

**Philosophy 232**  
**Epistemology**  
**Gila Sher**  
**Winter 2015**  
**Office Hours: W, 5-6**

**Graduate Seminar: TRUTH & SCIENTIFIC CHANGE**

Goal: Examine (i) how the reality of scientific change affects our conception of truth, and (ii) what conception of truth is most appropriate for science given the reality of scientific change.

**Grades:** Class presentation & Paper

**Topics**

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|---------|---|
| W 1/7   | Introduction to Seminar   |
| W 1/14  | From a Deflationist to a Substantivist Approach to Truth  |
| W 1/21  | From Traditional Correspondence to a New Correspondence   |
| W 1/28  | The Problem of Scientific Change & Pessimistic Meta-Induction.  |
| W 2/4   | A Common Solution, or a Prevalent Assumption Underlying Many Attempted Solutions: Approximate Truth. A Critical Examination of this Solution/ Assumption. |
| W 2/11  | An Alternative Solution: Truth as a Dynamic Standard for Knowledge  |
| W 2/18  | Truth & Incommensurability  |
| W 2/25  | Mathematical Truth & Scientific Truth   |
| W 3/4   | Dynamic Truth & Scientific Realism  |
| W 3/11* | Future Research   |

\* Change date

**Readings**

*W 1/14*      *From a Deflationist to a Substantivist Approach to Truth*

A. Tarski: "On the Concept of Truth in Formalized Languages" (1933)  
P. Horwich: *Truth* (1990/8)

- G. Sher: "On the Possibility of a Substantive Theory of Truth" (1998/9)  
 G. Sher: "In Search of a Substantive Theory of Truth" (2004)  
 D. Edwards: "Truth as a Substantive Property" (2013)

*W 1/21 From Traditional Correspondence to a New Correspondence*

- M. David: "The Correspondence Theory of Truth" (2002/9)  
 C. Wright: "Truth: A Traditional Debate Reviewed" (1999)  
 D. Patterson: "What is a Correspondence Theory of Truth?" (2003)  
 G. Sher: "Forms of Correspondence: The Intricate Route from Thought to Reality" (2013)  
 G. Sher: "Truth as Composite Correspondence" (Forthcoming)

*W 1/28 The Problem of Scientific Change & Pessimistic Meta-Induction*

- A. Chakravartty: "Scientific Realism" (2011)  
 L. Laudan: "A Confutation of Convergent Realism" (1981)  
 P. Lewis: "Why the Pessimistic Induction is a Fallacy" (2001)  
 J. Saatsi: "On the Pessimistic Induction and Two Fallacies" (2005)  
 G. Doppelt: "Reconstructing Scientific Realism to Rebut the Pessimistic Meta-Induction". (2007)  
 ----. "Explaining the Success of Science: Kuhn and Scientific Realists" (2013)  
 S. Roush: "Optimism about the Pessimistic Induction" (2010)

*W 2/4 A Common Solution, or a Prevalent Assumption Underlying Many Attempted Solutions: Approximate Truth. A Critical Examination of this Solution/ Assumption.*

- A. Chakravartty: "Scientific Realism". (2011)  
 K.R. Popper: *Conjectures and Refutations: The Growth of Knowledge* (1972: 231-6)  
 R.N. Boyd: "Realism, Approximate Truth and Philosophical Method" (1990)  
 T. Weston: "Approximate Truth and Scientific Realism" (1992)  
 I. Niiniluoto: "Verisimilitude: The Third Period" (1998)  
 P. Smith: "Approximate Truth and Dynamic Theories" (1998)  
 G. Oddie: "Truthlikeness" (2001/14)  
 J.A. Barrett: "Approximate Truth & Descriptive Nesting" (2008)

*W 2/11 An Alternative Solution: Truth as a Dynamic standard for Knowledge*

Exploratory Subject: No Readings

*W 2/18 Truth & Incommensurability*

- T.S. Kuhn: *The Structure of Scientific Revolutions* (1962/70). Chs. I, IX, X, XII, XIII, Postscript  
 P. Hoyningen-Huene: "Kuhn's Conception of Incommensurability" (1990)  
 H. Sankey: "Kuhn's Changing Concept of Incommensurability" (1993)

- . "Scientific Realism and the Semantic Incommensurability Thesis" (2009)  
 M. Carrier: "Changing Laws and Shifting Concepts: On the Nature and Impact of Incommensurability" (2001)  
 M. Devitt: "Incommensurability and the Priority of Metaphysics" (2001)  
 E. Oberheim & P. Hoyningen-Huene: "The Incommensurability of Scientific Theories" (2009/13)

*W 2/25 Mathematical Truth & Scientific Truth*

- P. Benacerraf: "What Numbers Could Not Be?" (1965)  
 ----. "Mathematical Truth" (1973)  
 M. Steiner: "The Application of Mathematics to Natural Science" (1989)  
 ----. "The Applicabilities of Mathematics" (1995)  
 O. Linnebo: "Platonism in the Philosophy of Mathematics" (2009/13)  
 H. Field: "Introduction: Fictionalism, Epistemology, and Modality" (1989)  
 M. Balaguer: "Fictionalism in the Philosophy of Mathematics" (2008/11)

*W 3/4 Dynamic Truth & Scientific Realism*

Exploratory Subject: Background Readings

- A. Chakravartty: "Scientific Realism" (2011)  
 R.N. Boyd: "What Realism Implies and What it Does Not" (1989)  
 T.D. Lyons: "Towards a Purely Axiological Scientific Realism" (2005)  
 C.L. Hardin & A. Rosenberg: "In Defence of Convergent Realism" (1982)  
 A. Fine: "Piecemeal Realism" (1990)  
 A. Musgrave: "Discussion: Realism About What?" (1992)  
 P. Kitcher: *The Advancement of Science: Science without Legend*, Ch. 5: "Realism and Scientific Progress" (1993)  
 P. K. Stanford: "Pyrrhic Victories for Scientific Realism" (2003)  
 ----. *Exceeding Our Grasp: Science, History, and the Problem of Unconceived Alternatives*, Ch. 2. (2006)

*W 3/11\* Future Research*

No Readings