SIMPLE AND COMPOUND STATEMENTS

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It is fairly standard practice in introductory textbooks on symbolic logic to distinguish simple from compound statements. A well-known account of this distinction goes as follows:

> A *simple* statement is one which does not contain any other statement as a component part, whereas every *compound* statement does contain another statement as a component part (I.M. Copi, *Symbolic Logic*, Fourth Edition, Macmillan, N.Y., 1973. P. 8)

This account fails to explain, however, why

(1) Joe believes that it is raining

is compound, while

(2) It is raining hard

is not. For (2) not unlike (1) also contains

(3) It is raining.

The needed explanation is forthcoming once we add to the above account the following:

(A) A statement P *contains* the statement R *if and only if*: (i) P properly contains R; and (ii) the result of replacing R in P by *any other* statement is a statement.

If we replace (3) in (1) by

(4) $2 > 1$

the result is a statement. Not so if we make a similar replacement in (2).

With (A) we thus have a criterion for determining the presence of statement operators as well as an expression of the idea that a compound statement must contain at least one statement operator.

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