

# Research Statement

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My research focuses on foundational semantic issues in metaphysics, epistemology, and ethics. Many debates in these areas—for instance, those about relativism or noncognitivism—are intimately tied to theoretical questions about meaning, communication, and thought. Progress in any of these debates is therefore impossible without a thorough understanding of the semantic issues involved. However, in recent years semantics has become an increasingly specialized field, with the main innovations stemming from formal work in natural language semantics. My research bridges the widening gap between the two fields. It is of interest for natural language semantics while it also contributes to important debates in contemporary analytic philosophy.

Much of my research is interdisciplinary, incorporating ideas and techniques from linguistics, computer science, and cognitive science. I am primarily interested in alternatives to the orthodox perspective that our best semantic theory for language and thought is truth-conditional. I argue against the orthodox perspective and for a *dynamic semantics*, according to which the meaning of a sentence is described in terms of the changes that utterances of that sentence induce on a conversational context. Some declarative sentences change the conversational context by adding a truth-condition determining proposition to the common ground, but others may affect the context in a different way. Such sentences then have content that is not truth-conditional content.

My current research focuses on developing a dynamic semantics for modals that solves outstanding puzzles in analytic philosophy, including the problem of *modal disagreement* in epistemology and the paradoxes about *conditional obligations* in ethics. In my future research I intend to extend my dynamic theory to a full-fledged noncognitive theory about ethics that avoids the problems of its predecessors, including the Frege-Geach problem.

A considerable part of my research on conditionals focuses on the Ramsey test for plain indicative conditionals such as “If John is not in Chicago, then he is Boston.” In “New Surprises for the Ramsey Test” (forthcoming in *Synthese*), I develop a dynamic interpretation

of Ramsey’s remarks on conditionals, according to which evaluating a conditional proceeds by first adding the antecedent hypothetically to what is believed and then evaluating the consequent on that basis. Conditionals do not express propositions but rather encode *rules for thinking*. My account offers numerous improvements over traditional AGM implementations of the Ramsey test as developed by, e.g., Levi and Gärdenfors. In an especially distinct contribution, my theory accounts for the crucial but widely neglected difference between suppositional reasoning and adopting a potential state of full belief. This distinction solves numerous puzzles about the Ramsey test, including those that are concerned with conditionals like “If Sally is deceiving me, I do not believe it” (attributed to Thomason and discussed by van Fraassen, Lewis, Jackson, and others).

My reading of the Ramsey test differs substantially from another popular interpretation, namely the *suppositional reading* as developed by Edgington and others. According to the suppositional view, conditionals express conditional assertions and are to be evaluated in terms of conditional probabilities. In “Realizing What Might Be” (under review—revise and resubmit at *Philosophical Studies*) I critically compare the suppositional view with the dynamic theory of conditionals. I prove, on the basis of a logical link between conditional and epistemic modals, that the suppositional view is untenable. Its main defect is that it cannot predict the logical validity of arguments involving conditionals like “If John is not in Chicago, then he *must* be in Boston.” The dynamic view about conditionals, on the other hand, leads to a natural view about epistemic modals with the right logic. This view is further elaborated in subsequent work.

In “Dynamics of Epistemic Modality” (under review) I develop and defend the dynamic perspective on epistemic modals in detail. I argue that we should abandon the traditional conception of epistemically modalized sentences as having truth-conditions relative to what is known. The main deficit of this view is that it cannot make sense of the possibility of modal disagreement without adopting extreme views such as relativism (as proposed by Egan, Hawthorne, MacFarlane, and Weatherson). The key idea of my proposal is that the meaning of an epistemically modalized sentence is to be described in terms of what we *do* when we utter the sentence. Specifically, I argue that *might*-statements are commonly used to highlight certain epistemic possibilities, and I develop a dynamic semantics on the basis of this insight. This view is independently plausible and has a range of important philosophical consequences, including an explanation of the possibility of modal disagreement that avoids relativism. Another important consequence is that the semantics is non-truth-conditional

yet fully compositional. This serves as the starting point for a generalized solution to the Frege-Geach problem for noncognitivism.

In “Ought” (in progress) I argue that deontic modals are similar to epistemic modals insofar as they are *information-sensitive*. Specifically, what ought to be done depends on the available information about the range of alternatives and their expected outcomes. Since this information may change during discourse and reasoning, so may what ought to be done. This gives us independent reasons to abandon classically valid rules of inference for deontic logic, including proof by cases and closure of *ought* under logical entailment. As a consequence we can show that the well-known paradoxes about conditional obligations (such as Forrester’s gentle murder paradox) are invalid. I elaborate this idea in a dynamic logic. The resulting logic avoids the paradoxes about conditional obligations while being sufficiently *strong*: it preserves the validity of modus ponens and identifies those circumstances in which we can rely on logical entailment to derive one normative judgment from another.

In addition to my interest in nondescriptive semantics and its philosophical ramifications, I have a longstanding interest in anaphoric pronouns. In “Intentional Identity Resolved” (in progress) I address the ontological problems raised by certain cases of intentional identity, such as Geach’s “Hob thinks a witch has blighted Bob’s mare, and Nob wonders whether she (the same witch) killed Cob’s sow.” To avoid ontologically dubious objects, an analysis of Geach’s sentence should avoid quantification over non-existent entities. But despite numerous attempts in recent years, no theory satisfies this desideratum while giving a satisfying account of intentional identity. Building on my semantic theory about modals, I develop a solution to the problem of intentional identity by treating indefinites as introducing discourse referents in intentional contexts that may bind anaphoric pronouns in other intentional contexts. This offers a satisfying account of intentional identity while avoiding unpalatable ontological commitments to non-existent objects. I also have a draft of a paper—to which I intend to return eventually—in which I solve ontological problems arising from anaphoric connections between pronouns and fictional terms.

In the future, I plan to extend my work on dynamic semantics to noncognitivism in ethics. I defend a version of noncognitivism on which predicative moral sentences do not have truth-conditions but on which there are normative beliefs. This is a consistent position since on my view beliefs do not necessarily have propositional content. However, the claim that moral sentences do not have truth-conditions faces the Frege-Geach problem: it allegedly cannot explain how to derive the meaning of complex moral judgments from the meaning of

its components. This problem has remained a critical stumbling block for all noncognitivist theories until now.

My dynamic perspective on meaning and communication solves the Frege-Geach problem for noncognitivism. I start with the intuition that moral judgments are made with the intention of *changing* the normative preferences of the audience. Moral judgments are then not descriptions of reality but encode instructions to move from one emotional state to another. So when Alex tells Mary that murder is wrong, he intends to affect Mary's normative preferences so that she condemns murder. Based on my previous work we can now provide an *independently motivated* notion of negation and logical entailment so that "Murder is wrong" and "Murder is not wrong" are inconsistent. Very roughly, the key idea is that is one cannot change one's normative preferences in accordance with both the instruction encoded by "Murder is wrong" and the one encoded by "Murder is not wrong". I extend this proposal to a quantified language involving descriptive as well as non-descriptive predicates.

My work on the Frege-Geach problem for noncognitivism is the starting point of a long-term research project. I plan to defend and elaborate the view that there are beliefs—for instance, moral beliefs—that lack propositional content. I propose a *holistic* view according to which beliefs supervene on global features of an agent's information and preferences. In light of this view, we must re-think numerous issues in epistemology and philosophy of mind, including those of knowledge and of mental content. Furthermore, I intend to connect my research on nondescriptive semantics with my longstanding interest in the history of 20th century philosophy. The key results of my work are intimately related to Heidegger's early notion of truth and Wittgenstein's conception of meaning as use. As a consequence, my future work will not only be of relevance for current themes in philosophy, but will also result in several contributions to the study of the history of philosophy.