

S. C. KLEENE. *On the term 'analytic' in logical syntax*. Preprinted for the members of the Fifth International Congress for the Unity of Science, Cambridge, Mass., 1939, as from *The journal of unified science*, vol. 9; 4 pp.

This is an abstract of a paper read at the Fifth International Congress for the Unity of Science, with a number of changes made by the author subsequent to the distribution of the preprint at the Congress.

In *Logical syntax* (35212), I gave a syntactical definition for 'analytic' with respect to Language II, which contains mathematical and descriptive signs as well. As part of this definition, a procedure of reduction to a certain normal form is described and evaluations for variables and descriptive signs are defined. In the present paper, Kleene shows how the definition can be considerably simplified by carrying out an idea indicated by him previously in this JOURNAL, vol. 4, p. 83. The number of reduction steps is thereby diminished. The nature of the modified definition may be illustrated by the following example: " $S_2 \vee S_3$, is analytic with respect to an evaluation for the variables and descriptive signs occurring if and only if either S_2 or S_3 is analytic with respect to the same evaluation."

When Tarski (in *Wahrheitsbegriff*, 28516) constructed his method for defining the semantical concept of truth, it became clear that an analogous method could be used in syntax for the definition of 'analytic' (or 'provable') in systems with indefinite rules. It seems that the simplified definition proposed by Kleene is this analogue. R. CARNAP