Phil/LPS 31 Introduction to Inductive Logic
Lecture 1

David Mwakima
dmwakima@uci.edu
University of California, Irvine

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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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- Sentential logic is the logic for representing the sentence structure of a fragment of natural language using truth-functional connectives.

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  3. If p is a formula and q is a formula, then $(p \lor q)$ is a formula.

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