

# Babel

## I Logic by Philosophers

### 1. Resources:

- 'The Algebra of Logic', Couturat
- [https://en.wikipedia.org/wiki/Interpretation\\_\(philosophy\)](https://en.wikipedia.org/wiki/Interpretation_(philosophy))

2. The standard form of a categorical statement is: *Quantifier* + *Subject* + *Copula* + *Predicate*, per example: "All men are animals".

3. *Subject*: "that about which something is said."

4. *Predicate*: "the part of the proposition denoting that which is affirmed or denied about the subject."

5. *Copula*: "that part of the proposition which denotes the relation between the subject and the predicate."

6. *Philosophical interpretation*: "is the assignment of meanings to various concepts, symbols, or objects under consideration," it includes both *conceptual interpretation* and *scientific interpretation*.

7. *Conceptual model*: "a model made of the composition of concepts, which are used to help people know, understand, or simulate a subject the model represents. "

8. In the context of propositional interpretation, an implication or consequence has for antecedent a *premise* or *cause*, and for consequence a *consequence*. When the premise is conditional or hypothetical, the antecedent is a *hypothesis* and the consequent a *thesis*.

9. When dealing with two equal propositions, one can be called a *theorem* and the other its *reciprocal*.

### I.1 Aristotlian Terminology

#### 10. Resources:

- <http://www.philosophypages.com/dy/c.htm#catrm>
- <http://plato.stanford.edu/entries/categories/>

11. *Class*: "Any collection or group of things, whether natural or arbitrary. In traditional logic, classes are designated by categorical terms."

**12. Categorical term:** “A word or phrase that designates a class. Each categorical term divides the world into two parts: the original class and its complement; the things to which the term applies and those to which it does not.”

**13. Complement:** “The class of all and only those things that are not included in the class designated by a categorical term.”

**14. Category:** “Categories attempt to enumerate the most general kinds (classes) into which entities in the world divide. ”

**15. Categorical logic:** “The traditional interpretation of the logic of classes developed by Aristotle and the medieval logicians.”

**16. Categorical proposition (categorical statement):** “A statement of the relationship between two classes, each of which is designated by a categorical term. Within each proposition, the subject term occurs before the copula and the predicate term after. There are only four forms of categorical proposition, distinguished by their quantity and quality.”

**17. Categorical syllogism:** “A logical argument consisting of exactly three categorical propositions, two premises and the conclusion, with a total of exactly three categorical terms, each used in only two of the propositions.”