Categorical Syllogisms: A test for validity

Distribution

In order to apply the test for validity, we need the notion of a "distributed term." When, in a given proposition, a term applies to each and every member that that term names, then the term is said to be "distributed."

Four rules of distribution:

- (1) A universal proposition always has a distributed subject term.
- (2) A particular proposition never has a distributed subject term.
- (3) An *affirmative* proposition never has a distributed predicate term.
- (4) A negative proposition always has a distributed predicate term.

The following list tells you very simply how to find distributed terms:

- (a) The subject term after "all" is distributed.
- (b) Both terms (subject and predicate) after "no" are distributed.
- (c) A predicate term following "not" is distributed.

*Rules for Checking Validity*¹

A categorical syllogism is valid if and only if it doesn't violate any of the following rules:

- (1) At least one premise must be universal.
- (2) At least one premise must be affirmative.
- (3) The middle term must be distributed at least once.
- (4) To get a universal conclusion, both premises must be universal.
- (5) To get an affirmative conclusion, both premises must be affirmative.
- (6) To get a negative conclusion, exactly one of the premises must be negative.
- (7) To get a conclusion with a distributed term in it, that term must be distributed in one of the premises.

Note that rules (1)-(3) focus on requirements of the premises alone, no matter what the conclusion. Rules (4)-(7) focus on requirements that must hold of the premises in order to get a certain type of conclusion.

¹ These rules assume that universal affirmative propositions have existential import. One wishing to deny this assumption should include an eighth rule that reads: "(8) To get a particular conclusion, exactly one premise must be particular."