

IV. The hierarchy of types

A type is defined as the range of significance of a propositional function, that is, as the collection of arguments for which the said function has values. Whenever an apparent variable occurs in a proposition, the range of values of the apparent variable is a type, the type being fixed by the function of which "all values" are concerned. The division of objects into types is necessitated by the reflexive fallacies which otherwise arise. These fallacies, as we saw, are to be avoided by what may be called the "vicious-circle principle", that is, "no totality can contain members defined in terms of itself". This principle, in our technical language, becomes: "Whatever contains an apparent variable must not be a possible value of that variable". Thus whatever contains an apparent variable must be of a different type from the possible values of that variable; we will say that it is of a higher type. Thus the apparent variables contained in an expression are what determines its type. This is the guiding principle in what follows.

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