Analytic(al) philosophy

- A standard way of placing Wittgenstein in the context of analytic philosophy is to describe him as a/the main source for two of its most important schools and traditions of philosophy of language:
  - Ideal language philosophy: In order to solve philosophical problems we must focus on logical syntax
    - G. Frege, B. Russell, "Wittgenstein I", R. Carnap, W.v.O. Quine …
  - Ordinary language philosophy: In order to solve philosophical problems we must focus on ordinary language
    - "Wittgenstein II", J.L. Austin, G. Ryle …

Background of the Tractatus

What is Wittgenstein trying to do in the *Tractatus*?
My *whole* task consists in explaining the nature of the proposition.
(NB p. 39, 22.1.1915)

Tractatus and the "linguistic turn":

- TLP wants to set the limits of thought "from within" by setting the limits of *language (*TLP 5.6, 5.61*).*
  - The task of philosophy is "the logical clarification of thoughts", which is effected by the clarification of propositions (TLP 4.112-4.121).
  - Propositions (Sätze) are understood as linguistic entities, and are to be subjected to logico-linguistic analysis.

Background of the Tractatus

So a major question in the *Tractatus* is how to distinguish sentences with sense from sentences that are senseless or nonsensical (i.e. do not express thoughts):

Everything that can be thought at all can be thought clearly. Everything that can be said can be said clearly. (TLP 4.116)

Early influences: logic and the foundations of mathematics

- Gottlob Frege (1848-1925)
  - *Begriffsschrift, eine der arithmetischen nachgebildete Formelsprache des reinen Denkens (1879)*
  - *Die Grundlagen der Arithmetik: eine logisch-mathematische Untersuchung über den Begriff der Zahl (1884)*
  - “Funktion und Begriff” (1891)
  - „Über Begriff und Gegenstand“ (1892)
  - “Über Sinn und Bedeutung”(1892)

- Bertrand Russell (1872-1970)
  - *The Principles of Mathematics* (1903)
  - "On Denoting" (1905)
  - *Principia Mathematica* (1910-13) (with A. N. Whitehead)

Background

- The *Tractatus* is not a book on the philosophy of mathematics.
- But it emerges out of 19th and early 20th century discussions of mathematics
  - new forms of mathematics , eg. non-euclidic geometry, infinitesimal calculus, transfinite set theory, etc. challenged the received conception of math

Three Responses

- Formalism
  - Mathematics consists of the manipulation of otherwise meaningless signs by formal rules. Numerals do not *stand for* numbers. (Hilbert)
- Empiricism
  - Mathematics is fundamentally an empirical science, not an a priori science. It's objects are based on empirical generalizations. (Mill)
- Logicism
  - Mathematics is grounded in logic. It is strictly a priori and true. Numerals *refer to* logical objects, i.e. numbers. (Frege)

Frege's logicism

- Mathematics, as well as other forms of "pure thought", must be grounded in logic.
- Logic is strictly universal. It contains its own substantive truths, and also is a canon for all correct inference.
- There is no thought outside of logic (no “illogical” thought), strictly speaking. Cf. *TLP* 5.473

What about our ordinary language?

- Natural language is an essential tool in human life and it is often possible to reason correctly and communicate effectively with it.
- But we are often led astray by the vagueness and imprecision of natural language.

- Moreover, its grammar often leads us to make incorrect inferences that we would probably not make if we operated with a symbol system that laid bare the logical structure underlying natural language.