

Philosophy 208
The Language Revolution
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Hamilton College, Fall 2011

Class 13 - Logical Empiricism
Wittgenstein and Ayer

But First...

David Rosenthal's Lecture

- Translation and Meaning
- Monday, October 17, 4:10pm
- Précis
- The lecture will be better if you read ahead just a little.
- Sunday Dinner?

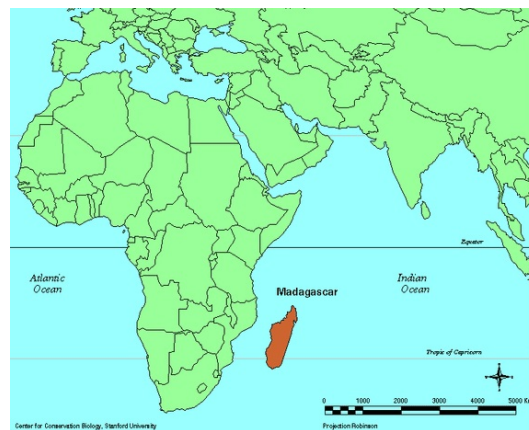


A Couple of Final Thoughts on Reference

- Direct Reference Semantics for singular terms raises an epistemic worry.
- How do names hook onto the world.
 - Answer: baptism (ordinarily ostension)
- How do my terms refer to the same objects that yours do?
 - Answer: the causal theory of reference

Difficulties with CTR kinks in the causal chain

- ‘Madagascar’ used to refer to part of the mainland of Africa.
 - ▶ Through mis-communication, it has come to denote an island off of the mainland.
 - ▶ There was a baptism (presumably) and then a causal chain.
 - ▶ But current uses now refer to something other than the original place.
- The notion of a causal chain is also contentious.
- We will not pursue these worries.
 - ▶ What is important to take from the discussion of CTR and the division of linguistic labor is the role of the community in naming.



Problems with Direct Reference

- Frege's sense descriptivism was motivated by three problems with the 'Fido'-Fido, direct reference theory.
- These problems re-emerge for direct reference theorists.
 - ▶ cognitive content
 - ▶ vacuous reference
 - ▶ opaque contexts

The Meta-Linguistic Description Theory

- An intensionalist response to Kripke and direct-reference theory.
- Jerrold Katz
 - A name 'p' means 'the thing which is a bearer of 'p''
 - 'Brad Pitt' means the thing which is a bearer of 'Brad Pitt'
- Meta-linguistic: the sense of the name is not expressed within the language in question.
 - We do not replace 'Brad Pitt' with its description.
- Helps with names without bearers



On to Meaning!

Logical Empiricism

- The logical empiricists sought a systematic justification for our scientific beliefs, relying only on sense experience
- Hume and Locke were content to imagine how all our knowledge could be grounded in sense experience.
- The logical empiricists tried actually to trace the line between science and sense data.
- The new logic of Frege, Russell, and Wittgenstein gave Hume's claim that mathematics is the relation of ideas a plausible interpretation.
- Carnap's 1928 *Aufbau: The Logical Structure of the World*.
 - ▶ attempts to develop scientific theory, using the tools of logic, out of sense-data, or sense experiences

Logical Empiricism Against Hegelian Idealism

- Pseudo-problems, pseudo-questions, meaningless language, and controversial epistemology
 - ▶ A. The meaning of life
 - ▶ B. The existence (or non-existence) of God
 - ▶ C. Whether the world was created, with all its historical remnants and memories, say, five minutes ago
 - ▶ D. Why there is something rather than nothing
 - ▶ E. Emergent evolutionary theory, and Bergson's *elan vital*
 - ▶ F. Freudian psychology
 - ▶ G. Marxist theories of history
- Verificationist theory of meaning: for a sentence to be meaningful, it must be verifiable on the basis of observation.
- Any sentence which is unverifiable, like any of the examples A-G above, is meaningless.
 - ▶ "The absolute is lazy" (Ayer).
- The challenge for the logical empiricists was to clarify what it meant to verify a sentence.

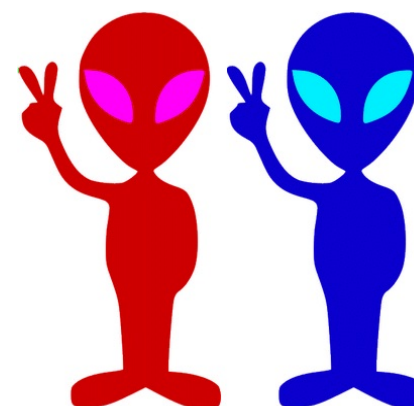
Wittgenstein's *Tractatus*

- The founding work of logical empiricism
- Wittgenstein seeks the limits of language, in distinguishing between what can and what can not be said.
 - §7. Whereof one cannot speak, thereof one must be silent.
- How can we think about the boundary of thought?
- What is outside of the boundary is inaccessible to us.



The Picture Theory

- Both the world and our language consist of independent atomic elements, which are combined according to strictly logical principles.
- The world is a collection of independent states of affairs.
- If I am standing to the right of you, we could have two atomic facts (my standing and your standing) and a logical relation (to the right of) between those facts.
- I could stand to the right of you, or to the left of you, or on the other side of the planet, all of which are independent of you.
 - ▶ §1.2. The world divides into facts.
 - ▶ §2.06. From the existence or non-existence of one state of affairs, it is impossible to infer the existence or non-existence of another (Wittgenstein, *Tractatus*).
- Language consists of atomic statements of those facts, connected into more complex statements by logical principles.



Language Mirrors the World

- Language consists of atomic statements of those facts, connected (into more complex statements) by logical principles.
- Language provides a logical structure which is isomorphic to the structure of the world
 - ▶ §2.16. If a fact is to be a picture, it must have something in common with what it depicts.
 - ▶ §2.17. What a picture must have in common with reality, in order to be able to depict it - correctly or incorrectly - in the way it does, is its pictorial form (Wittgenstein, *Tractatus*).

Analysis and Atomism

- My standing in a place is not an atomic fact, it is a complex fact.
 - ▶ I am a complex
 - ▶ standing is a complex
 - ▶ you are a complex
- The true analysis of the world will involve analyzing these complexes into their simple (atomic) components.
- Wittgenstein never gives a clear example of an atomic fact.
 - ▶ The color of a spot in my field of vision?
- The representations of atomic facts are the foundational elements of the *Tractatus*.
 - ▶ the postulates of Euclidean geometry
 - ▶ or of Descartes's synthetic presentation of the *Meditations*
- A theory of the world that analyzed all of the myriad complexes into their atomic elements would present a veridical and secure picture of the world.
- Analytic philosophy

Logical Truths as Necessary

- One of the most important advances in modern logic was its ability to characterize properties of logical truth.
- In propositional logic, all logical truths are tautologies, complex statements which are true no matter the truth values of their component variables.
- We might characterize these statements as necessary truths.
 - ▶ the certainty of logic and mathematics provided essential support to Descartes's claim that our minds have substantial content built into their structures.
 - ▶ From the claim that logic and mathematics are innate, it is reasonable to ask whether there are other innate ideas, including the idea of God.

Logical Truths as Nonsense

- The only statements that can picture the world are those that have sense, that can be either true or false, that can picture accurately or not.
- Tautologies are empty of content.
 - ▶ §4.46. The proposition shows what it says, the tautology and the contradiction that they say nothing. The tautology has no truth conditions, for it is unconditionally true; and the contradiction is on no condition true. Tautology and contradiction are without sense.
 - ▶ §6.1251. Hence, there can *never* be surprises in logic.



Tautologies Resist Foundations

- §6.127. All the propositions of logic are of equal states: it is not the case that some of them are essentially primitive propositions and others essentially derived propositions. Every tautology itself shows that it is a tautology.
 - ▶ If they can not be placed into an order, they are outside of the realm of knowledge.
 - ▶ But, they are not unknowable in the way that, say, God's goodness would be unknowable, or whether we have free will.
 - ▶ They are unknowable because they are too thin to be objects of knowledge.
 - ▶ They don't picture any fact.

Frege and Logical Empiricism

- There is a direct line between Frege and logical empiricism.
 - Carnap studied with Frege.
- Wittgenstein's *Tractatus* was the culmination of the anti-psychologistic enterprise of logical analysis begun by Frege.
- Carnap's *Der Logische Aufbau der Welt*, was patterned on Whitehead and Russell's *Principia Mathematica*, which had, like Frege's *Grundgesetze*, attempted to reduce all of mathematics to logic.
- It would be a mistake, though, to take the logical empiricists as completely aligned with Frege.
- Fregean senses, in their third realm, may well be the kinds of metaphysical objects that the logical empiricists were deriding.
- The logical empiricists were much closer to Russell, who denied the existence of senses, than to Frege.

British Empiricism and Logical Empiricism

- The logical empiricists presented a verificationist theory of meaning, inspired directly by Hume and Locke.
- Hume: for a term to be meaningful, it had to stand for an idea in one's mind that could be traced back to an initial sense impression.
 - ▶ Commit to the flames, as meaningless, any speculative metaphysics.
- The logical empiricists replaced Hume's theory of language (which we saw originally in Locke) with a verifiability theory of meaning.
- Legitimate expressions must stand for publically observable objects.
- Combining Frege's logical tools with Hume's empiricist principles.

The Verification Theory of Meaning

for a sentence to be meaningful, it must be verifiable

- All our justifiable claims are traceable to a core set of claims which refer only to things or events that we can experience.
 - ▶ or derived from axiomatic observations
 - ▶ or introduced by definition
- All and only meaningful statements will be analytic, observable, or derivable (using logic) from observable axioms.
- Any sentence which is unverifiable, including especially claims related to the examples A-G above, is meaningless.
- Some metaphysical questions can be re-cast as scientific ones.
- Many philosophical problems, like the problem of free will, should be dissolved, rather than solved.
- The challenge for the logical empiricists was to clarify what it meant to verify a sentence.
 - ▶ more difficult than it seems
 - ▶ philosophy of science

Verificationism and Circularity

- The verification theory claims that a proposition is meaningless unless it is verifiable.
- But, to know whether the statement is verifiable, we need to know what it means.
- “Kichwa chake kikubwa.”
 - ▶ If we know that it means that the meaning of life is 42, we can claim that it is not verifiable.
 - ▶ If we know that it is Swahili for ‘his head is big’, then we can claim that it is verifiable.
- Are the toves in fact slithy?
- If we know what a proposition (or sentence or statement) means before we verify it, then verificationism is not doing any semantic work.

Nonsense and Metaphysics

- There seems to be a difference between real nonsense (gibberish) and metaphysical claims.
- Metaphysical claims can be grammatical, and composed of terms which otherwise might refer.
- They can combine with other claims in consistent ways.
- Some terms which are supposed by the positivists to be meaningless do appear to have content.