

## On the Methodology of Possible Worlds Semantics, I: Correspondence Theory

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*1 Motivation* Though possible worlds semantics has long been established as the dominant research tradition in philosophical logic and its applications, its various theories, background assumptions, and norms have seldom been systematically investigated from a methodological point of view. By way of illustration, consider the matter of semantic *adequacy*. When a new or revised logical system is proposed, the first and often the only significant ‘test’ to which it is subjected is that of “completeness”: Can the logic be shown to be complete with respect to a suitable semantics? Providing the system has a minimum of intrinsic interest, an affirmative answer to this question is virtually a ticket to ‘official’ recognition, while even incomplete systems of no intrinsic interest whatsoever may acquire, in virtue of their incompleteness, a kind of rarity value in the catalogue of logics. In short, (in)completeness proofs are the mainstay of many a journal article and provide the meat of many logic textbooks.

If completeness is genuinely to represent a criterion of internal adequacy, and not merely a logical nicety, we must ask ourselves exactly what cash-value a complete semantics possesses. This question leads naturally to a further problem. Given a well-defined model theory and appropriate rules of interpretation, the matter of completeness is a factual (or better a logical) one, to be settled by formal analysis. But if we are considering logical semantics in general, or one tradition like that of possible worlds in particular, the question is no longer purely logical: it contains a methodological component and can be answered only on the basis of adopting certain *conventions*. To prove completeness we may need recourse to some nonstandard interpretation of the logical constants, or to some alternative specification of the intended ‘models’. Consequently, issues of the following sort arise: Within what limits are we free to modify the stan-

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