

SEVENTH EXCURSUS

Varieties of Apriority

The notions of a priori knowledge and justification play a central role in this work. There are many ways in which one can understand the a priori, so in this excursus I will go into more detail about just how I am understanding it.

I have said that a sentence S is a priori for a subject s if s is in a position to know S with justification independent of experience. This characterization of apriority differs from some standard conceptions in that it predicates apriority of sentences and also in that it involves potential knowledge rather than knowledge. Other aspects of the definition, such as ‘justification independent of experience’ and the strength of the relevant sort of knowledge, need to be clarified.

In order to clarify my conception of the a priori, I will go over issues concerning sententiality, idealization, experience-independence, and conclusiveness. My aim is not to show that this is the one true conception of the a priori. Rather, my aim is to set out a stipulative conception that is the most useful for my purposes, and to show how it differs from other conceptions.

I will not try to give a positive account of the a priori in the sense of answering the question ‘How is a priori knowledge possible?’ I do not have a positive account to offer any more than I have a positive account of empirical knowledge. I have instead adopted the approach of clarifying what I mean by the a priori, and of answering important challenges. I take it to be antecedently fairly obvious that there is a priori knowledge (in logic and mathematics, for example), so I take it that absent strong arguments to the contrary, we have good reasons to believe that a priori knowledge is possible. I address Quine’s famous challenge to the a priori in the next chapter, and I address two recent challenges in the next excursus.

Sententiality

Standardly, the notion of apriority applies most fundamentally to knowledge and justification, and perhaps derivatively to propositions. Typically, one says that a subject knows a priori that p when she knows that p with justification independent of experience. A subject knows a posteriori (or equivalently, knows empirically) that p when she knows that p with justification that depends on

experience. One can then say that p is knowable a priori, or more simply that p is a priori, when it is possible that someone knows a priori that p .

It is less standard to associate apriority with sentences.¹ One could start with the definitions above and simply say that a sentence S is a priori when it expresses an a priori proposition. But because the nature of propositions is contested, as discussed in section 2 of chapter 2, doing this will not serve my purposes. Instead, I ground the apriority of sentences in the apriority of associated thoughts, where thoughts are mental states such as beliefs.

A thought is *a priori justified* when it is justified independently of experience. A thought constitutes *a priori knowledge* when it is a priori justified and constitutes knowledge in virtue of that justification. A thought constitutes *potential a priori knowledge* when it is possible that on (perhaps idealized) reflection, it can come to constitute a priori knowledge. In this case, we can also say more simply that the thought is *a priori*.

We can then define the apriority of sentences in terms of the apriority of thoughts. For a context-independent sentence S , S is *known a priori* by a subject when the subject has a thought that constitutes a priori knowledge and is apt to be expressed by S . S is *justified a priori* when S expresses a thought that is justified a priori. S is *knowable a priori* or just *a priori* when it is possible that someone knows S a priori.

When S is context-dependent, its apriority may depend on context. For example, it may be that ‘bald’ is context-sensitive in such a way that ‘Someone is bald iff they have no hairs on their head’ is a priori in some contexts but not others. We can say (as in the third excursus) that S is known a priori in a context (in which S is uttered) if the utterance of S in that context expresses a thought that constitutes a priori knowledge. (Equivalently, a sentence token is a priori if it expresses such a thought.) S is justified a priori in a context when it expresses a thought in that context that is justified a priori. S is knowable a priori, or just a priori, in a context when it expresses in that context a thought that constitutes potential a priori knowledge.

The stipulated conception of apriority helps to bypass the debate between Fregeans and Russellians about the nature of propositions and about which sentences express propositions that are knowable a priori. Fregeans typically endorse the intuitive view that ‘Hesperus is Phosphorus’ expresses a proposition that cannot be known a priori. Russellians (e.g. Salmon 1986; Soames 2002) typically hold that the sentence expresses a trivial singular proposition (that Venus is Venus) that can be known a priori. For this reason, a Russellian might classify

¹ It is worth noting, though, that in *Naming and Necessity* (e.g. pp. 65–6), Kripke often casts his discussion of apriority in terms of the apriority of a sentence for a speaker.

the sentence as a priori. This debate concerns a conception of apriority distinct from the one I am concerned with, however.

On the current definition of apriority, ‘Hesperus is Phosphorus’ is not a priori in a typical context. The thought expressed by a typical utterance of ‘Hesperus is Phosphorus’ clearly cannot be justified independently of experience. There is no process of reasoning that starts with this very mental state and ends with its constituting a priori knowledge. At best, a different thought (one expressible by ‘Hesperus is Hesperus’, for example) associated with the same singular proposition can be so justified.

It might be objected that if expression of a thought by an utterance requires only that the thought and the utterance have the same content, and if the contents of both are singular propositions, then ‘Hesperus is Phosphorus’ might express a thought that Venus is Venus, which is a priori. Likewise, it might be objected that if persistence of a thought over time requires merely sameness of content, then a thought that Hesperus is Phosphorus might become justified a priori in virtue of persisting as a thought that Hesperus is Hesperus. In response, we can note that the notions of expression and persistence (discussed in the third excursus) require more than sameness of content: they require appropriate causal, psychological, and inferential connections, of a sort that are absent in the purported case of expression and persistence above.

On the current definition, the apriority or non-apriority of a sentence is not simply a function of the referents of the parts of the sentence. For example, although ‘Hesperus is Phosphorus’ above is not a priori in a typical context, and the same goes for ‘If Hesperus exists, Hesperus is Phosphorus’, ‘If Hesperus exists, Hesperus is Hesperus’ is plausibly a priori in all typical contexts.² On this approach, as on the intuitive understanding, apriority is sensitive to modes of presentations. The last two sentences differ in apriority despite the expressions used having the same referents, and differing only in the way that those referents are presented. We do not need to make any explicit stipulations about modes of presentation to obtain this result. The phenomenon in question results from the stipulation that the apriority of a sentence in a context depends on the epistemic properties of the thought expressed by an utterance of the sentence, where these epistemic properties are tied to the inferential role of the thought in cognition. There is no doubting that the thoughts associated with the two sentences above are associated with quite different inferential roles.

² Perhaps there are atypical contexts in which someone has acquired the name ‘Hesperus’ from two different sources and in which a speaker uses ‘If Hesperus exists, Hesperus is Hesperus’ to express an empirical thought that they are not in a position to know a priori. If so, the sentence is not a priori in that context. Likewise, there perhaps are atypical contexts in which a speaker uses ‘Hesperus’ and ‘Phosphorus’ entirely interchangeably (perhaps taking it as stipulative that both refer to Venus). Then ‘If Hesperus exists, Hesperus is Phosphorus’ is a priori in that context.

It is worth noting, though, that Russellians who accept guises or modes of presentation can define something close to the current notion by appeal to these entities. For example, Salmon (1993) allows that a proposition is *w-apriori* relative to a given way of taking it if the proposition can be known a priori under that way. One could then suggest that a sentence *S* is a priori in a context (in which *S* is uttered), in the current sense, if the proposition it expresses is *w-apriori* relative to the way the proposition is presented in the utterance of *S* in that context. The apriority of a thought could be defined in a similar way. In this sense, even on a Russellian view ‘Hesperus is Phosphorus’ will certainly not be a priori in typical contexts.

To say that sentence *S* is a priori in a context centered on speaker *A* is not to say that a knowledge ascription of the form ‘*A* knows a priori that *S*’ (or ‘*A* can know a priori that *S*’) is true. Clearly ‘If I exist and am located, I am here’ may be a priori for a speaker even if that speaker cannot know a priori that if I exist and am located, I am here. The criteria may also come apart in cases where ascriber and ascribee use the expressions in *S* with different modes of presentation. The current construal of apriority requires no commitment on the semantics of attitude ascriptions (although in ‘Propositions and Attitude Ascriptions’, I have argued for a Fregean treatment of these ascriptions). What I have said here about the non-apriority of ‘Hesperus is Phosphorus’ is even consistent with a Russellian semantics for attitude ascriptions on which ‘*A* knows a priori that Hesperus is Phosphorus’ is true.

My account of sentential apriority presupposes the notions of thoughts, expression, and persistence. If one rejects these notions, one will have to define the apriority of a sentence in some other way. One could appeal to Fregean propositions, or to associated guises, or perhaps to ancillary propositions. But again, at least once general skepticism about the a priori (discussed in the eighth excursus and in the next chapter) is dismissed, it is something of a datum that utterances of sentences such as ‘Hesperus is Hesperus (if it exists)’ correspond to a priori knowledge in a way that typical utterances of ‘Hesperus is Phosphorus (if it exists)’ do not. So any satisfactory theory will have to give an account of this distinction.

Idealization

The current notion of apriority involves an idealization away from a speaker’s contingent cognitive limitations, and even away from contingent human limitations. A sentence token (of a complex mathematical sentence, for example) may be a priori even if the speaker’s actual cognitive capacities are too limited to justify the corresponding thought a priori. To a first approximation, what matters is that it is *possible* that the corresponding thought be justified a priori.

On a second approximation one can dispense with the modal definition. As we saw earlier (E₃), that definition leads to problems both with semantic fragility and with views on which certain conceivable cognitive capacities are not metaphysically possible. For example, if it turns out that no possible being can construct a proof with more than a million steps, then a statement whose proof requires more steps than this will not be knowable a priori by any thinker. But it will still count as a priori in the idealized sense I am invoking here.

One might invoke a normative idealization here, understanding apriority in terms of what a thinker ideally ought to accept. But perhaps the best option is to understand the apriority of a sentence in terms of the existence of an a priori warrant for that sentence (as in E₄). We can say that context-independent sentence *S* is a priori when there exists an a priori warrant for it (for some possible speaker), and that a context-dependent sentence *S* is a priori in a context when there is an a priori warrant for accepting it for the speaker of that context. In the mathematical case above, for example, there exists a proof for the sentence, even if it is impossible that the proof be used to prove the sentence. Correspondingly, one can say that there exists an a priori warrant for the sentence, even if it is impossible that the warrant be used to justify the sentence. One can argue that all a priori knowledge is grounded in an a priori warrant, so that a priori warrant is the more fundamental notion here.

In principle, we can understand the apriority of both sentences and propositions in terms of a priori warrants. If we do so, the notion will be unaffected by brute constraints on the metaphysical possibility of a priori knowledge. As a bonus, this construal gives us a notion of propositional apriority that is unaffected by the problems of semantic fragility discussed earlier (E₃): the propositions expressed by relevant sentences of the form ‘*S* iff actually *S*’ may not be knowable a priori, but there exist proofs for these propositions, and the propositions still have an a priori warrant.

Non-experiential justification

The definition of apriority says ‘justified independent of experience’. Here, what is excluded is a justifying role for experience. It is a familiar point that even in a priori knowledge (say, knowledge of ‘Red is red’), experience may play an enabling role in giving one the concepts that are required for this knowledge. Furthermore, in a priori deduction of one logical claim from another, it is not out of the question that the experience of thought plays a causal role in the inference process. Apriority is compatible with enabling roles and other causal roles for experience: only a justifying role is ruled out. One could capture this notion more precisely in the framework of support

structures by saying ‘has a non-experiential justification’, where a justification is non-experiential (to a first approximation) when it is not grounded in experiential evidence.

The paradigm cases of experiential justification are cases in which a subject’s phenomenal experience serves as evidence. For example, a belief that there is a red cube in front of one can be justified by perceptual experience as of a red cube, and an introspective belief that one is in pain can be justified by the pain experience. But there are tricky cases that do not obviously involve an evidential role for phenomenal experience: what about beliefs produced by unconscious perception, or by non-experiential introspection? These should count as a posteriori for our purposes. (On some conceptions, introspective knowledge counts as a priori, but it does not on mine: we do not want ‘I believe that I am Australian’ to be a priori scrutible for me from any base just because I can know it by introspection.) So one might instead stipulate that an experiential justification is one grounded in perceptual or introspective evidence, where this leaves open whether conscious experience per se is involved.

In principle one might also count other sources of justification as experiential: testimonial justification, for example. I will not explicitly include this, as I think that perceptual justification is always involved in testimonial justification, but if someone disagrees, these can be included too. More generally, we might have a category of basic empirical evidence (as in E4) and say that a justification is a posteriori when basic empirical evidence plays a justifying role and a priori when it does not. Basic empirical evidence includes at least perceptual and introspective evidence, but the definition leaves open that it includes more. This question is revisited at the end of the eighth excursus.

Conclusiveness

It is often held that a priori knowledge must meet higher standards than those ordinarily invoked for empirical knowledge. For example, it is sometimes held that a priori knowledge must meet the sort of conclusive standard associated with proof and analysis, rather than the weaker standard associated with induction and abduction. On this conception, an inductive generalization from instances each of which is known a priori—say, generalizing to the truth of Goldbach’s conjecture on the grounds that all even numbers so far examined are the sum of two primes—does not yield a priori knowledge, even though there is some sense in which it is justified as well as most empirical inductive knowledge, and justified a priori. Likewise, an abductive conditional from total evidence to a conclusion that is grounded in and goes beyond the evidence might have some sort of a priori justification, but on the conception in question it will not yield a priori knowledge.

This conception is that of the *conclusive* a priori, since it requires that one can conclusively rule out (in a certain intuitive sense) the possibility that the relevant conclusion is false. In the cases above, although one may have non-experiential justification for believing a conclusion, one is unable to conclusively rule out the possibility that the conclusion is false. This standard is higher than the standard typically invoked for empirical knowledge, where one typically allows that induction and abduction can yield knowledge, even though one cannot conclusively rule out (in the same intuitive sense) the possibility that the relevant conclusion is false.

There is some intuitive force to the idea that a priori knowledge requires conclusiveness (or at least potential conclusiveness), but we need not adjudicate this matter here. Instead, we can stipulate a notion of the conclusive a priori, which builds in a requirement of conclusiveness, and a notion of the nonconclusive a priori, which does not. Both notions are useful for different purposes, including my own purposes. On the face of it, A Priori Scrutability remains a strong and interesting thesis if it is cast in terms of nonconclusive apriority. Still, for some of my purposes (notably the modal and semantic purposes discussed in the tenth and eleventh excursuses), conclusive apriority is the most important notion, and a scrutability thesis cast in terms of it will play an important role.

It is natural to understand conclusive knowledge as *certainty*, as we did in section 1 of chapter 2. We might take this notion as primitive, or understand it as requiring a justified credence of 1, or understand it intuitively as knowledge beyond skepticism: knowledge that enables one to absolutely exclude any skeptical scenarios in which the relevant belief is false. This epistemological notion should be contrasted with mere psychological certainty, which requires something like full confidence without requiring justification. We might say that certainty in the epistemological sense is justified psychological certainty.

On a traditional view, processes such as induction, abduction, and perception do not yield certainty, but other processes such as deduction, introspection, and perhaps conceptual analysis can yield certainty. For example, it is widely held that a priori reasoning can yield certainty of mathematical claims. Perhaps it is not obvious that we non-ideal reasoners can be certain here, but there is some appeal to the idea that idealized reasoning about logic and mathematics could yield certainty. Likewise, it is arguable that there is at least an ideal warrant for being certain of various mathematical truths.

One complication is that even with ideal a priori reasoning, certainty can be undermined by self-doubt concerning one's cognitive capacities, as discussed in the sixth excursus. To handle this, one might suggest that conclusive knowledge is knowledge that falls short of certainty at most in virtue of this sort of self-doubt. Or perhaps better, one might invoke the insulated idealization discussed

in the sixth excursus, and hold that a thought is conclusively a priori if insulated idealized reflection on the thought would lead to its being accepted with psychological certainty (or: if there is an insulated ideal warrant for its being accepted with psychological certainty).

Even setting aside self-doubt, someone might argue that there cannot be epistemological certainty even for ideal reasoners. It might be held that even logical truths are not certain in this way, even on an insulated idealization. Given such a view, one will need to characterize conclusive knowledge in other terms (perhaps by example). Speaking for myself, I think it is reasonably plausible that there can be certainty under an idealization, and I think that scrutability conditionals are in principle knowable with this sort of certainty. But I leave open the possibility that conclusive knowledge can be defined in some other way.