

Introduction to Kripke

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Kripke's professional career began as a high school student when he published his early pioneering work in logic on the semantics and completeness proofs of the normal and non-normal modal systems. Not much later, his seminal work on "Semantical Analysis of Intuitionistic Logic" appeared. Shortly after that came his founding of transfinite recursion theory with his two classic papers, "Transfinite Recursions on Admissible Ordinals" and "Admissible Ordinals and the Analytic Hierarchy." Had he accomplished nothing else in his intellectual life, Kripke would have already earned his claim to fame.

But his thoughts in what turned out to be his greatest area of accomplishment, philosophy, were just beginning to gel. Already as a college student he had the basic ideas of his classic seminal work, *Naming and Necessity*, which was to revolutionize the field of philosophy. The work revealed what has become a hallmark of Kripke: his conceptual clarity par excellence. While continuing to develop his ideas in mathematical logic, he developed many important thoughts in philosophy. His work on a new theory of truth for dealing with the Epimenides paradox (the semantical paradox of the liar), on a puzzle about belief, and on his novel interpretation of Wittgenstein on rules and private language have dominated discussion and generated an industry on these topics.

Today, Kripke's accomplishments span several areas of philosophy, including epistemology; metaphysics; and philosophy of language, logic, mathematics, and mind; as well as areas of mathematical logic and more recently of linguistics as well. His work has also extended to important scholarship in the history of twentieth-century philosophy and in the history of logic and set theory.

In his first seminal work in philosophy, *Naming and Necessity*, Kripke discusses his historical predecessors, Mill, Frege, and Russell, and

continues the debate regarding the meaning of proper names and general names and their relation to determining the reference of these terms. He defends a view of the reference of these terms akin to Mill's over the then-dominant view of Frege and Russell, but adds a new "picture" of how these terms have their reference determined. This so-called new theory of reference (which is now more than forty years old and should more properly be called "the new received view of reference") replaced the Frege and Russell received view of reference. This Kripkean picture has done much to change our thinking about meaning and reference and the connection between these notions.

Kripke makes perhaps an even greater philosophical impact in *Naming and Necessity* with his discussion of modalities. In particular, he clarifies the epistemic notion of apriority and the metaphysical notion of necessity and the distinction between them. Contrary to the once received view, he argues that not all a priori truths are necessary truths and vice versa. His analysis of these notions has unquestionably changed our philosophical thinking about them.

Kripke ends *Naming and Necessity* with an application of his views on reference and necessity to philosophy of mind. He presents a novel treatment of Cartesianism and a critique of naturalism in philosophy of mind. In particular, he offers a critique of the once dominant view in philosophy of mind, known as the identity thesis, a view that identifies mental states, such as pain, with brain states.

In his book *Wittgenstein on Rules and Private Language*, Kripke presents a novel view of the late Wittgenstein's challenge to the traditional picture of language as having truth conditions. He then presents a novel interpretation of the late Wittgenstein's view that language has assertability conditions and of Wittgenstein's defense of this view. Kripke relates this to Humean skepticism. The book reveals a deep understanding of Wittgenstein's picture of the relation among language, mind, and the world.

In his "A Puzzle about Belief," Kripke shows how the ordinary way in which we attribute belief to people leads to certain puzzles, which previously were thought to present a puzzle for anyone holding a view similar to Mill's on names. This important work reveals further connections between mind and language and has changed our philosophical outlook about what are called propositional attitudes.

In what may be called "philosophical logic," there simply isn't a more important and influential figure in the current discipline. His work on the semantics of modal logic and intuitionism and his outline of a theory

of truth have been the foundations for all that is contemporary and state-of-the-art in philosophical logic.

There are many gifted logicians, but none that display Kripke's keen judgment regarding the nature of logic and its philosophical implications, especially with regard to the epistemic status of logic. Countering views that are in vogue, Kripke shows the problems of viewing logic as an empirical science and even of the coherency of claiming that we can "adopt a logic," whether for empirical or linguistic reasons.

STRUCTURE OF THE BOOK

Accordingly, this book on the philosophy of Saul Kripke contains the following parts and chapters.

Part I. Naming, Necessity, and Apriority

Part I consists of the first four chapters. Chapter 1, "Kripke on Proper and General Names," by Bernard Linsky, not only offers an original interpretation of what Kripke means by the rigidity of a general term, but also is a review of Kripke's *Naming and Necessity* lectures, summarizing the famous arguments and examples they introduced, with indications of the lines of investigation that they initiated. Accordingly, this is a good chapter for someone who does not have much familiarity with Kripke's views to read first.

Linsky discusses at length Kripke's famous refutation of the "cluster of descriptions theory of proper names" with his well-known examples of 'Jonah', 'Moses', 'Aristotle', and 'Gödel' and 'Schmidt'. The arguments against the descriptions theory have come to be classified as "modal," "epistemic," and "semantic" arguments. Linsky summarizes notions that Kripke's own account of names introduced, such as "rigid designator," "baptism and chain of reference," and "fixing the reference of a name with a description." He also summarizes Kripke's arguments, which arise from considering identity statements, for a priori contingent and a posteriori necessary truths, in particular the necessity of identity and the essentiality of origin. Whereas Kripke himself only claimed to offer a "better picture" of names than the "cluster theory," almost immediately a range of theories were presented to fill out the picture. Linsky distinguishes several of these attempts to fill out what Kripke had introduced, including the "causal-historical theory of reference" and the "theory of direct reference."

Naming and Necessity also introduced the view that natural kind terms and some general terms are also rigid designators, including ‘water’, ‘tiger’, and ‘lightning’. Linsky’s survey of *Naming and Necessity* concludes with a defense of the very notion of a kind or general term being a rigid designator against recent arguments from Soames. The final section addresses Kripke’s discussion of definite descriptions, in particular the account of Donnellan’s “referential/attributive” distinction in the 1977 paper “Speaker’s Reference and Semantic Reference.”

As presented here, the wider importance of the *Naming and Necessity* lectures came from their application to issues outside the narrow dialectic of descriptions and Millian names that had bounded the discussion through Russell, Frege, and Strawson, and on to Searle with the cluster theory. With the sharp distinction between the mechanism that determines the referent of a name and what descriptive properties might pick out that referent, Kripke made it possible to consider metaphysical issues separately from the epistemic issues with which they had been so closely associated. Whereas Quine’s “jungle of Aristotelian essentialism” was thus opened to exploration, more immediate results came from the clearing away of possible objections to the thesis of the necessity of identity. As will be seen in the following chapters, Kripke’s theory of proper and general names also had consequences in many other areas of philosophy.

In Chapter 2, “Fiction, Myth, and Reality,” Nathan Salmon argues that Kripke’s account of names from fiction illuminates, but exacerbates, the perennial problem of true singular negative existentials: An atomic sentence is true only if its subject term designates; and yet (*S*) ‘Sherlock Holmes is nonexistent’ is true only if its subject term does not designate. In his 1973 John Locke lectures, on vacuous names and names in fiction, Kripke argues that natural-language discourse about (not within) fiction posits a realm of abstract entities, *fictional characters*, supposedly created by storytellers. He contends further that a proper name from fiction, such as ‘Holmes’, is ambiguous between a primary (in a “primordial” sense), typically object-fictional use – ‘Holmes₁’ – on which it is non-designating and therefore without semantic content, and a secondary (in a non-primordial sense), metafictional use – ‘Holmes₂’ – on which it names the character. He says further that in (*S*), the name has its primary use, which is “quasi-intensional,” with the result that (*S*) typically expresses that there is no true proposition that Holmes₁ exists. But this contention is subject to the same difficulty as the original sentence, since the ‘that’-clause is a non-designating term

on a par with ‘Holmes₁’. Salmon proposes an alternative account on which ‘Holmes’ univocally designates the character, and (*S*), although false, is often used to convey correct information that it does not semantically express.

In Chapter 3, “Kripke on Epistemic and Metaphysical Possibility: Two Routes to the Necessary A Posteriori,” Scott Soames argues that *Naming and Necessity* and “Identity and Necessity” contain two routes to necessary a posteriori truths. On the first, they are necessary truths that predicate essential properties of objects or kinds that the objects or kinds can be known to possess only a posteriori. This encompasses all putative instances of the Kripkean necessary a posteriori – including necessary a posteriori statements of non-identity (as in ‘Saul Kripke ≠ David Kaplan’), and necessary a posteriori identity statements involving a simple name or natural kind term plus a descriptive constituent (as in ‘Water is the substance instances of which are made up of molecules with two hydrogen atoms and one oxygen atom’). Simple identities such as ‘Hesperus is Phosphorus’ and ‘woodchucks are groundhogs’, Soames claims, are left out of this picture.

The second route, Soames maintains, commits Kripke to an implicit appeal to his strong disquotational principle connecting evidence required to justify accepting a sentence one understands with evidence required to justify belief in the proposition it expresses. Soames contends that the two routes to the necessary a posteriori differ in that (i) the first applies to a proper subset of cases to which the second is meant to apply; (ii) the first, but not the second, leads to the recognition of epistemically possible world-states over and above the metaphysically possible; and (iii) the first takes the empirical evidence required for a posteriori knowledge of *p* to rule out epistemic possibilities in which *p* is false, whereas the second does not. Soames argues that the first route is sound, whereas the second is not.

Nevertheless, Soames maintains that an insight is extractable from the failed second route. Its guiding idea is that belief in singular propositions may result either from understanding and accepting sentences that express them, or from thinking of individuals or kinds as bearers of certain descriptive properties – and that because of this, believing the bare proposition that *o* is *F* may always involve also believing a related, descriptive or metalinguistic proposition that provides a way of thinking about *o*. In short, according to Soames, there may be something broadly Fregean about mental states the contents of which include singular propositions.

In Chapter 4, “Possible Worlds Semantics: Philosophical Foundations,” Robert Stalnaker discusses Kripke’s early formal contributions to the semantics for modal logic and his philosophical application of possible worlds semantics to philosophical problems in *Naming and Necessity*. This raises questions about the metaphysical status of possible worlds that have been much discussed in the philosophical literature. This chapter is about Kripke’s views about some of the questions raised in those discussions. Stalnaker’s interpretation of Kripke is based entirely on remarks made in *Naming and Necessity*, and in the preface to the edition of those lectures that was published in 1980.

Kripke made it clear that he rejected David Lewis’s modal realist interpretation of possible worlds, according to which they are concrete universes spatially and temporally disconnected from ours, but the alternative “actualist” interpretation of possible worlds raises at least these further questions: What exactly are possible worlds (or possible states of the world, which Kripke suggests would be less misleading terminology)? What contribution do they make to the explanation of modal discourse, and of the distinctive facts that modal discourse is used to state? Does the slogan “necessity is truth in all possible worlds” provide, or point to, a reductive analysis of necessity? Are possible worlds, in some sense, prior to modal operators and modal auxiliaries? If not, in what sense are they explanatory? How are possible worlds, or counterfactual situations, specified? How do they contribute to our understanding of specific metaphysical questions about the relations between particular individuals and their qualitative characteristics, the kinds to which they belong, and the matter of which they are constituted? How are we to understand the possible existence of individuals that do not actually exist? Section 2 discusses Kripke’s rejection of modal realism and of the idea that the analysis of necessity and possibility in terms of possible worlds provides a reductive analysis of modal concepts, and raises the question of exactly what role the notion of a possible world plays in a philosophical explanation of modality. Section 3 aims to disentangle what Kripke regards as a pseudoproblem about the identification of individuals across possible worlds from the questions about such identifications that Kripke acknowledges are legitimate. Section 4 speculates about Kripke’s views about the status of merely possible individuals – the interpretation of individuals that are members of the domains of other possible worlds, but not in the domain of the actual world.

Part II. Formal Semantics, Truth, Philosophy of Mathematics, and Philosophy of Logic

Part II consists of Chapters 5, 6, 7, and 8. They are devoted to Kripke's work in the semantics of various formal systems, his views in philosophy of mathematics and logic, and his resolution of the Liar Paradox via his theory of truth.

John Burgess's first contribution, Chapter 5, "Kripke Models," is primarily an elementary introduction to Kripke's contributions to developing models for modal and intuitionistic logic, intended to prepare the reader to tackle more formal treatments elsewhere. Burgess takes the occasion to warn against some common misunderstandings (notably the impression that the model theory commits one to a metaphysical rather than a logical understanding of modality), to clarify the history of the subject (notably the roles of McKinsey and Jonsson on the one hand, and Kanger and Hintikka on the other, as precursors, and the greater importance of the former pair), and to indicate something of the relationship of the work in model theory to the work on the nature of modality (the latter is in no way implicit in the former, but the philosophical work is needed to clarify the ultimate significance of the earlier mathematical work).

Chapter 6, "Kripke on Truth," Burgess's second contribution, is again primarily an elementary introduction. It includes a comparison of Kripke's theory of truth with Tarski's and discusses the extent to which they need a hierarchy of metalanguages. The last section does, however, go beyond Kripke's "Outline" to say a little about the content of Kripke's unpublished work on related topics.

In Chapter 7, "Kripke on Logicism, Wittgenstein, and *De Re* Beliefs about Numbers," Mark Steiner discusses Kripke's unpublished Whitehead Lectures, in which he sets forth a new view of numbers that has two main features: (a) Numbers are not numerals, so the view is not nominalist; and (b) the properties of the numbers depend upon the properties of the numerals (and thus, for example, the binary and the decimal numerals refer to different sets of numbers), so the view is not platonist. Steiner calls this view "quasi-nominalist," and argues that the view is the closest to that of the later Wittgenstein that Kripke has set forth. He also discusses what he takes to be the evolution of Kripke's thought concerning Wittgenstein, and suggests a slow convergence of Kripke's views to the actual views of Wittgenstein taking place from *Naming and Necessity*,

through *Wittgenstein on Rules and Private Language*, to the Whitehead Lectures. Steiner also discusses Kripke's views on *de re* beliefs about numbers, which is based on Kripke's notion of a buckstopper.

In Chapter 8, "Kripke on the Incoherency of Adopting a Logic," I first discuss Kripke's general objections to the notion of adopting a logic. Whether we view logic as a set of statements or as a formal system, Kripke's various applications of the Lewis Carroll infinite regress argument show that we cannot be neutral and adopt one for evaluation or compare one with another. In Section 2, I consider whether we can adopt a "logic" that is not subject to this argument: "quantum logic." In Section 3, I evaluate the claim of adopting intuitionist logic.

Kripke maintains that there are four possible claims of what one means by a change in logic:

1. We could merely be introducing, or recognizing, a new set of connectives. These connectives may not be introduced by definition, but may be introduced as new primitive notions in any system. This is Kripke's view of intuitionist logic, and he adds, "One may always, of course, invent new connectives, which ... satisfy somewhat different laws [from our connectives] because they have a somewhat different interpretation. That should be uncontroversial."
2. We could be introducing new connectives and repudiating our old connectives as meaningless. This has two forms:

- a) syntactic, or "axiomatic," presentation of the new system of logic.

Here, we just introduce a language purely syntactically, or an uninterpreted axiomatic, or formal, system, and given something called "formation rules" we are to define something we call "grammatical strings" and then we define which strings are going to be called "axioms" and which will be called "inference rules." But Kripke maintains that if you only look at the formal system, then you really can't tell whether these connectives mean the same as the old ones or not because no one has explained or given you the slightest idea of what they mean. Similarly, as Kripke has been urging, "One has to first use reasoning in order to even see what is provable in a formal system."

- b) semantic interpretation of the symbols.

The symbols have been explained and the old connectives are repudiated as meaningless. Kripke has argued that accepting these new connectives is not an objection to accepting the old connectives as well. Further, this is the view held by Kreisel, probably Gödel, and Kleene, as well as Kripke.

3. We could claim to have discovered a definite fallacy.

We may discover, in an a priori manner, that something thought of for centuries as a sound principle of logic was actually based on a fallacy. This is not because we are “adopting a new logic,” but because we look at the old formal system and see that it wasn’t really sound with respect to its informal interpretation, and that the “proof” we had that it was sound was fallacious. This is what happened in the case of the Aristotelian syllogism, and for all we know there are other such proofs that we make that contain a fallacy. But this should no more count against the notion of self-evidence or apriority than the fact that something may seem to be supported by experiment and then later turn out not to be so well supported by experiment should undermine our using *being supported by experiment* as a justification for accepting something.

4. We could claim that we mean what we always meant by a certain connective, but we now have discovered that new laws apply to the connective.

The real problem, Kripke states, is not whether the new connectives mean the same as the old ones, but whether there’s anything in the new language satisfying the same laws as the old.

But Kripke’s main point is this: “There aren’t different logics. There is only logic. There are different formal systems.” We use logic to reason about them to see if a new formal system has an interesting interpretation that may have sound principles of logic. But we can’t adopt it.

Part III. Language and Mind

Chapters 9, 10, 11, and 12 bridge the gap between Kripke’s views on these two topics.

In Chapter 9, “Kripke’s Puzzle about Belief,” Mark Richard considers whether Kripke’s puzzle about Pierre (who thinks true both ‘Londres est jolie’ and ‘London is not pretty’) might be a puzzle about belief: Does Pierre, or does he not, believe that London is pretty? But if there is no univocal answer to that question, Richard considers whether perhaps it is more a puzzle about belief ascription: In such-and-such a situation would it be right to say that Pierre believes that? Or perhaps it is a puzzle about translation: Can we invariably translate what Pierre says with ‘Londres est jolie’ into our idiom? Richard’s own view is that the puzzle is first and foremost a puzzle about how we talk about beliefs; his essay attempts to defend this view.

In his second contribution, Chapter 10, “A Note on Kripke’s Puzzle about Belief,” Nathan Salmon contrasts different versions of Kripke’s puzzle about belief, drawing different conclusions from each. Arguing that every instance of the disquotational principle schema is analytic, Salmon reconstructs the original puzzle, which employs that schema, as an argument demonstrating that (evidently contrary to Kripke) one can believe contradictions while being completely rational (and even while being a logician who will correct any belief that he/she recognizes is contradictory). More significantly, Salmon reconstructs the puzzle employing the strengthened disquotation principle schema as a disproof, by *reductio ad absurdum*, of that stronger principle – not merely demonstrating (as Kripke appears to favor) that not all instances of strengthened disquotation are true even if none are false, but demonstrating, moreover, that some instances must be altogether false. A perfectly competent speaker who is reflective and non-reticent, and who believes what is expressed by a simple sentence, may nevertheless sincerely dissent to that sentence under normal circumstances. Such, Salmon argues, is the inevitable moral of Kripke’s strengthened puzzle. For further details, see Salmon’s abstract at the beginning of his contribution.

Chapter 11, “On the Skepticism about Rule-Following in Kripke’s Version of Wittgenstein,” George Wilson’s contribution, is on what is sometimes referred to as “Kripkenstein’s” skepticism in rule-following. It is widely supposed that the conclusion of the Skeptical Argument in Kripke’s *Wittgenstein on Rules and Private Language* says that there are no facts about someone’s meaning or understanding something by a term. It is also supposed that Kripke’s Wittgenstein responds to this conclusion by denying in the Skeptical Solution that ascriptions of meaning even *purport* to state or represent facts – say, facts about a speaker’s use of an arbitrary term. In the first section of the paper, Wilson outlines his chief reasons for thinking that these related interpretative suppositions are false. The Skeptical Argument does *not* aim at establishing *semantic non-factualism*, and the Skeptical Solution does not presuppose it. Second, Wilson argues that the framework of the Skeptical Solution actually depends upon the idea that meaning ascriptions *are*, in some substantial sense, factual in content, and he attempts to specify the type of facts that are represented by correct meaning ascriptions according to Kripke’s Wittgensteinian perspective. Roughly, the meaning of a term in a community is constituted by facts about the assertability conditions of the term and about its role or utility in the relevant “language games” that the community’s linguistic practices have established. It is hard to make