoise said to Achilles'.

Friedman, 'Carnap and Quine: twentieth-century echoes of Kant and Hume'.

Hylton, Quine, chapters 1 and 2 (especially pp. 65-80).

Maddy, Second Philosophy, §I.6, §III.1.ii.

Quine, Philosophy of Logic, chapters 6 and 7. Pursuit of Truth, §6.

Richardson, 'Carnap's principle of tolerance'.

Ricketts, 'Tolerance and logicism'.

Hylton's introductory chapter gives a comprehensive overview of Quine's naturalistic approach to philosophy. Quine's views on logic apparently softened somewhat in later years, as demonstrated in the two Quine selections (see 'Three forms of naturalism' for a quick summary).

## 13. Carnap/Quine

One striking feature of the debate between Carnap and Quine is how consistently they seem to talk past each other.

Carnap, 'Reply to Quine'.

Hillier, 'Mathematics in science -- Carnap versus Quine'.

#### Extra reading:

Ricketts, 'Languages and calculi'.

#### 14. Putnam

Putnam, 'Is logic empirical?' (aka 'The logic of quantum mechanics').

Gibbins, Particles and Paradoxes, pp. 142-159.

Hughes, The Structure and Interpretation of Quantum Mechanics, pp. 209-212.

Extra reading:

Malament, 'Notes on "quantum logic"'.

These are notes for part of David's course, Probability and Determinism, where you can learn far more about this topic.

### 15. Naturalized Kant

Maddy, Second Philosophy, §§III.3-III.8.

Extra reading:

Maddy, Second Philosophy, §III.1.

For the rest of the course, we'll be talking about the late Wittgenstein's views on logic, which are largely subsumed by the larger question of following a rule. Though this work is quite different from the *Tractatus*, it's no easier, so you should once again dip into some of the secondary literature as we go along.

# Introductions:

Fogelin, Wittgenstein. Fogelin, Taking Wittgenstein at his Word. McGinn, Wittgenstein and the Philosophical Investigations. Stern, Wittgenstein's Philosophical Investigations. Others:

Baker and Hacker, Wittgenstein: Understanding and Meaning. Wittgenstein: Rules, Grammar and Necessity. Pears, The False Prison, volume II. Hacker, Insight and Illusion. Stern, Wittgenstein on Mind and Language.

Like Black on the *Tractatus*, Baker and Hacker give line-by-line commentaries on the *Philosophical Investigations*: the first volume on §§1-184, the second on §§185-242.

16. Following a rule

Wittgenstein, Philosophical Investigations, §§89-242.

Remarks on the Foundations of Mathematics, Part I, §§1-23, 113-156.

17. Logical necessity

Wittgenstein, Remarks on the Foundations of Mathematics, Part III, §§23-24, 46-47, VI §§15-16.

Dummett, 'Wittgenstein's philosophy of mathematics'.

Stroud, 'Wittgenstein and logical necessity'.

Canfield, 'Anthropological science fiction and logical necessity'.

In his influential and widely-discussed *Wittgenstein on Rules and Private Language*, Kripke describes Wittgenstein as proposing a new skeptical paradox and offering a skeptical solution to it. Subsequent commentators have challenged both the fidelity of this reading to the text and the viability of its purported skeptical solution. Kusch's book for an exhaustive exposition and defense.

This general approach to Wittgenstein on rule-following was anticipated by Fogelin in the first edition of his *Wittgenstein*.

18. The rule-following paradox and its skeptical solution

Wittgenstein, Philosophical Investigations, §§243-315.

Fogelin, Wittgenstein, chapters XI and XII, and pp. 241-246.

Fogelin, Taking Wittgenstein at his Word, chapter 1.

Extra reading:

Kripke, Wittgenstein on Rules and Private Language, pp. 1-113.

Kusch, A Skeptical Guide to Meaning and Rules, chapter 1.

Stern, 'Recent work on Wittgenstein, 1980-1990', pp. 424-432.

Summerfield, '*Philosophical Investigations* 201: a Wittgensteinian reply to Kripke', pp. 417-432.

## 19. Wittgenstein on the irrelevance of science

Given the period (the early 80s), perhaps it's not surprising that one `straight' (as opposed to `skeptical') solution proposed for the paradox runs through the causal theory of reference: what makes my use of 'gold' correct (or incorrect) is that the item I'm describing is (or isn't) of the same kind as the samples I used to introduce the term. (See, e.g., McGinn [1984] or Maddy [1984]. Kusch discusses this idea in A Skeptical Guide, pp. 133-136.) Whatever we may now think about the causal theory of reference, viewing the problem from this angle raises an important question about Wittgenstein's thought: what convinces him that all scientific information is irrelevant here? (This question is particularly poignant for the second-philosophical position described in #15.) I confess to considerable embarrassment about various aspects of this old paper of mine, but it does at least address this question, as does Fogelin. Pears has been struggling with it for decades.

Wittgenstein, Remarks on the Philosophy of Psychology, volume I, §§903-906, 908-909 (more or less the same as Zettel, §§608-613).

Maddy, 'How the causal theorist follows a rule', pp. 466-468.

Fogelin, Wittgenstein, pp. 205-210.

Pears, The False Prison, volume II, pp. 199-216, 251-255, 450-451, 454-457, 509-516.

Paradox and Platitude, pp. vii-xi, 1-3, 17-22.

Extra reading:

Smart, 'Wittgenstein, following a rule, and scientific psychology' (with comments by Margalit).

Moyal-Sharrock, Review of Paradox and Platitude, ¶¶1-3.

Stern, 'Recent work on Wittgenstein', pp. 432-433.

20. The therapeutic Wittgenstein

Goldfarb, 'Kripke on Wittgenstein on rules', §III.

Diamond, 'Realism and the realistic spirit'.

Pears, The False Prison, volume II, pp. 216-225.

Maddy, 'Naturalism, transcendentalism and therapy', pp. 31-36.

These three outline an interpretation of Wittgenstein at the opposite extreme from Kripke's, an interpretation pioneered by Diamond, Goldfarb and others.

Extra reading:

Goldfarb, 'I want you to bring me a slab: remarks on the opening sections of the *Philosophical Investigations*'.

Maddy, 'Wittgenstein's anti-philosophy of mathematics'.

Rogers, 'Taking Wittgenstein seriously as a therapist'.

Stroud, 'Wittgenstein's "treatment" of the quest for "a language which describes my inner experiences and which only I myself can understand"'.

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