

pretations the relation $<$ may be translated approximately by "therefore".

Remark.—Such a relation as " $a < b$ " is a proposition, whatever may be the interpretation of the terms a and b . Consequently, whenever a $<$ relation has two like relations (or even only one) for its members, it can receive only the propositional interpretation, that is to say, it can only denote an implication.

A relation whose members are simple terms (letters) is called a *primary* proposition; a relation whose members are primary propositions is called a *secondary* proposition, and so on.

From this it may be seen at once that the propositional interpretation is more homogeneous than the conceptual, since it alone makes it possible to give the same meaning to the copula $<$ in both primary and secondary propositions.

4. Definition of Equality.—There is a second copula that may be defined by means of the first; this is the copula $=$ ("equal to"). By definition we have

$$a = b,$$

whenever

$$a < b \text{ and } b < a$$

are true at the same time, and then only. In other words, the single relation $a = b$ is equivalent to the two simultaneous relations $a < b$ and $b < a$.

In both interpretations the meaning of the copula $=$ is determined by its formal definition:

C. I.: $a = b$ means, "All a 's are b 's and all b 's are a 's"; in other words, that the classes a and b coincide, that they are identical.¹

P. I.: $a = b$ means that a implies b and b implies a ; in

¹ This does not mean that the concepts a and b have the same meaning. Examples: "triangle" and "trilateral", "equiangular triangle" and "equilateral triangle".