

UNCERTAINTIES OVER DISTRIBUTION DISPELLED

WILLIAM H. FRIEDMAN

The classical doctrine of distribution has received a number of crushing blows administered by Peter Geach but has not been discarded as an inference device in modern texts on syllogistic logic. Geach has attacked not only the utility of the concept of distribution (for he has substituted a variant interpretation ([3], pp. 61-64) of categorical sentences which makes the doctrine dispensable), but he has impugned the doctrine's intelligibility as well. And no wonder, for even the most sophisticated and otherwise excellent texts leave much to be desired in explicating the doctrine. For instance, Michalos explains that "a term is distributed in a categorical sentence if and only if the sentence makes an assertion about every object denoted by the term" ([6], p. 84). He then considers a sample 0-proposition, "Some roses are not flowers." In order to apply his definition to it, he paraphrases the proposition as "Given any flower at all, only some are roses [sic]." Now it is notoriously difficult to show that the predicate ('flowers' in this case) is distributed in an 0-proposition, thus text authors will often be found to forsake or forget their own sound principles just to establish distribution in this sort of proposition. Note that the original proposition is negative, whereas the paraphrase is throughly and unabashedly affirmative. Michalos' revised version also clearly depends on a reading of 'some' as 'some are and some are not,' yet this flies in the face of his earlier point, ([6], p. 54) that 'some' means 'at least one.' Note too that the paraphrase is ungrammatical in a way that affects the thought—can it be that given any flower, only some [of *them*?] are roses?

Perhaps we can preserve the intent of Michalos to provide a general pattern of paraphrase for 0-propositions as (1) 'In the entire *class* of flowers, some of its elements are not roses,' or (2) 'Given any flower, *it* may not be a rose.' Let us ignore the fact that these, like Michalos' own paraphrase appear to translate 'some flowers are not roses.'

(1), however, makes an assertion about the class of flowers and, therefore, not about "every object denoted by the term" 'flower'—a violation of the definition. In any event, to resort to classes at this elementary level may needlessly incur nominalistic objections, and, further, the paraphrase (1) is