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PRÉCIS OF *CONTINGENT A PRIORI TRUTHS. METAPHYSICS, SEMANTICS, EPISTEMOLOGY AND PRAGMATICS*

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It was a fortunate coincidence that this book appeared just in time to mark the fiftieth anniversary of Kripke's famous three lectures at Princeton in 1972, later published as *Naming and Necessity* (1980). Kripke's work—alongside important contributions by Donnellan, Putnam, and Kaplan—played a central role in what can arguably be regarded as a paradigm shift in twentieth-century philosophy of language. *Naming and Necessity* became one of the most influential works in the analytic tradition, and the many theses Kripke derives from the seemingly straightforward idea that proper names are rigid designators have had profound implications across diverse domains, including the philosophy of mathematics and the mind-body problem.

Among the various claims Kripke advances, none has intrigued me more than the possibility that certain sentences might express contingent truths that are nevertheless knowable a priori. The dual thesis—that there may be necessary truths that are knowable only a posteriori—has received near-universal acceptance and represents a significant departure from the classical understanding of modality and epistemology. In contrast, the idea of contingent a priori truths has been met with considerable skepticism. Donnellan (1977) and, more recently, Stalnaker (2022) have regarded Kripke's examples of such truths as highly artificial—mere philosophical toys devised for theoretical speculation. Evans (1979) described the notion as an "intolerable paradox" if taken *au pied de la lettre*, and Dummett (1973) saw it as a *reductio ad absurdum* of the very notion of rigid designation. My own reaction was quite different. From the outset, I felt Kripke was onto something—that he was attempting to uncover a significant feature of our cognitive architecture and of the epistemic

foundations of science. At the same time, some of the criticisms—particularly those raised by Donnellan and partially by Evans—also struck me as compelling: after all, how could one plausibly claim to know facts about the natural world, such as planetary motion, a priori?

Kripke famously presents in *Naming and Necessity* two examples that have been extensively discussed in the literature. The first concerns the standard platinum-iridium bar kept in Sèvres, France, once used to define the unit of measurement known as the meter. He considers the following sentence:

(**M**) One meter is the length of the standard stick at t_0.

Assuming that the non-rigid definite description 'the length of the standard stick at t_0' was used to fix the reference of the rigid designator 'one meter', it follows that (**M**) expresses a contingent truth. This is because 'one meter' refers rigidly to the same length across all possible worlds, while 'the length of the standard stick at t_0' picks out different lengths in different possible worlds, depending on the physical condition of the stick. Nevertheless, (**M**) is knowable a priori, since it results from a stipulation: the stipulator who introduces the reference-fixing convention does not need any measurement to know that the length of the stick at t_0 is one meter. The second well-known example derives from the history of the discovery of Neptune by the French astronomer Urbain Le Verrier in 1846. Prior to any telescopic observation of Neptune, Le Verrier detected anomalies in the orbit of Uranus and hypothesized the existence of another, as yet unobserved, celestial body causing these perturbations. Assuming that he proposed the name 'Neptune' for this hypothetical object,[1] then we have a sentence of the form:

(**N**) Neptune is the planet responsible for the perturbations in Uranus' orbit.

This statement, too, was known a priori by Le Verrier, insofar as it was the product of a reference-fixing stipulation. However, like (**M**), (**N**) expresses a contingent truth: 'Neptune' is a rigid designator referring to the same object in all possible worlds, whereas the definite description 'the planet responsible for the perturbations in Uranus'

[1] It is actually not clear whether Le Verrier himself proposed this particular name for the new planet, but the example remains valid regardless of this historical detail.

orbit' may refer to different entities—or to none at all—in other worlds.[2]

In the book, I examine several competing interpretations of Kripke's examples. In the final section, I offer my own proposal, which, as I believe, diverges considerably from those previously reviewed. It begins with a seemingly trivial yet crucial observation: the sentences (**M**) and (**N**) cannot, at least in their original contexts, be construed merely as descriptive reports about the world. Rather, they must first be understood as the product of a stipulative act. Only subsequent to this stipulation do they acquire truth-value. If these statements are the content of a stipulation, then—viewed through the lens of illocutionary force—the illocutionary act that renders them true cannot be a standard assertion. Instead, from the illocutionary perspective, they must bear the force of what Austin termed a *performative* utterance, or what Searle later called a *declarative* illocutionary act. This is a rather basic insight, yet it has been largely overlooked in much of the literature on Kripke's cases. Recognizing the declarative nature of these reference-fixing statements opens a new interpretive framework for understanding Kripke's examples. Crucially, it enables us to identify significant disanalogies between cases similar in structure to the meter example and those akin to the Neptune case.

The book starts in Chapter 1 with a more or less standard explanation of Kripke's cases: first, the idea that proper names, as used in ordinary language, behave like rigid designators; next, how this leads to the so-called *modal argument*, which purports to show that names cannot have a descriptive content as their meaning and must, therefore, be understood as directly referential. The discussion then turns to Kripke's distinction between definite descriptions as devices for reference fixing and as meaning providers. Finally, there is an exposition of the thesis that there might be sentences (such as (**M**) and (**N**)) that express contingent a priori truths. The chapter also briefly discusses a famous objection by Dummett to the modal argument in

[2] A minor complication arises here. It is possible that no object at all satisfies the description 'the planet responsible for the perturbations in Uranus' orbit'. A similar case occurred with Le Verrier's earlier postulation of Vulcan in 1859 as the planet responsible for anomalies in Mercury's orbit—an entity that ultimately turned out not to exist, as the anomalies were later explained by Einstein's theory of general relativity. Accordingly, (**N**) should be more accurately rendered as: 'Neptune is the planet responsible for the perturbations in Uranus' orbit, if there is one'. A similar qualification could, albeit less obviously, be applied to the meter case. For present purposes, we set aside this complication.

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terms of scope ambiguity. It concludes by pointing out what seems to me to be two important gaps in Kripke's own account of contingent a priori truths:

- First, Kripke does not clarify the nature of the truth-makers in such cases. The way he formulates the examples—particularly in the case of Neptune—suggests that the truth-makers for (**M**) and (**N**) are, respectively, (i) the fact that the standard stick possesses a certain length (understood as a physical property); and (ii) the fact that Neptune plays a certain causal role in producing the perturbations in Uranus' orbit. However, both of these are empirical facts. If this is what Kripke meant, then critics such as Donnellan are justified in objecting: "Surely only God, if even He, could perform the miracle of stipulating how the world shall be". (1977, p. 19)

- Second, in presenting the two canonical examples, Kripke emphasizes that the possibility of contingent a priori knowledge of (**M**) and (**N**) applies specifically to the stipulator, and at the moment of stipulation. However, this raises two important questions:

  (i) What about individuals other than the stipulator? It seems that they too possess some form of a priori knowledge. For instance, no one needs to travel to Sèvres to measure the standard stick to know that it is one meter long. Anyone who uses the metric system appears to know this without empirical verification—suggesting that this knowledge is, in some extended sense, a priori, even if derivative. Does this entail a derivative form of a priori knowledge?

  (ii) What about the stipulators themselves, or others, at a time after the stipulation has occurred? If knowledge of the stipulated truth relies on memory, does this compromise its a priori status? Intuitively, the stipulation should generate a stable epistemic status for the proposition that persists through time. Yet Kripke offers no account of how such enduring a priori knowledge might be possible beyond the moment of stipulation.

There is a need, then, for a more informative theory of how a priori knowledge of stipulative truths can be shared and preserved. Part

of the motivation for writing this book was to develop a more adequate framework to address—and, if possible, close—these explanatory gaps.[3]

Chapter 2 offers a relatively standard discussion of Kaplan's analogous cases of contingent a priori truths, which arise in the context of his semantics for both pure indexicals and demonstratives—for instance, in sentences such as 'I am here now', 'I exist', or 'Dthat[the president of France in 2025] is the president of France in 2025'. Kaplan holds that the epistemic status of such sentences (i.e., whether they are knowable a priori or a posteriori) is determined by the *character* of the expression, while their metaphysical status (i.e., whether the proposition expressed is necessary or contingent) is determined by the *content* in a context. Kaplan's cases are often grouped together with Kripke's as instances of the same broader phenomenon—namely, contingent a priori truths seemingly grounded in the semantics of rigid designation (with proper names in Kripke and indexicals in Kaplan). However, one of the chapter's central claims is that there are important and often overlooked differences between the two frameworks. Most notably, in Kripke's cases, contingency and aprioricity are properties of *a single proposition*—the one expressed by the sentence. In contrast, Kaplan's analysis assigns these two features to *different semantic layers*: aprioricity belongs to the character, while contingency belongs to the content. Even more significantly, Kripke's examples crucially involve stipulative acts, whereas Kaplan's do not; they are ordinary assertions involving indexicals, not acts of reference-fixing.

Chapters 3 and 4 examine a family of related objections to Kripke's cases, raised by critics such as Plantinga (1974), Donnellan (1977), Salmon (1986, 1987), and Soames (2005). These objections typically rest on the claim that, in order for the stipulator to possess any substantive knowledge of the proposition expressed in cases like (**M**) and (**N**), some form of perceptual contact—particularly with the referent of the rigid designator—is required. If this is correct, then either there is no genuine a priori knowledge in such cases, or, at best, the a priori component is purely metalinguistic. For example, in the Neptune case, Le Verrier might be said to know that the sentence (**N**) is true, but—so the argument goes—he could not know which proposition it expresses, due to the lack of perceptual access to the referent of 'Neptune'. One of my key conclusions in response to

[3] In Chapter 10, I propose how these gaps may be addressed by examining the illocutionary structure of the stipulative acts underlying Kripke's cases.

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Donnellan is that he is mistaken in assuming that one cannot make a contingent proposition true by stipulation. His critique presupposes that all contingent truths are non-linguistic, such as the fact that Neptune causally influences Uranus' orbit. However, he neglects the role of declarative illocutionary acts, which can themselves bring about the truth of propositions. For instance, when a judge utters 'I declare the defendant guilty', the very act of saying so (under proper conditions) makes the proposition that the defendant is guilty (as a legal status) true. Analogously, the stipulations involved in Kripke's cases may be understood as performative speech acts that generate contingent truths. In Chapter 4, I extend this critique to Plantinga, Salmon, and Soames, challenging their shared assumption that visual (or other sensory) perception of the meter stick is either necessary or sufficient for *de re* knowledge of its length. In this connection, I draw on Berkeley's *Three Dialogues between Hylas and Philonous*, proposing what I term the "Philonous' Objection": namely, that mere perception of the stick does not yield epistemic access to its precise length, since perceptual impressions vary with perspective and contextual conditions. This suggests that *de re* knowledge of such properties cannot be grounded solely in sensory contact.

Chapter 5 examines Kripke's later reformulation of his views on the contingent a priori, as presented in a series of talks delivered in 1986, fourteen years after the original *Naming and Necessity* lectures. In these talks, Kripke introduces a few modifications aimed at incorporating an identifiability requirement for the object whose name is introduced by a description. It is difficult to avoid the impression that some of these adjustments feel somewhat ad hoc, seemingly motivated by the desire to neutralize the objection that visual contact with the meter stick (or Neptune) is necessary for the stipulation to succeed. However, one of Kripke's remarks in this context strikes me as particularly compelling, namely, that there can be no contingent a posteriori knowledge of any length without contingent a priori knowledge of some length. This is a powerful insight. It challenges the idea that contingent a priori truths are merely philosophical curiosities or linguistic oddities, suggesting instead that such truths are fundamental to the epistemic infrastructure of science—particularly in the establishment of measurement standards. Without these stipulative foundations, empirical science itself could not proceed in a coherent or unified manner. If we take Kripke's insight seriously, this may reveal a deeper asymmetry between the two canonical cases, (**M**) and (**N**)—an asymmetry that is analyzed in greater depth in Chapter 10.

Any discussion of the contingent a priori must, at some point, engage with Evans' (1979) distinction between "deep" and "superficial" contingencies—a topic addressed in Chapter 6. As the chapter argues, Evans' terminology is potentially misleading: it implies that deep contingencies are the only genuine contingencies, while superficial contingencies are somehow merely apparent. It also seems to suggest that a deep contingency is, by implication, also a superficial one, but not the other way around. However, neither implication is accurate. A clearer and more compelling formulation of this distinction is offered in Davies and Humberstone (1980), whose account is explored in Chapter 7. There, the conceptual basis for distinguishing between different types of contingency is more rigorously developed, helping to clarify the underlying metaphysical and epistemic dimensions. Evans' central critical point is that Kripke's cases can be reinterpreted as special cases involving indexicals, and since indexical truths are only superficially contingent, they may lack the philosophical significance Kripke attributed to them. This critique resurfaces in Chapter 8, where the debate is further contextualized and evaluated.

Chapter 7 is dedicated to the framework of two-dimensional semantics. It begins with Stalnaker's influential model of assertion, which introduces the notion of propositional concepts and their associated matrices. Within this framework, the diagonal proposition is what determines the epistemic status of the propositional concept: a contingent a priori truth corresponds to a propositional concept whose diagonal is necessary, while each row of the matrix represents a contingent proposition. As I argue, this provides a useful formal model for capturing Kripke's phenomenon, but it does not offer a genuine explanatory account of how such cases arise. The chapter also includes a critical review of Chalmers' and Jackson's alternative formulations of two-dimensional semantics, articulated in terms of primary and secondary intensions. I highlight several conceptual and technical difficulties associated with these views, suggesting that, while they enrich the discussion, they too fall short of fully explaining the phenomenon.

Evans' critical position, examined in Chapter 6, rests on the contentious claim that there are no indexical-free examples of contingent a priori truths. Chapter 8 addresses this claim by discussing a number of counterexamples that have appeared in the literature since Evans' paper—many of which were formulated explicitly as reactions to his position. I argue that the most persuasive of these examples are those that, while free of indexicals, nonetheless emerge

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from Kaplan's logic of demonstratives. As Kaplan notes in his 1977 manuscript, the logic of demonstratives gives rise to a class of formulas with a stable character—that is, formulas whose character is constant across contexts and, hence, indexical-free—for which the modal schema

$$\models \varphi \Rightarrow \models \Box\varphi$$

fails. An illustrative case is the formula '$\exists x \exists p$ *Located* (x, p)', which asserts that someone is located somewhere. While this is a contingent proposition, it turns out to be true in all models of the logic of demonstratives—highlighting a kind of non-trivial, indexical-free contingent a priori truth that challenges Evans' generalization.

Chapter 9 presents the basic elements of speech act theory that will serve as the main analytical framework for the argument developed in Chapter 10. Among the various formulations available today, I focus primarily on the accounts provided by Searle (1979) and Searle and Varderveken (1985), due to their clarity, systematic structure, and suitability for the intended application. This theoretical groundwork is chosen to allow the transition into the next chapter to unfold organically and without conceptual strain.[4] Two central notions discussed are particularly relevant:

- The concept of *institutional facts*, which will be employed to address the first explanatory gap in Kripke's treatment of contingent a priori truths; and
- The notion of *illocutionary commitment*, which will serve as the key to resolving the second gap, concerning the durability and communicability of a priori knowledge post-stipulation.

Chapter 10 contains the central contribution of the book. It is here that I develop my own approach, based on the illocutionary structure underlying Kripke's cases. As previously noted, the statements (**M**) and (**N**) are not, in isolation, true or false in the manner of ordinary assertions, whose propositional content is either true or false independently of being uttered. Rather, the content of (**M**) and (**N**) must first be made true by a stipulation. If this is the case, then the act that confers truth upon them must have a performative dimension (in Austin's sense) or be a declarative act (in Searle's sense) that brings about the truth of its propositional content. In short, these

[4] Whether other formulations of speech act theory would alter the present approach is a question I leave for another occasion.

statements are true in virtue of the stipulation itself. The central idea is that, once a successful stipulation is performed, the justification for (**M**) or (**N**) rests solely on the fact that they result from such a stipulation—hence, there is a clear sense in which their epistemic status is a priori: they are *made true* by a linguistic act. That is, no empirical verification or measurement is required to justify the statement, even if empirical knowledge is involved in verifying the conditions under which the stipulation can succeed. Of course, several complexities arise and are discussed throughout the chapter (for instance, whether the content of the act is metalinguistic or factual or both). One important point is that the content of a declarative act must be contingent, since a necessary proposition would be true independently of any illocutionary act—thus undermining the illocutionary point of issuing a declaration. Like all illocutionary acts, declarative acts are subject to felicity conditions (in Austin's sense), and knowledge of whether those conditions obtain may well be empirical. However, this does not entail that knowledge *of the propositional content* of a successful declarative act is empirical. At one point, I draw an analogy between declarative stipulations (such as in the meter case) and mathematical definitions. Both are subject to felicity conditions (e.g., the definition must not have been introduced previously in the same theory with a different content, must use primitive or previously defined terms, must be coherent within the system, etc.). While determining whether these conditions are satisfied might involve empirical processes, the knowledge produced—once the definition is successful—is not empirical.

To summarize, my proposal for closing the two explanatory gaps in Kripke's account is as follows:

- On the nature of truth-makers: The truth-makers of Kripke's contingent a priori statements are not empirical facts but rather institutional facts (in Searle's sense), brought into existence by declarative illocutionary acts.

- On the transmission and durability of a priori knowledge: A priori knowledge can be transmitted from the stipulator to others via illocutionary commitment. That is, within a scientific community, accepting someone's authority in fixing a standard (e.g., by stipulating (**M**)) entails a commitment to uphold that statement as justified by the declarative act alone—independent of empirical validation. The same mechanism explains how contingent a priori truths persist through time: some illocutionary

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> acts on one occasion license, or even require, corresponding illocutionary acts in subsequent contexts.

A key consequence of this view is an asymmetry between the meter case and the Neptune case. In the meter case, the proposition expressed by (**M**) can be made true through a declarative act—because fixing a standard of measurement can successfully create an institutional fact. In contrast, the proposition expressed in the Neptune case refers to a physical fact of the world, and thus cannot be made true by a declaration.

Therefore, one of the central conclusions of Chapter 10 is that contingent a priori truths are real and indispensable to both our scientific practices and cognitive frameworks (science could not function without standards of measurement—hence, without *some* contingent a priori truth such as (**M**)). However, they are not as pervasive as Kripke may have suggested: not all cases of descriptive reference fixing yield epistemically interesting institutional facts. Some (e.g., (**N**)) produce only trivial metalinguistic truths rather than genuinely new or substantive contents.

Finally, Chapter 11 examines Frege's early views on definitions and, perhaps surprisingly, identifies certain affinities with the notion of contingent a priori truths, as reconstructed in the framework developed throughout this book.

Taken as a whole, the book seeks to offer a perspective in which contingent a priori truths emerge as both natural and deeply embedded in our cognitive and social practices—a perspective that, while inspired by Kripke's insights, may extend beyond what Kripke himself might have endorsed.[5]

REFERENCES

Davies, Martin and Lloyd Humberstone, 1980, "Two Notions of Necessity", *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, vol. 38, no. 1, pp. 1–30.

Donnellan, Keith, 1977, "The Contingent A Priori and Rigid Designators", *Midwest Studies in Philosophy*, vol. 2, no. 1, pp. 12–27.

Dummett, Michael, 1973, *Frege: Philosophy of Language*, Harvard University Press, Cambridge, Mass.

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Evans, Gareth, 1979, "Reference and Contingency", *The Monist*, vol. 62, no. 2, pp. 161–189.
Kripke, Saul, 1980, *Naming and Necessity*, Harvard University Press, Cambridge, Mass.
Plantinga, Alvin, 1974, *The Nature of Necessity*, Oxford University Press, New York.
Salmon, Nathan, 1987, "How to Measure the Standard Metre", in *Proceedings of the Aristotelian Society*, volume 88, pp. 193–217.
Salmon, Nathan, 1986, *Frege's Puzzle*, Ridgeview Publishing Company, Atascadero, Cal.
Searle, John, 1979, "A Taxonomy of Illocutionary Acts", in John Searle (ed.), *Expression and Meaning: Studies in the Theory of Speech Acts*, Cambridge University Press, Cambridge, pp. 1–29.
Searle, John and Daniel Vanderveken, 1985, *Foundations of Illocutionary Logic*, Cambridge University Press, Cambridge.
Soames, Scott, 2005, *Reference and Description: The Case against Two-Dimensionalism*, Princeton University Press, New Jersey.
Stalnaker, Robert, 2022, "Reference Fixing and the Contingent A Priori", *Theoria*, vol. 88, no. 2, pp. 438–452.

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