

## LECTURE 17: LOGICAL SYNTAX OF LANGUAGE

### 1. Background to *L*<sub>SL</sub>

- (a) Gödel's theorem
  - arithmetization of syntax
  - The syntax of a language may be formulated within that language itself. (p. xiv, see also p. 3)
  - What is the object-language vs. syntax-language distinction? (p. 4)
- (b) *Grundlagenstreit* and intuitionism
  - alternative systems of logic (p. xiv)

### 2. Preliminaries

- (a) Principle of Tolerance (p. xv)
- (b) What is the *logical syntax* of a language?
  - p. xiii "...an exact method for the construction of these sentences about sentences."
  - p. 1 "...the formal theory of the linguistic forms of that language."
    - What does it mean for a theory to be *formal*?
  - p. 6 Formal structure is what is invariant under isomorphism.
- (c) Pure vs. descriptive syntax
  - i. Pure syntax is wholly analytic (p. 7)
  - ii. Pure syntax is not *about* anything at all.
  - iii. Descriptive syntax is related to pure syntax as physical geometry to pure mathematical geometry (p. 7)
- (d) Reversal of the traditional method (p. xv)
  - meaning is use