

## A More Satisfactory Description of the Semantics of Justification

JOHN T. KEARNS

*1 Introduction* In [1] I developed a semantic account for a first-order language. This semantics is based on the concept of justification rather than truth. With respect to this semantic account I showed that a system of intuitionist logic is sound and complete.

I have since realized that there are certain misconceptions involved in the treatment of the semantics of justification. In [1] I said that a sentence is justified (i.e., its assertion is warranted) if it is either known to be true or follows from sentences known to be true. My mistake was in employing the concept of *following from*. It is conceivable that one sentence might follow from others even though we were incapable of knowing this (it is conceivable, but I judge it to be unlikely). A more satisfactory description has it that a sentence is justified if it is either known or *deducible* from sentences that are known. (Of course, this means deducible by *correct* deductions.) This new characterization of justification does not change the fact that a sentence can be justified without being known.

As well as affecting my informal account of justification, the mistake led me to misunderstand the role of the formal semantics presented in [1]. I thought of that semantic account as giving the significance in terms of justification of the connectives and quantifiers. But some features of the semantics were motivated by thinking in terms of the relations *following from* and *being incompatible with*. This kind of semantic account cannot capture the epistemic concept of justification.

Given a proper understanding of justification, the deductive system of [1] (the system of intuitionist logic) has a more fundamental character than the semantic account. We can determine by consulting the concept of justification—as I am presently explaining it—that the deductive system is correct (i.e., that it is sound with respect to justification). From this perspective, the semantic