# LOGICAL TRUTH AND INDETERMINACY 

STEVEN E. BOËR

In various of his writings, W. V. O. Quine has attempted to characterize the conditions under which a sentence of a natural language counts as a logical truth. P. F. Strawson, in [6], lodges the objection that Quine cannot give an ultimately coherent account of logical truths in natural languages without recourse to the very sorts of intensional devices which he so steadfastly refuses to countenance. Since then, both Quine and his commentators have essayed replies to Strawson. My aim in this paper is to show that these replies, whatever their intrinsic merits, fail to supply Quine with an adequate answer to Strawson's original criticism.

1 To begin with, let us restate the Strawsonian objection in the context of Quine's most recent discussion of logical truth in [3]. Rather than talking directly about sentences of our natural language, Quine asks us to envisage a "regimentation" of that language into the idiom of standard first-order predicate calculus with identity, and he then proceeds to use the term 'sentence' in the sense of 'sentence of the regimented idiom.' He then offers three different but allegedly equivalent characterizations of logical truth (for a regimented language):
(L1) . . . a sentence is logically true if all sentences are true that share its logical structure. (p. 49)
(L2) A logical truth, then, is definable as a sentence from which we get only truths when we substitute [open] sentences for its simple [open] sentences. (p. 50)
(L3) A logical truth . . . is a truth thus obtainable [by substitution] from a valid logical schema. (p. 51)

Actually, (L3) itself could be expanded into three different definitions, depending on how one chooses to characterize the intermediary notion of a valid logical schema-e.g., in terms of the truth of all its substitutioninstances, its being satisfied in all admissible models, or its provability via some demonstrably complete proof-procedure. But for our present purposes we may ignore this further complication.

