Phil/LPS 31 Introduction to Inductive Logic
Lecture 1

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Topics

- Logic in General
- Sentences
- Truth-functional connectives
- Sentential logic

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- Finally, the word "system" means that given (1) these symbols and (2) rules of transforming these symbols; we can get (3) other symbols that also belong to the representation.

Toy Example of a Logic

- Here's a toy example of a logic.

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- It turns out that saying what “propositions” are is a hard philosophical problem. So we’ll stick to sentences!

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  4. Having 1001 strands of hair does not make you bald. How about 1000, 999, . . . ,?

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- What's the difference between the sentences in Case 1 and Case 2?

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- By contrast, the connectives (until, because) in Case 2 are not truth-functional. In order to determine the truth-value of the compound sentences which involve them, we need extra information beyond the truth-value of the simpler sentences.
- Sentential logic captures the sentence structure of a fragment of natural language using truth-functional connectives.

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- The closure condition simply states that nothing else is a formula of sentential logic.