

## Detailed Description

**Context** The context for our project consists, centrally, of (I) the well-known relational ('possible-worlds') semantics for modal propositional logic and its various extensions to modal predicate logic, a technical resource first flourishing from the late 1950s and over the course of the 1960s. The context is filled out by two branches from this central component, each of them first flourishing from the late 1960s over the course of the 1970s: (II) the 'modal metaphysics' tradition of reading metaphysical interpretations into the technical resources from (I) and/or invoking these resources to shed light on pre-existing metaphysical questions; and (III) the 'modal pragmatics' tradition of extending the resources from (I) to accommodate the broadly pragmatic phenomena of context-sensitivity and speech-act content.

(I) Contemporary research into the logic of modalities commenced in the opening third of the twentieth century, with CI Lewis's syntactic exploration in [75] of a variety of systems of intensional logic; roughly concurrently, the conception of a possible-worlds semantics was nascent in Wittgenstein's *Tractatus* [154], with its informal theory of sentence-meanings as truth-conditions on possible states of affairs. The 1940s witnessed Carnap's gradual accretion [12–14] of certain central elements of a *Tractatus*-inspired possible-worlds semantics for an elementary modal predicate logic (with its propositional fragment the strongest non-trivial modal propositional system, Lewis's S5, and the modality interpreted as a universal quantifier over worlds); alongside this early semantical work came Ruth Barcan's

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