
Articulating the A Priori–A Posteriori Distinction

The distinction between a priori knowledge and a posteriori knowledge has come under attack in the recent literature. Here are some examples:

It seems to me that discussions of the past decades have made clear how intricate and complex the classical notion of the a priori is, and *neither* the Strong conception *nor* the Weak conception (nor anything else) can provide a coherent explication. (Kitcher 2000, 85)

My own externalist commitments... lead me to think that the a priori–a posteriori distinction is not a particularly natural one, and hence that its importance to epistemology has been grossly overestimated. (Hawthorne 2007, 201)

In short, what we are seeing is that there is a deep instability in the classic collection of platitudes about a priori knowledge. (Jenkins 2008, 255)

The distinction [between a priori and a posteriori knowledge] is handy enough for a rough initial description of epistemic phenomena; it is out of place in a deeper theoretical analysis, because it obscures more significant epistemic patterns. (Williamson 2007, 169)

The target of the attacks is a particular concept—the concept of a priori knowledge—or, alternatively, a particular distinction—the distinction between a priori and a posteriori knowledge. The attacks are related, but different: two are directed at the coherence of their target; two at its significance.

Evaluating the attacks requires answering two questions. First, have they hit their target? Second, are they compelling? My goal is to argue that the attacks fail because they miss their target. Since the attacks are directed at a particular concept or distinction, they must accurately locate the target concept or distinction. Accurately locating the target concept or distinction requires correctly articulating that concept or distinction. The attacks miss their target because they fail to correctly articulate the target concept or distinction. I go on to present a different challenge to the a priori-a posteriori distinction. This challenge is not directed at the coherence or significance of the distinction. Its target is the traditional view that all knowledge (or justified belief) is either a priori or a posteriori.

1

A successful attack on the concept of a priori knowledge requires a correct articulation of the target concept. Correctly articulating the concept of a priori knowledge is challenging since the target concept is obscured by several factors. First, there are two different approaches to articulating it. A reductive approach articulates the concept of a priori knowledge in terms of the concept of a priori justification. According to this approach, S knows a priori that p just in case S's belief that p is justified a priori and the other conditions on knowledge are satisfied. Its primary target is the concept of a priori justification. A nonreductive approach provides an articulation of the concept of a priori knowledge that does not include any conditions involving the concept of the a priori. Its primary target is the concept of a priori knowledge.

Second, there are two approaches to providing an analysis of the target concept: theory-neutral and theory-dependent. The goal of a theory-neutral articulation of the concept of a priori knowledge (or justification) is to provide an analysis of the concept of a priori knowledge (or justification) that does not presuppose any particular analysis or account of the more general concept of knowledge (or justification). It aims at neutrality among the competing conceptions of knowledge (or justification). The goal of a theory-dependent analysis of the concept of a priori knowledge (or justification) is to provide an analysis of the concept of knowledge (or justification) within the more general framework of a particular theory of knowledge (or justification), which I call the *background theory* of knowledge (or justification).

Third, a priori knowledge (or justification) is a species of knowledge (or justification). Consequently, any item of a priori knowledge (or justified belief) must satisfy both the general conditions on knowledge (or justification) and the conditions that differentiate a priori knowledge (or justification) from a

posteriori knowledge (or justification). The goal of an analysis of the concept of a priori knowledge (or justification) is to identify the conditions that differentiate a priori knowledge (or justification) from a posteriori knowledge (or justification), rather than those that are common to both. The former conditions are constitutive of a priori knowledge (or justification); the latter are constitutive of the background theory of knowledge (or justification).

These obscuring factors introduce a number of common errors in accurately locating and articulating the concept of a priori knowledge. Three are worth noting from the start. First, most theorists who offer articulations of the concept of a priori knowledge claim to be articulating the so-called traditional Kantian concept of a priori knowledge. This concept arose in a period dominated by Cartesian assumptions about the nature of knowledge and justification. Hence, when offering an articulation of this concept, it is critical to distinguish between the features constitutive of a priori knowledge (or justification) as opposed to the features constitutive of the background theory of knowledge (or justification). Failure to distinguish between these two features can lead to mistaken articulations of the traditional concept of a priori knowledge.

Second, most contemporary theorists reject the traditional Cartesian accounts of knowledge and justification, and offer articulations of the traditional concept of a priori knowledge within the context of their preferred theory of knowledge. When articulating the traditional concept of a priori knowledge within a nontraditional theory of knowledge, one must take care to ensure that the articulation coheres with the requirements of the new background theory. Failure to do so can result in mistaken conclusions about the implications of the new background theory for the a priori.

Third, if one offers an articulation of the traditional concept of a priori knowledge within a nontraditional background theory and arrives at the conclusion that the resulting account of a priori knowledge is problematic, one must take care to determine whether the source of the problem is the requirements of the background theory of knowledge or the requirements of the a priori. Failure to do so can lead to the mistaken conclusion that the a priori is problematic when the problem is rooted in the background theory of knowledge.

The question before us is whether the concept of a priori knowledge is coherent and significant. The four authors cited earlier express reservations about its coherence or significance. I begin with a selective review of some of Philip Kitcher's seminal work on the a priori.¹ My purpose is twofold. The first is to introduce two different strategies for challenging the coherence or significance of the concept of a priori knowledge. The second is to provide clear examples of arguments against the a priori that miss their target by committing one of

1. For a fuller discussion, see Casullo (1988, 2003, 2009).

the errors that I identified earlier. In the subsequent sections, I will turn to the arguments of John Hawthorne, C. S. Jenkins, and Timothy Williamson and identify variations of these errors.

2

Philip Kitcher offers two different strategies for arguing that the concept of a priori knowledge is either incoherent or insignificant. His original strategy is to argue that there is no a priori knowledge. If he is correct, it follows that the a priori–a posteriori distinction does not mark a significant division in epistemic reality; it does not mark any division. It does not follow, however, that the concept is incoherent. In fact, Kitcher employs an analysis of the concept of a priori knowledge as an essential premise in his argument in support of the conclusion that there is no a priori knowledge. In his later work, Kitcher adopts a different approach. Rather than offering an argument against the existence of a priori knowledge that involves an analysis of the concept, he challenges the concept itself. He maintains that the traditional concept is too complex to be coherently articulated.

Kitcher (1983) offers the following influential argument against the traditional view that some knowledge is a priori:

- (K1) The concept of a priori knowledge entails that a priori warrant is indefeasible by experience.
- (K2) The warrant conferred by alleged a priori sources of knowledge is defeasible by experience.
- (K3) Therefore, no knowledge is a priori.

(K1) is supported by the following analysis of the concept of a priori knowledge:

X knows a priori that p iff X knows that p and X 's knowledge that p was produced by a process which is an a priori warrant for it.

α is an a priori warrant for X 's belief that p if and only if α is a process such that, given any life e sufficient for X [to acquire the concepts in] p

- (a) some process of the same type could produce in X a belief that p ;
- (b) if a process of the same type were to produce in X a belief that p , then it would warrant X in believing that p ;
- (c) if a process of the same type were to produce in X a belief that p , then p . (Kitcher 1983, 24)

The analysis is reductive since it analyzes a priori knowledge in terms of a priori warrant. It is also theory-dependent since Kitcher (2000, 66) maintains that his “general understanding of warrants is a version of reliabilism.”

Conditions (b) and (c) of the analysis share a common feature: both impose higher standards on a priori warrant than those required by Kitcher’s background theory of warrant. Condition (c) precludes the possibility of a priori warranted false beliefs. Condition (b) requires that S’s a priori warranted belief that p be indefeasible by experience in any world in which S has sufficient experience to acquire the concepts in p. Reliabilism, however, does not preclude either the possibility of warranted false beliefs or the possibility of empirically defeasible warranted beliefs. Consequently, in the absence of some compelling supporting argument, the higher standards are ad hoc and should be rejected.²

Kitcher’s argument provides a clear example of an error of the second type. He offers an articulation of the traditional concept of a priori justification within a reliabilist theory of warrant, but the articulation introduces conditions on a priori warrant that are not supported by his background theory of warrant. As a consequence, he arrives at the mistaken conclusion that the theory precludes a priori warrant.

Kitcher (2000) adopts a different strategy. He acknowledges that his articulation of the concept of a priori warrant faces difficulty, but now argues that the alternative favored by his opponents, the Weak conception or (WC),

(WC) S’s belief that p is justified a priori just in case S’s belief that p is justified by a nonexperiential process,

is also open to objection. The upshot is that there is no coherent articulation of the traditional concept of a priori knowledge.

2. Kitcher argues that (c) is supported by (b) and that (b) is supported by the intuitive idea that a priori knowledge is independent of experience:

But if alternative experiences could undermine one’s knowledge then there are features of one’s current experience which are relevant to the knowledge, namely those features whose *absence* would change the current experience into the subversive experience. The idea of the support lent by kindly experience is the obverse of the idea of the defeat brought by uncooperative experience. (1983, 89)

His account of the relationship between supporting and defeating evidence, however, is not supported by his background theory of warrant. It is uncontroversial that if S’s belief that p is supported (i.e., warranted) by experience then S’s belief that p is not warranted (and hence, not known) a priori. But suppose that S’s belief that p is warranted nonexperientially and that S’s nonexperiential warrant for the belief that p is defeasible by experience. It does not follow that S’s belief that p is supported (i.e., warranted) by experience. Kitcher now concedes this point and agrees that his original defense of (b) fails. This argument resurfaces in Hawthorne (2007), which is discussed in section 3.

We now turn to two of the arguments that Kitcher offers against (WC).³ The first contends that (WC) fails to capture a feature of the traditional concept of a priori knowledge: “the tradition ascribes to a priori knowledge the functional significance of being in a position to prescribe to future experience; knowledge that prescribes to future experience is irrefutable by future experience” (Kitcher 2000, 77). Let us grant that the tradition ascribes to a priori knowledge the functional significance of prescribing to future experience. This observation, taken by itself, does not provide a basis for rejecting (WC) since Kitcher has not shown that this feature is constitutive of the traditional concept of a priori knowledge. Moreover, there is good reason to deny that it is. It is generally acknowledged that the traditional concept of knowledge is Cartesian foundationalism, according to which S knows that p only if S’s justification for the belief that p is infallible, incorrigible, and indubitable.⁴ Hence, incorrigibility, or immunity to revision, is a feature constitutive of the traditional concept of knowledge. It is not a feature that differentiates a priori knowledge from empirical knowledge.

This argument provides a clear example of an error of the first type. Kitcher mistakes a feature of the traditional theory of knowledge for a feature of the traditional concept of a priori knowledge and, as a consequence, draws the mistaken conclusion that (WC) does not provide an adequate articulation of the traditional concept of the a priori.

The second argument contends that (WC) is too weak. Kitcher invites us to consider the following thought experiment. Suppose that a cubical die, composed of some homogeneous material and whose faces are numbered 1 through 6, is rolled once. What is the chance that the uppermost face will be the one numbered 6? One might reason as follows. Since the material is homogeneous, the situation is symmetrical with respect to the six faces. One of the numbered faces will be uppermost. Therefore, the probability that it will be the one numbered 6 is 1/6. Kitcher (2000, 78) maintains that this thought experiment involves a nonexperiential process that meets reliabilist standards. Therefore, according to (WC), the conclusion in question is known a priori. But, Kitcher (2000, 79) contends, “this will set the Weak conception at variance with the classical view of the bounds of apriority.”

3. For a discussion of his remaining arguments, see Casullo (2009).

4. William Alston offers the following characterization of the traditional concept of knowledge:

Descartes, along with many other seventeenth- and eighteenth-century philosophers, took it that any knowledge worthy of the name would be based on cognitions the truth of which is guaranteed (infallible), that were maximally stable, immune to ever being shown to be mistaken (incorrigible), and concerning which no reasonable doubt could be raised (indubitable). (1992, 146)

Kitcher's contention is mistaken. He fails to distinguish between the requirements of (WC) and the requirements of the background theory in which (WC) is embedded. If (WC) is embedded within the traditional Cartesian theory of knowledge then it delivers results consistent with the classical view of the bounds of apriority. In order for the conclusion in question to be known, on the traditional theory, it must be infallible, incorrigible, and indubitable. Since it does not meet those conditions, that conclusion is not known, a priori or otherwise. Kitcher generates the appearance of variance between (WC) and the classical theory by embedding (WC) within a reliabilist theory of knowledge. Since reliabilism imposes lower standards for knowledge than the traditional theory, the conclusion of the argument is (let us grant) known a priori. The variance is due entirely to the difference in the standards for knowledge imposed by the two different background theories in which (WC) is embedded. It is not due to (WC).

This argument provides a clear example of the third type of error. Kitcher mistakes a consequence that is due to the nontraditional background theory in which he embeds (WC) for a consequence of (WC) itself and, as a result, draws the mistaken conclusion that (WC) does not provide an adequate articulation of the traditional concept of a priori knowledge.

3

John Hawthorne contends that the a priori–a posteriori distinction is not a natural one. This conclusion, he maintains, derives from his commitment to epistemological and semantic externalism. My main concern is the case based on his commitment to epistemological externalism, which, I believe, carries the primary burden of his argument. Hawthorne offers three leading arguments based on epistemological considerations. I will argue that all three fall short of their goal. The first fails because it does not distinguish between reductive and nonreductive analyses of the concept of a priori knowledge. The second fails because it turns on an incorrect account of the relationship between experiences that warrant belief and experiences that defeat warrant. The third raises a problem that arises from embedding the traditional concept of a priori knowledge within his externalist general theory of knowledge, but the problem is due entirely to the background theory of knowledge.

According to the safety account of knowledge preferred by Hawthorne:

- (S) S knows p iff there is no close world where S makes a mistake that is relevantly similar to his actual belief that p. (2007, 202)

The central idea of the account is that of a relevantly similar mistake. What constitutes such a mistake? Details are scarce, but Hawthorne tells us two things.

First, the fact that S makes a mistake about p in some close possible world does not show that S does not actually know that p “since he may use a relevantly different method at that close world” (2007, 202). Second, the fact that S does not make a mistake about p in any close possible world does not show that S actually knows p. For example, suppose that S uses an unreliable method to form the belief that p, where p is some necessary truth. Although there is no world in which S believes p falsely, “there are relevantly similar cases in which [S is] in error” (2007, 202). So we have two leading ideas. Mistake regarding p, where a different belief forming method is used, is not relevantly similar; and mistake regarding propositions other than p, where the same belief forming method is used, is relevant. Hence, on Hawthorne’s account, method of belief formation plays a central role in marking the difference between knowledge and true belief.

Hawthorne (2007, 203 n. 5) takes as his starting point Kitcher’s account of a priori knowledge and maintains that “it is quite clear that Kitcher’s basic idea is that a process warrants a belief a priori iff, no matter how the environment is, that process is a warrant provider.” Building on this idea, Hawthorne (2007, 202) maintains: “It is often thought that in a case of a priori knowledge, the status of a belief as knowledge does not constitutively depend on the external environment (this being one natural take on the idea that a priori knowledge is independent of perceptual experience).” Rather than endorsing Kitcher’s articulation, Hawthorne offers the following alternative:

- (HA1) x knows p a priori after duration d of x’s existence iff any possible intrinsic duplicate y of x knows p after duration d of y’s existence.
(2007, 202)

Hawthorne quickly disposes of (HA1) by inviting us to consider a variant of the well-known fake barn case. Suppose that Henry is driving in barn gas country, an area riddled with barn gas that induces hallucinations of barns. Suppose that the barns are all real in barn gas country and that Henry happens to look at a barn from one of the few locations that is not riddled by the gas. As in the original fake barn case, Henry does not know that there is a barn in front of him. Hawthorne now introduces a parallel case with respect to a priori beliefs:

Suppose there exists a priori gas that induces the phenomenology of blatant obviousness for false propositions. Consider a person who believes a proposition not for any empirical reason but because the phenomenology of obviousness causes him to do so. Suppose the claim in question is that all bachelors are men. Consider a duplicate of that person who is embedded in an environment riddled with a priori gas. As a matter of luck he does not stumble into the gas. He in fact forms the belief that all bachelors are men. But he could very easily

have stumbled into the gas and believed—due to felt obviousness—that all bachelors are women. Insofar as one judges that the person does not know in fake barn cases, it is natural enough to judge that the person does not know in a priori gas cases. But this means that if we cling to the environment dependence idea, very few of our beliefs will count as a priori. (2007, 205)

Suppose that we grant that the argument is compelling. What moral should we draw from this?

The source of the problem is clear. Hawthorne takes as his starting point Kitcher's analysis of the concept of a priori knowledge. Kitcher's analysis, however, is reductive. He analyzes that concept in terms of the concept of a priori warrant. Hence, he articulates the idea that a priori knowledge is independent of perceptual experience as

- (K) The status of a belief as *warranted* does not constitutively depend on the external environment.

Hawthorne's analysis, however, is nonreductive. He articulates the idea that a priori knowledge is independent of perceptual experience as

- (H) The status of the belief as *knowledge* does not constitutively depend on the external environment.

If the idea that a priori knowledge is independent of perceptual experience is articulated as a condition on a priori warrant, the problem that Hawthorne raises vanishes. There is no immediate objection to maintaining that Henry's belief is warranted in fake barn country or barn gas country. Similarly, a priori gas cases pose no immediate objection to (K). In short, the failure to distinguish between reductive and nonreductive analyses of the concept of a priori knowledge undermines Hawthorne's first argument.

Hawthorne considers the option of providing a reductive analysis of a priori knowledge in terms of a priori justification in a later discussion. There he considers a particular version of the view that intellectual intuition is a source of a priori justification. That view, according to Hawthorne (2007, 214), "is most naturally motivated by the idea that a priori knowledge decomposes into an 'internalist' component that is accessible to the subject... and an 'externalist component' that includes various reliability conditions." He rejects the view by raising a number of considerations against the accessibility features of its internalist component.

Hawthorne's case against reductive analyses is not compelling since it is based on the assumption that an account of a priori warrant must take on the objectionable accessibility features that are the target of his attack. Kitcher, however, provides an

account of a priori warrant that is avowedly externalist. His preferred view of warrants is a version of Goldman's process reliabilism that does not involve the internalist component that Hawthorne rejects. So Hawthorne has not provided any compelling reason to conclude that epistemological externalism presents any special barrier to articulating a reductive analysis of the concept of a priori knowledge.

Hawthorne acknowledges that environment independence is not the traditional way of marking the view that a priori knowledge is independent of experience. He introduces two alternative ways of developing the view. The first appeals to *grounds* of a belief:

(HA2) A case of knowing is a priori iff experience does not form part of the grounds of the belief. (Hawthorne 2007, 208)

Hawthorne rejects (HA2) because he finds the notion of grounds unclear.⁵ The second appeals to *methods of belief formation*, where a method of belief formation is a process that delivers or sustains a belief:

(HA3) Experience-Independence: A case of knowing is a priori if it is sustained by a method that is not experience involving. (Hawthorne 2007, 208)

Hawthorne maintains that, on initial examination, (HA3) gives favorable results since mathematical knowledge based solely on reasoning, say working through a mathematical proof that *p*, comes out a priori.⁶ Closer examination, however, reveals that there is a problem lurking:

Even though I have carefully worked through a mathematical proof that *p*, I will not know *p* if I get empirical evidence that I am mad, or that human or

5. The argument seems to go as follows:

- (1) One can form perceptual beliefs about the external world that are not based on beliefs about one's perceptual experiences.
- (2) In such cases, beliefs or knowledge about one's perceptual experiences are not part of one's evidence.
- (3) Therefore, it is not clear in what sense experience is part of the grounds of one's belief in such cases.

6. Hawthorne notes that (HA3) has the consequence that, when conjoined with his safety account of knowledge, it allows for the possibility of a wide range of contingent a priori knowledge. If, for example, someone is born with an innate mechanism that is a reliable source of beliefs about some contingent subject matter then those beliefs will count as knowledge by the safety account and a priori knowledge by the Experience-Independence account. He does not, however, view this consequence as problematic.

mechanized experts have agreed that not-p, or that there is a priori gas in the area, or that I have made lots of mistakes using a very similar proof technique in the past, or that lots of smart people are inclined to laugh when they hear my proof. . . . Call knowledge-destroying experiences Bad experiences. Call the remainder Good experiences. . . . That my proof counts as knowledge appears to depend crucially on its being accompanied by Good experiences. But if the process of arriving at putatively a priori knowledge is individuated so as to include Good experiences, then it will count as a posteriori by the experience dependent criterion. (Hawthorne 2007, 209–210)

Hence, (HA3) appears to have the consequence that little, if any, knowledge is a priori.

The structure of Hawthorne's argument is immediately puzzling. It looks like this:

- (H1) Experience-Dependence: A case of knowing is a posteriori if it sustained by a method that is experience-involving.
- (H2) Suppose that S has carefully worked through a mathematical proof that p.
- (H3) S's proof does not count as knowledge if it is accompanied by Bad experiences.
- (H4) Therefore, S's proof counts as knowledge only if it is accompanied by Good experiences.
- (H5) If the process of working through a proof is individuated so as to include Good experiences, then it will count as experience-involving and, hence, a posteriori by the experience-dependent criterion.

Consider a parallel argument restricted to the empirical domain. Suppose that S carefully forms the true belief that there is a barn over there on the basis of her perceptual experience. S will not know that there is a barn over there if she gets testimonial evidence that there is barn gas in the area, or that she frequently mistakes other buildings for barns, or that no one else in the vicinity sees a barn. Call knowledge-destroying testimony Bad testimony. Call the remainder Good testimony. The parallel argument looks like this:

- (T1) Testimony-Dependence: A case of knowing is testimonial if it is sustained by a method that is testimony-involving.
- (T2) Suppose that S has carefully formed the true belief that there is a barn over there on the basis of her perceptual experience.
- (T3) S's true belief does not count as knowledge if it is accompanied by Bad testimony.

- (T4) Therefore, S's true belief counts as knowledge only if it is accompanied by Good testimony.
- (T5) If the process of forming a belief based on one's perceptual experience is individuated so as to include Good testimony, then it will count as testimonial by the testimony-dependent criterion.

Although there are many different ways of individuating belief forming processes, it is evident that very few epistemologists, if any, will take seriously a way of individuating them on which paradigm cases of perceptual belief turn out, on closer examination, to be testimonial merely in virtue of the fact that testimonial evidence can destroy perceptual knowledge.

In order to sort out matters, we need to distinguish between experiences that warrant the belief that *p* as opposed to experiences that defeat warrant for the belief that *p*. In Hawthorne's terminology, the experiences that defeat warrant are Bad experiences; the remaining experiences are Good experiences. A similar distinction can be made in the testimony example. Testimony that defeats warrant is Bad testimony; testimony that does not is Good testimony. Returning now to the testimony version of Hawthorne's argument, we can see clearly the source of the problem. The step from (T3) to (T4) is invalid. From the fact that Bad testimony can defeat S's perceptual warrant for the belief that *p*, it does not follow that perception can warrant S's belief that *p* only if it is accompanied by Good testimony. Perceptual experience can warrant S's belief in the absence of Good testimony. All that is necessary is that S's belief *not* be accompanied by Bad testimony. By parity of reasoning, the step from (H3) to (H4) in Hawthorne's original argument is also invalid. From the fact that Bad experience can defeat the warrant conferred on S's belief that *p* by having carefully worked through a proof that *p*, it does not follow that carefully working through a proof that *p* can warrant S's belief that *p* only if accompanied by Good experiences. S's proof can warrant S's belief that *p* in the absence of Good experiences. All that is necessary is that S's proof *not* be accompanied by Bad experiences.⁷

7. Hawthorne acknowledges that a natural reaction to his concern is to distinguish between cases in which the presence of an experience is epistemologically relevant as opposed to cases in which the absence of an experience is epistemologically relevant. He replies, however:

There are a variety of tricky questions in the vicinity here. Can omissions as well as positive events count as part of a process? If so, should the presence of an experiential omission in a process count as experience involving the relevant sense? (2007, 210)

Suppose we grant that the answer to the first question is affirmative. An affirmative answer to the second has the consequence that all knowledge is testimonial (since, presumably, all knowledge can be destroyed by appropriate testimonial evidence). That result by itself should indicate that, whatever the correct metaphysics of omissions or absences, the answer to the epistemological question is clear.

Hawthorne contends that his externalist theory of knowledge challenges the significance of the a priori–a posteriori distinction. His second argument, pared down to its essential elements, rests on two premises.⁸ First, experiences of type E can defeat the warrant (destroy the knowledge) conferred on S's belief that p by virtue of being sustained by method M. Second, if experiences of type E can defeat the warrant (destroy the knowledge) conferred on S's belief that p by virtue of being sustained by method M, then S's belief that p is warranted (known) by virtue of being produced by method M only if it is accompanied by experiences of type E. Hawthorne's externalist theory of knowledge is not essential to the formulation of the argument and does not support its key second premise. Hence, the argument neither derives from nor is supported by his externalist theory of knowledge. It rests on an incorrect account of the relationship between experiences that confer warrant on a belief and experiences that defeat warrant. From the fact that experiences of type E can defeat the warrant (destroy the knowledge) conferred on S's belief that p by virtue of being sustained by method M, it does not follow that S's belief that p is warranted (known) by virtue of being produced by method M only if it is accompanied by experiences of type E. Although (bad) testimonial experiences can defeat the warrant conferred on S's belief that p by virtue of being sustained by visual perception, it does not follow that S's belief that p is warranted by visual perception only if it is accompanied by (good) testimonial experiences.

Hawthorne's final argument turns on the individuation of belief forming methods. Suppose that a student learns some laws of nature from a teacher, remembers them at a later time, and applies them to derive further nomic beliefs and conditional predictions. We are to suppose that the student's beliefs and predictions are highly reliable; most are sufficiently safe to count as knowledge. Hawthorne maintains that our natural reaction is that the student's knowledge is not a priori:

the process that led to the fixation of belief included experiential exposure to the teacher. The knowledge is a posteriori knowledge, achieved via testimony, not a priori knowledge. (2007, 211)

There is, however, a twist. Suppose that the student derives a conditional prediction from some laws stored in memory. We can distinguish at least two different belief forming processes:

There is a process that begins with the teacher telling him the laws and ends with applying some laws to derive a conditional prediction. But there is a

8. Hawthorne's argument is essentially the same as the argument Kitcher offers in support of condition (b) in his analysis of the concept of a priori warrant. See note 2 above.

shorter process that begins with retrieving the laws from the relevant internal information bank and ends with producing the conditional prediction. One of the processes is experience-dependent. One is not. Which shall we use to test whether the belief is a priori? Let us call the process beginning with the retrieval Short and the process beginning with the interaction with the teacher Long. Is there any deep mistake in taking Short to be the relevant safe method? (211)

The student's conditional prediction can be viewed as the product of either of two different belief forming processes. Both are safe and yield the result that the student knows the conditional prediction. On one, according to Hawthorne, the resulting knowledge is a priori, but on the other, it is a posteriori. Yet, there is no "deep mistake" in choosing one over the other.

Hawthorne's final argument can be summarized as follows:

- (H*1) Whether the knowledge in question is a priori turns on the choice of belief forming process.
- (H*2) There is no deep mistake in choosing one over the other.
- (H*3) Therefore, the a priori–a posteriori distinction is not deep.

The argument is puzzling since the primary question that it raises concerns the epistemology of preservative memory rather than the epistemology of the a priori. The initial premise of the argument is supported by two claims. If Long is the relevant belief forming process, then the student's knowledge is a posteriori since the student's original knowledge is warranted by testimony. Second, if Short is the relevant belief forming process, the student's knowledge is a priori since it is not warranted by testimony and the student has no other relevant empirical evidence that the law in question is true. Hence, the primary question raised by the argument is

- (Q) If S's original knowledge that p is warranted by testimony and that knowledge is preserved by memory, is S's later knowledge that p warranted by testimony?

On the face of it, (Q) is interesting and significant.⁹ Moreover, it is a question about preservative memory and not the a priori. But, on Hawthorne's account, (Q) is not very deep since the answer to it turns on the choice of belief forming process.

9. Tyler Burge (1993), for example, argues for an affirmative answer.

There are other examples of epistemological questions that appear, on the face of it, to be interesting and significant but turn on the choice of belief forming process. For example, Kitcher rejects reliabilism in favor of a sociohistorical conception of knowledge:

On my *socio-historical* conception of knowledge, the knowledge we have today isn't simply a matter of what we have experienced or thought during the course of our lives, but is dependent on the historical tradition in which we stand and on the social institutions that it has bequeathed to us. (2000, 80)

More generally, he rejects “synchronic” conceptions of knowledge, which entail that *S*'s warrant for the belief that *p* depends only on *S*'s cognitive states and processes (2000, 81–82). Hence, if we return to the example of our student who learns scientific laws from a teacher at an early age and later retrieves them from preservative memory, Kitcher would maintain that the relevant belief forming process does not stop with the student's teacher but extends back to his teacher's teachers and beyond. The question whether a socio-historical or synchronic conception of knowledge is correct seems interesting and significant. But, by Hawthorne's lights, it turns out not to be very deep, since the answer to it turns on the choice of belief forming process. So the problem Hawthorne raises, if it is genuine, extends far beyond the a priori. If he is right, many epistemological questions are superficial.

Hawthorne, however, cannot maintain, by the lights of his own theory, that questions that turn on the choice of belief forming process are superficial. Consider a variant of his case of the student who learns laws of nature from a teacher. The variant is identical to Hawthorne's original case, with one exception. As in the original case, the student learns many laws of nature from a competent teacher. But the student also learns a single law of nature from an incompetent teacher, whose scientific pronouncements are usually false. On this particular occasion, by sheer luck, her pronouncement is true. Let us now suppose that the student retrieves from memory the law he learned from the incompetent teacher and bases his conditional prediction on that law. Call the process that results in the conditional prediction *Long**. In this case, the student does not know the conditional prediction since it is based on a law that she does not know.

Hawthorne maintains that, in the original Short and Long cases, the choice between the belief forming processes is insignificant because, from the perspective of a safety theory, both yield the result that the student knows the conditional prediction. But Short is also a terminal segment of the process *Long**, and the choice between Short and *Long** does make a difference in terms of whether the subject knows. If there is no deep mistake in choosing Short over *Long**, then the distinction between knowledge and true belief is not very deep. But, assuming

that the distinction between knowledge and true belief is significant, then Hawthorne must provide some account of how to individuate belief forming processes for purposes of determining whether a true belief constitutes knowledge. Once such an account is provided, it can be employed to individuate belief forming processes for purposes of determining whether they are experience-dependent.

The case of the incompetent teacher shows that Long* is the relevant belief forming process for determining whether the student knows the conditional prediction. It also shows that the student's original warrant for the belief that *p* is relevant to whether a later true belief based on the student's memory that *p* constitutes knowledge; that is, it shows that the correct answer to (Q) is affirmative. Therefore, in Hawthorne's original case, Long is the relevant belief forming process. It is the process that should be used to test whether the student's knowledge is a priori. Since the student's knowledge in Long is warranted by the teacher's testimony, it is a posteriori.¹⁰

We can now draw a more general conclusion regarding Hawthorne's final argument. Hawthorne endorses a general theory of knowledge in which method of belief formation plays a central role in determining whether a true belief constitutes knowledge. He then maintains that if one embeds the Experience-Independent account of a priori knowledge in that general theory of knowledge, a problem arises. Whether items of knowledge turn out to be a priori depends on how belief forming processes are individuated. This problem, however, is not due to the embedded concept of a priori knowledge. It is due to the fact that the general theory of knowledge in which it is embedded assigns a central role to methods of belief formation without providing an account of how they are to be individuated.

4

Carrie Jenkins's (2008) goal is to offer an epistemology of arithmetic that reconciles apriorism, realism, and empiricism. Empiricism maintains that "all our knowledge of the world as it is independently of us must either be, or ultimately rest upon, knowledge obtained through the senses" (Jenkins 2008, 2). A priori knowledge is "knowledge secured without epistemic reliance on any empirical

10. Hawthorne seems to think that if a supporter of the distinction between a priori and a posteriori knowledge opts for Long over Short her position is compromised since knowledge of mathematical principles acquired via earlier training and preserved by memory is a posteriori. But why is this a problem? If testimony is an experiential source of knowledge, then knowledge based on testimony is properly classified as a posteriori. The suggestion seems to be that if this is the case, then much of our mathematical knowledge may turn out to be a posteriori. But how does this support the claim that the a priori–a posteriori distinction is not deep?

evidence” (Jenkins 2008, 4). Jenkins (2008, 4) contends that it is often further assumed that “a priori knowledge is knowledge which does not epistemically depend on the senses *at all*” and maintains, to the contrary, that “there is a significant difference between epistemic independence of empirical evidence and epistemic independence of the senses altogether.” This difference is the focus of her investigation. The leading idea of her account of arithmetical knowledge is that “experience grounds our concepts (which is not the same as supplying evidence for any proposition), and then mere conceptual examination enables us to learn arithmetical truths” (Jenkins 2008, 4). The account, according to Jenkins (2008, 4–5), “makes it reasonable to describe our means of acquiring such knowledge as both a priori (in the sense of independent of empirical evidence) and empirical.”

Jenkins account of arithmetical knowledge is rich and nuanced. Here I offer a general outline that highlights only the features relevant to my discussion. Jenkins assumes that there is a sense of “knowledge” and a sense of “justification” on which externalism is correct. Her goal is to defend the view that we have a priori knowledge of arithmetic in the externalist sense. According to Jenkins (2008, 126), arithmetical truths are conceptual truths—that is, “we can know about arithmetic by examining our concepts.” But, in order to know such truths by examining our concepts, the concepts in question must be grounded. A concept is grounded just in case “it is relevantly accurate and there is nothing lucky or accidental about its being so” (Jenkins 2008, 128). Moreover, a concept must be justified in order to be grounded. A concept is justified just in case “it is rationally respectable for us to rely on it as a relevantly accurate guide to the world” (Jenkins 2008, 129). Hence, according to Jenkins,

Concept accuracy, justification, and grounding are important because, while we have no reason to suppose that examining just *any old* concepts will help us learn about the independent world, examining *accurate* concepts can help us acquire true beliefs about the world, examining *justified* concepts can help us acquire justified beliefs about the independent world, and examining *grounded* concepts can help us acquire knowledge of it. (2008, 131)

Finally, empiricism mandates that the only data relevant to concept justification and grounding are “*data obtained through the senses*” (Jenkins 2008, 137).

My focus is on the alleged reconciliation between apriorism and empiricism. The reconciliation rests on the following contentions:

- (J1) S knows a priori that p iff S knows that p and S’s knowledge is epistemically independent of empirical *evidence*.

- (J2) S's (basic) arithmetical knowledge that p depends epistemically on the concepts constitutive of S's belief that p being grounded by the senses.
- (J3) The sensory input that grounds the concepts constitutive of S's belief that p does not constitute *evidence* for S's belief that p .
- (J4) S knows empirically that p iff S knows that p and S's knowledge depends epistemically on the senses *in some way*.

Since S's basic arithmetical knowledge does not depend epistemically on empirical evidence, it is a priori; but since it does depend epistemically on the senses, it is also empirical.

A question immediately arises regarding the reconciliation. Since Jenkins allows that knowledge can depend epistemically on the senses without depending on empirical evidence, her characterization of the a priori seems too narrow. Why not characterize a priori knowledge more broadly as knowledge that is epistemically independent of the senses? Jenkins is sensitive to the issue and offers two arguments in defense of her characterization. The first contends that it is in line with the tradition. The second maintains that the traditional account of the a priori is unstable. Consequently, no characterization can fully salvage it.

The defense based on tradition appeals to Kant, Chisholm, and Moser. With respect to Kant, Jenkins remarks:

I hope that qualms about my decision to retain the term 'a priori' may be dispelled when we recall that modern usage of the term 'a priori' was largely determined by Kant, and that Kant allowed that some a priori knowledge—the 'impure' sort—depends upon experience in so far as the *concepts* involved are 'derived from' experience. . . . I have proposed that the only way in which arithmetical knowledge depends on sensory input is in so far as the concepts involved must be appropriately related to that input in order for us to count as knowing arithmetical propositions. (2008, 252)

Kant's distinction between pure and impure a priori knowledge offers little precedent or support for Jenkins's characterization of a priori knowledge. Kant maintains that impure a priori knowledge involves concepts derived from experience but pure a priori knowledge does not. The point of Kant's distinction is negative. He maintains that the fact that experience may be necessary to acquire the concepts constitutive of some proposition that p does not preclude a priori knowledge that p . Moreover, Kant does not maintain that the experience necessary to acquire concepts plays any epistemic role. Jenkins, however, proposes a dependence on experience that is both positive and epistemic. On her account, S has a priori arithmetical knowledge that p only if the concepts constitutive of p are derived

from experience in an appropriate manner. Her account, unlike Kant's, rules out the possibility of pure a priori knowledge based on an examination of concepts.

Jenkins also fails to note that Kant's characterization of empirical knowledge provides compelling evidence that she is not in line with the tradition:

we shall understand by a priori knowledge... knowledge absolutely independent of all experience. Opposed to it is empirical knowledge, which is knowledge possible only a posteriori, that is through experience. (Kant 1965, 43)

For Kant, empirical knowledge and a posteriori knowledge are the same. Both contrast with a priori knowledge. Hence, if empirical knowledge can epistemically depend on experience in some nonevidential way, then a priori knowledge cannot depend epistemically on experience in that nonevidential way.

Jenkins next appeals to Chisholm, who states:

Speaking very roughly, we might say that one mark of an a priori proposition is this: once you understand it, you see that it is true. We might call this the traditional conception of the a priori. (1977, 40; quoted in Jenkins 2008, 252)

Here she maintains:

If this characterization is even 'very roughly' correct, then it looks as though arithmetical knowledge as I envisage it has as good a claim as any to count as a priori. With grounded arithmetical concepts in place, we are in a position to see that $7 + 5 = 12$ is true. (2008, 252–253)

But it is clear that Chisholm's remarks, taken at face value, do not support Jenkins's contention. On Chisholm's account, it is understanding alone that is sufficient for a priori knowledge. Putting this point in Jenkins's terminology: with arithmetical concepts in place, we are in a position to see that $7 + 5 = 12$ is true. Chisholm's account does not require that those concepts be grounded.

Jenkins (2008, 253), however, does not think that we should read Chisholm too literally here: "Chisholm's characterization is not (in my opinion) best interpreted as implying that concepts don't need to be grounded in order to be a source of knowledge." This suggestion does not square well with Chisholm's official characterization of immediate a priori knowledge:

D 3.1 h is an *axiom* = Df h is necessarily such that (i) it is true and (ii) for every S , if S accepts h , the h is certain for S .

D 3.2 h is *axiomatic* for S = Df (i) h is an axiom and (ii) S accepts h . (1977, 42)

For Chisholm (1977, 41), accepting some proposition requires that “you grasp *what* it is for that proposition to be true,” but there is no requirement that, in order to grasp what it is for some proposition to be true, its constituent concepts must be grounded. Jenkins also overlooks the fact that Chisholm explicitly addresses the role of experience in concept acquisition, and argues that the manner in which one acquires concepts is irrelevant to the epistemic status of beliefs formed on the basis of examining those concepts.¹¹

Jenkins’s final appeal is to Paul Moser (1987, 1), who maintains that the distinction between a priori and a posteriori knowledge “may be plausibly regarded as connoting two kinds of *epistemic justification*.” He (1987, 1) goes on to articulate this idea as follows: “an instance of knowledge is a priori if and only if its justification condition is a priori in the sense that it does not depend on evidence from sensory experience.” Moser’s characterization, with its specific reference to independence of “evidence” from sensory experience, is similar to that of Jenkins. Hence, it appears to offer some support for her contention that her characterization accords with the tradition.

But there is reason to be cautious here. Moser maintains that justification is a necessary condition for knowledge and that the a priori–a posteriori distinction is fundamentally a distinction between two types of justification. So Moser is offering a reductive analysis of the concept of a priori knowledge in terms of the concept of a priori justification. I have argued that the traditional concept of a priori justification is best articulated as

(APJ) S’s belief that p is justified a priori just in case S’s belief that p is nonexperientially justified.

Moser, however, appears to disagree. He maintains:

(APJ*) S’s belief that p is justified a priori just in case the justification of S’s belief that p does not depend on evidence from sensory experience.

11. Chisholm maintains that it is a distinguishing characteristic of intuitive induction—the process of examining concepts that he alleges is the source of immediate a priori knowledge—that the manner in which one acquires the requisite concepts is irrelevant to the epistemic status of beliefs acquired by this process:

Let us suppose that the knowledge expressed by the two sentences “Necessarily, being red excludes being blue” and “Necessarily, being human includes being animal” is arrived at by intuitive induction; and let us suppose further that in each case, the process began with the perception of certain particular things. Neither conclusion depends for its *justification* upon the particular perceptions which led to the knowledge concerned. . . . If we happen to find our perception was unveridical, this finding will have no bearing upon the result. (1977, 39)

What is the source of this difference?

Moser (1989, 42) favors a particular conception of epistemic justification: “the notion of justification as *an adequate indication, relative to one’s total evidence, that a proposition is true.*”¹² We can characterize this conception, which I call the *Adequate Evidence* conception, as follows:

- (AE) S’s belief that p is justified just in case S’s belief that p is adequately supported by S’s total evidence.

The conjunction of (APJ) and (AE) yields (APJ*).

Two points are important for our purposes. First, (APJ) is a theory-neutral articulation of the traditional concept of a priori justification; it does not presuppose any particular theory of epistemic justification. (APJ*) is a theory-dependent articulation of that concept; it presupposes (AE). Second, (APJ) and (APJ*) are equivalent if, but only if, justification is a function of evidence alone. Since Moser takes justification to be a function of evidence alone, he would take (APJ) and (APJ*) to be equivalent.

Given that Moser’s articulation of the traditional concept of a priori justification is theory-dependent, Jenkins should endorse it only if she endorses the theory of justification that it presupposes. She should, however, have serious reservations about endorsing (AE) for two reasons. First, Jenkins’s account of arithmetical knowledge presupposes an externalist theory of justification, but Moser (1989, 71–77) contends that (AE) is incompatible with externalist theories of justification. Second, and more important, (AE) is at odds with Jenkins’s account of the relationship between justified concepts and justified belief. According to Jenkins (2008, 129), a correctly conducted examination of concepts yields justified belief only if the concepts involved in that examination are justified. But, as she stresses, the experiences that justify a concept do not constitute evidence for beliefs based on an examination of those concepts. So either justified belief based on an examination of concepts does not require that the examined concepts be justified, or justified belief is not a function of evidence alone. In other words, if Jenkins’s account of arithmetical knowledge is correct, then (AE) is false. Since Moser’s theory-dependent analysis of the concept of a priori justification presupposes (AE), it is not a precedent that Jenkins can coherently embrace.

Jenkins recognizes that, despite the alleged historical precedents, many will balk at the very idea of knowledge that is both a priori and empirical. Her second argument addresses this concern directly. Here Jenkins (2008, 255) maintains

12. Moser (1989, 42) goes on to say: “Such an adequate indication is provided for one by something that makes a proposition, P, evidentially more probable for one, on one’s total evidence, than not only \sim P but also P’s probabilistic competitors.”

that there is a deep instability in the classic collection of platitudes about a priori knowledge, since it includes all of the following:

- (A) All a posteriori knowledge is knowledge that depends on empirical evidence.
- (B) Only knowledge that is independent of experience is a priori.
- (C) All knowledge is either a priori or a posteriori and none is both.

Jenkins contends that her account of arithmetical knowledge shows that some member of the collection must be given up. She acknowledges that her proposal to reject (B) may sound radical, but counters that the remaining options are also radical.

But this is a mistake. The instability in the triad (A)–(C) is due to the fact that Jenkins introduces into her theory of arithmetical knowledge a conception of a priori knowledge that presupposes (AE), but (AE) does not cohere with her general theory of justification. Since she maintains that justified belief based on an examination of concepts requires justified concepts, she denies that justified belief is a function of evidence alone. Hence, Jenkins's argument rests on an error of the second type: she endorses an articulation of the traditional concept of a priori knowledge that does not cohere with her background theory of justification.

(APJ), however, coheres with her theory of justification since it is theory-neutral. Moreover, if one replaces (APJ*) with (APJ) in her theory of arithmetical knowledge and amends the triad to reflect that change, the resulting triad is stable:

- (A*) All a posteriori knowledge is knowledge whose justification depends on experience;
- (B*) Only knowledge whose justification is independent of experience is a priori;
- (C) All knowledge is either a priori or a posteriori and none is both.

Nothing must be given up to accommodate Jenkins's theory of arithmetical knowledge. Such knowledge is a posteriori since concept justification is a necessary condition of such knowledge and concept justification depends on experience.

5

Timothy Williamson also has misgivings about the a priori–a posteriori distinction. His misgivings arise within a broader investigation into the methodology

and subject matter of philosophy. In particular, he argues against the view that philosophy involves a distinctive subject matter such as conceptual, linguistic, or analytic truths. Moreover, Williamson denies that philosophical investigation involves a distinctive cognitive faculty. The metaphysical modalities represent one significant domain of philosophical investigation. Here he maintains that knowledge of the metaphysical modalities is reducible to knowledge of counterfactual conditionals, and offers an account of such knowledge in terms of the exercise of the imagination. Williamson's (2007, 165) misgivings about the a priori–a posteriori distinction are based in the observation that “in our imagination-based knowledge of counterfactuals, sense experience can play a role that is neither strictly evidential nor purely enabling.”

Since Williamson's misgivings are based on his account of knowledge of the metaphysical modalities, one strategy for rejecting them is to reject his account of knowledge of the metaphysical modalities. There are two basic ways to reject that account. The first is to deny that knowledge of the metaphysical modalities is reducible to knowledge of counterfactual conditionals. The second is to deny his imagination-based account of knowledge of counterfactuals. My goal is not to assess the cogency of his account of knowledge of the metaphysical modalities.¹³ My goal is to assess the implications of his account, if cogent, for the a priori–a posteriori distinction. My primary contention is that he overestimates the implications of his account and that the reason he does so is that he invokes a conception of a priori knowledge that does not cohere well with his background theory of knowledge.

The structure of Williamson's argument is straightforward. He begins (2007, 165) by distinguishing two roles that experience can play in the acquisition of knowledge, enabling and evidential, and maintains that a priori knowledge “is supposed to be incompatible with an evidential role for experience... [but] supposed to be compatible with an enabling role for experience.” According to the tradition, most, if not all, propositions known a priori are necessary truths. But Williamson maintains that knowledge of necessary truths is reducible to knowledge of counterfactuals and, on his account of knowledge of counterfactuals, experience can play a role that is neither purely enabling nor strictly evidential. Suppose that S knows that p and experience plays a role that is neither purely enabling nor strictly evidential. Williamson contends that S's knowledge that p is not happily classified either as a priori or a posteriori. He concludes (2007, 169) that the a priori–a posteriori distinction “is handy enough for a rough initial description of epistemic phenomena; it is out of place in a deeper theoretical analysis, because it obscures more significant epistemic patterns.”

13. See chapter 12 here for such an assessment.

Williamson's argument can be summarized as follows:

- (W1) Knowledge of necessary truths is reducible to knowledge of counterfactuals.
- (W2) Experience can play a role in knowledge of counterfactuals that is neither purely enabling nor strictly evidential.
- (W3) In such cases, the resulting knowledge is not happily classified either as a priori or a posteriori.
- (W4) Therefore, the distinction between a priori and a posteriori knowledge is not useful for deep theoretical analysis.

Significant questions can be raised about the premises of the argument as well as its validity. As I indicated earlier, one can question both Williamson's account of knowledge of necessary truths and his account of knowledge of counterfactuals. I propose to grant both. One can also question Williamson's understanding of the distinction between purely enabling and strictly evidential roles, and whether the cases in which he alleges that experience plays neither role are convincing. Once again, I propose to grant his understanding of the distinction and his verdict on the cases. Still, one might maintain that even if there are such cases, it does not follow that the distinction between a priori and a posteriori knowledge is not theoretically significant since such cases are few or inconsequential. Alternatively, one might maintain that such cases are borderline and that the existence of borderline cases is not sufficient to challenge the cogency or importance of a distinction. Once again, I will not pursue those responses. I will grant the centrality and importance of his cases. My focus will be on (W3) since it is the premise that bears directly on the a priori–a posteriori distinction.

In order to assess (W3), we must address two questions. What is the role of experience in those cases in which it is alleged that it is neither purely enabling nor strictly evidential? Why are such cases not happily classified as either a priori or a posteriori? In order to answer the first question, let us focus on Williamson's central example. Consider a person who learns the words "inch" and "centimeter" independently of one another by learning to make reliable naked eye judgments of distances. Suppose that such a person visually judges, for example, that two marks are at most two inches apart. Since the judgment is sufficiently reliable, the person knows a posteriori that the two marks are at most two inches apart. Williamson (2007, 166) contends that the person can employ their capacity to judge distances visually offline to make the following counterfactual judgment:

- (25) If two marks had been nine inches apart, they would have been at least nineteen centimeters apart.

Here the person visually imagines two marks nine inches apart and employs their capacity to judge distances in centimeters visually offline to judge that they are at least nineteen centimeters apart. Since the person's judgment is sufficiently reliable, that person knows (25).

The role of experience in this case is not evidential, according to Williamson, because the judgment is not based on memories of having visually encountered similar distances in the past and it is not deduced from general principles inductively or abductively inferred from past experiences. Moreover, it does not play a purely enabling role since the experiences necessary to reliably evaluate (25) go beyond the experiences necessary to acquire the concepts involved in (25).¹⁴ Williamson articulates its role as follows:

I know (25) only if my offline application of the concepts of an inch and a centimeter was sufficiently skilful. Whether I am justified in believing (25) likewise depends on how skilful I am in making such judgments. My possession of the appropriate skills depends constitutively, not just causally, on past experience for the calibration of my judgments of length in those units. (2007, 166)

There are three central claims about the role of experience in this passage:

- (C1) One knows (justifiably believes) (25) only if one's offline application of the relevant concepts is sufficiently skillful.
- (C2) One's possession of the appropriate skills depends constitutively, not just causally, on past experience.
- (C3) The experiences necessary to skillfully apply the relevant concepts go beyond the experiences necessary to acquire those concepts.

(C1)–(C3) introduce an epistemic role for experience that is not evidential: experience is necessary for the skillful application of concepts.

We are now faced with the following question:

- (Q) If S knows (justifiably believes) that p and S's knowledge (justified belief) that p depends (epistemically) on experience for the skillful application of concepts but not for evidence, does S know (justifiably believe) that p a priori or a posteriori?

14. Williamson (2007, 166) contends: "Someone could easily have enough sense experience to understand (25) without being reliable enough in their judgments of distance to know (25). Nor is the role of past experience in the judgment of (25) purely enabling in some other way, for example by acquainting me with a logical argument for (25)."

Premise (W3) contends that neither response to (Q) is satisfactory. Each response faces a significant threat. If one maintains that knowledge of (25) is a priori because experience does not play an evidential role, there is the threat that too much will count as a priori. If one maintains that knowledge of (25) is a posteriori because experience plays more than a purely enabling role, there is the threat that knowledge of many philosophically significant modal truths will turn out to be a posteriori. Therefore, Williamson's case against the significance of the a priori–a posteriori distinction turns on whether both threats are genuine. My contention is that, although the first is genuine, the second is not.

With respect to the first response, Williamson (2007, 167) maintains that “long forgotten experience can mold my judgment in many ways without playing a directly evidential role,” and, as a consequence, our knowledge of (25) may be quite similar to our knowledge of (26):

- (26) If two marks had been nine inches apart, they would have been further apart than the front and back legs of an ant.

One can know (26), according to Williamson (2007, 167), without having any evidence based on sense experience: “The ability to imagine accurately what an ant would look like next to two marks nine inches apart suffices.” Knowledge of (26), acquired in this manner, is clearly a posteriori, but the first response would classify it as a priori.

Even if one has reservations about Williamson's example, my earlier discussion of Hawthorne underscores the threat faced by the first option. Williamson's example appeals to the role of forgotten experience in molding judgment. Hawthorne's discussion highlights the role of forgotten evidence. He introduces the example of a student who learns a scientific law on the basis of the testimony of a teacher, and later recalls that law but not the testimonial evidence on which his belief was originally based. Here we argued that whether the student knows the law at the later time depends epistemically on his original evidence even if it is forgotten. If the student originally learned that law from a competent teacher, he knows the law at the later time. But if the student originally learned that law from an incompetent teacher, he does not know the law at the later time. We also argued that, in the case of the student who knows the law, if the student's original (but now forgotten) evidence is based on experience, then the student's later knowledge is properly classified as a posteriori. The first response, however, would classify it as a priori. Therefore, the threat facing the first response is genuine.

With respect to the second response, Williamson invites us to consider three propositions:

- (27) It is necessary that whoever knows something believes it.
- (28) If Mary knew that it was raining, she would believe that it was raining.
- (29) Whoever knew something believed it.

Here he maintains that

the experiences through which we learned to distinguish in practice between belief and non-belief and between knowledge and ignorance play no strictly evidential role in our knowledge of (27)–(29). Nevertheless, their role may be more than purely enabling... Why should not subtle differences between two courses of experience, each of which sufficed for coming to understand “know” and “believe,” make for differences in how test cases are processed, just large enough to tip honest judgments in opposite directions? (2007, 168)

If this account of the role of experience in our knowledge of (27)–(29) is correct, should we draw the conclusion that the knowledge in question is a posteriori? Williamson contends:

Not if that suggests that (27)–(29) are inductive or abductive conclusions from perceptual data. In such cases, the question “*A priori* or a *posteriori*?” is too crude to be of much epistemological use. (2007, 169)

Therefore, knowledge of (25) is not happily classified as a posteriori because, if it is so classified, then knowledge of (27)–(29) would also be properly classified as a posteriori, but, contends Williamson, such knowledge is not properly classified as a posteriori.

Williamson’s argument against the significance of the a priori–a posteriori distinction turns on two basic ideas. First, a background theory of knowledge (and justification) that introduces an epistemic role for experience that is nonevidential. One knows (or justifiably believes) (25)–(29) only if one can skillfully apply the relevant concepts. But whether one can skillfully apply the concepts depends constitutively on one’s past experiences. Second, a conception of a priori knowledge on which such knowledge is incompatible with reliance on experiential evidence. The background theory opens up the possibility of knowledge (and justified belief) that depends epistemically on experience but not on experiential evidence. And we are faced with the question: Is such knowledge a priori or a posteriori?

This question is left open by Williamson’s articulation of the concept of a priori knowledge because it consists solely of a necessary condition in terms of the role

of experiential evidence, but his background theory of knowledge denies that justification is exclusively a function of one's evidence. Hence, his articulation of the concept of a priori knowledge does not cohere well with his background theory of knowledge. The traditional conception of a priori knowledge, as I have articulated it, coheres better with Williamson's background theory of knowledge since that conception does not presuppose that justification is exclusively a function of one's evidence. It maintains that a priori knowledge is incompatible with a justificatory role for experience, but it does not restrict the justificatory role of experience to experiential evidence. If we replace Williamson's articulation of the concept of a priori knowledge with the traditional conception, it follows straightforwardly, that if S knows (justifiably believes) that p only if S can skillfully apply the concepts in p and S's skillful application of those concepts depends constitutively on S's past experience, then S knows (justifiably believes) a posteriori that p.

Williamson (2007, 169) maintains that classifying knowledge of (27)–(29) as a posteriori is unacceptable “if that suggests that (27)–(29) are inductive or abductive conclusions from perceptual data.” The traditional conception of a posteriori justification neither entails nor suggests that if S knows a posteriori that p, then S knows that p on the basis of an inductive or abductive inference from perceptual data. The traditional conception of a posteriori justification, like the traditional conception of a priori justification, is theory-neutral. It does not entail or suggest that one's justification is exclusively a function of one's evidence. The suggestion that if S knows a posteriori that p, then S knows that p on the basis of an inductive or abductive inference from perceptual data derives from Williamson's articulation of the a priori–a posteriori distinction solely in terms of the role of experiential evidence. Therefore, his argument against the second option fails. The threat facing that option is merely apparent.

Williamson's argument fails because (W3) is false. (W3) is false because knowledge of (25) is happily classified as a posteriori. The alleged threat to classifying knowledge of (25) as a posteriori is merely apparent. Williamson maintained that knowledge of (25) is not happily classified as a posteriori because, if it is so classified, then knowledge of (27)–(29) would also be properly classified as a posteriori. But such knowledge is not properly classified as a posteriori. I maintained, in response, that the argument that he offers to show that knowledge of (27)–(29) is not properly classified as a posteriori depends on a conception of a priori knowledge that does not cohere well with his background theory of knowledge. Once that conception is replaced by the traditional conception of a priori knowledge, the threat that he envisages evaporates. There is, however a residual concern with this response. One might argue that even if Williamson's supporting argument fails, he is correct to insist that knowledge of (27)–(29) is not properly classified as a posteriori. Therefore, if the traditional conception of a

priori knowledge classifies such knowledge as a posteriori, it should also be rejected.

This concern is misplaced. The traditional conception of a priori knowledge classifies knowledge of (27)–(29) as a posteriori only if Williamson is right about the role of experience in our knowledge of (27)–(29). I conceded his account of the role of experience in such knowledge in order to evaluate its implications. But anyone who thinks that knowledge of (27)–(29) is properly classified as a priori will reject his account of the role of experience in such knowledge. Most likely, such a person will reject his claim that the experiences through which we learned to distinguish between belief and nonbelief and between knowledge and ignorance are more than purely enabling, and insist that the conditions for concept possession that he endorses are too lax.

The traditional conception of a priori knowledge is not vulnerable to the argument that Williamson offers in support of (W3). Therefore, his argument fails to show that the traditional a priori–a posteriori distinction is not useful for deep theoretical analysis. Nevertheless, even if his supporting argument fails, the charge may be accurate. So the final issue we must address is whether the traditional version of the distinction is open to that charge. Williamson alleges that the distinction is not useful because it obscures more significant epistemic patterns. His conception of a priori knowledge in terms of independence from experiential evidence is open to that charge since it obscures the fact that a belief can depend epistemically on experience in a nonevidential way—that is, it can depend on experience for the skillful application of concepts. But the traditional conception of a priori knowledge does not suffer from this shortcoming; it articulates that concept in terms of nonexperiential justification. Since Williamson maintains that conceptual skill is a necessary condition of justified belief, the traditional conception does not obscure this form of epistemic dependence on experience. So we are left with the question: What significant epistemic pattern does it obscure?¹⁵

The a priori–a posteriori distinction has come under attack in the recent literature. I have surveyed the challenges of the leading critics and provided answers to them. I do not conclude, however, that the distinction is invulnerable to attack. In the following section, I articulate an important challenge to the distinction. The challenge is important not because it shows that the distinction is insignificant

15. Williamson maintains (2007, 169): “We may acknowledge an extensive category of *armchair knowledge*, in the sense of knowledge in which experience plays no strictly evidential role, while remembering that such knowledge may not fit the stereotype of the a priori, because the contribution of experience was for more than enabling.” Like his conception of a priori knowledge, his conception of armchair knowledge obscures significant epistemic patterns. It obscures the difference between (a) knowledge whose justification does not depend on experience, and (b) knowledge whose justification does depend on experience but not experiential evidence.

or incoherent but because it leads to a rejection of the traditional view that all knowledge (or justified belief) is either a priori or a posteriori.¹⁶

6

In this section, I consider a loosely related family of views that have recently become more prominent in discussions of the a priori. They share three features. The first is a focus on the epistemic status of basic inferential principles and procedures, including logical principles and procedures. The second is a rejection of both traditional rationalist accounts of their justification in terms of appeals to rational insight and traditional empiricist accounts of their justification in both their Millian and Quinean forms. The third is a strategy for addressing the epistemic status of such principles and procedures, which will emerge in the ensuing discussion.

Gilbert Harman (2001, 657) favors a general foundations theory of epistemic justification, according to which “all of one’s beliefs and inferential procedures are foundational.” A belief or inferential procedure is foundational for a person “if and only if the person is *prima facie* justified in so believing or inferring in the absence of any appeal to further beliefs or procedures” (Harman 2001, 657). General foundationalism has the consequence that, at a given time, all of one’s beliefs and inferential practices are *prima facie* justified.

Harman (2001, 659–660) notes that if we conjoin general foundationalism with Bonjour’s (1998, 11) definition of a priori justification—*P* is justified a priori for *S* if and only if *S* “has a reason for thinking *P* to be true that does not depend on any positive appeal to experience or other causally mediated quasi-perceptual contact with contingent features of the world”—we arrive at the following striking conclusion: “If ‘having a reason’ applies even to foundational beliefs and means something like ‘is justified in thinking’, then this definition could be interpreted to imply that all of one’s beliefs are justified a priori, according to general foundationalism.” Harman does not resist this consequence. Instead, he argues against Bonjour’s contention that the only alternative to scepticism is to embrace the traditional rationalist account of a priori justification in terms of rational insight into the necessary truth of a proposition. A general foundations theory can avoid scepticism without introducing rational insight as a source of a priori justification.

Hartry Field offers a strikingly similar perspective on basic inferential procedures and principles. He (2001, 117) begins by defining “a *weakly* a priori

16. In Casullo (2003), I offer a more radical challenge to the a priori–a posteriori distinction that turns on the question whether the distinction between experiential and nonexperiential sources of justification can be coherently articulated.

proposition as one that can be reasonably believed without empirical evidence; an *empirically infeasible* proposition as one that admits no empirical evidence against it; and an a priori proposition as one that is both weakly a priori and empirically infeasible.” Field (2001, 119) extends his definition to include methodologies or rules for forming and revising beliefs: “a methodology or rule [is] *weakly* a priori iff it can be reasonably employed without empirical evidence; *empirically infeasible* if no empirical evidence could undermine the reasonableness of its employment; and a priori if it meets both conditions.”

Field (2001, 119) notes that he does not require that an a priori proposition or rule can be reasonably believed only by someone who has a nonempirical justification for it since he wants to leave open the possibility of propositions and rules that can be reasonably believed without any justification at all. Such propositions and rules are called “default reasonable.” It follows, given his definitions, that all default reasonable propositions and rules are, trivially, *weakly* a priori, and a priori if and only if they are empirically infeasible. Field defends this consequence by noting:

surely among the most plausible examples of default reasonable propositions and rules are simple logical truths like ‘If snow is white then snow is white’ and basic deductive rules like modus ponens and ‘and’-elimination. It would be odd to exclude these from the ranks of the a priori merely because of their being default reasonable. (2001, 119)

Field (2001, 120) also maintains, however, that “there is no obvious reason why propositions such as ‘People usually tell the truth’ shouldn’t count as default reasonable, and it would be odd to count such propositions as a priori.” The empirical infeasibility condition is necessary to block this undesirable result. “People usually tell the truth” is defeasible by empirical evidence, but, according to Field, logical truths are not.¹⁷

17. I (2003) argue against the empirical infeasibility condition on a priori justification on the grounds that it rules out the possibility of propositions that are justified both a priori and empirically. But, as Field (2001, 118) acknowledges, “complex and unobvious logical truths can admit empirical justification without diminishing their claims to a priori status.” To circumvent this problem, Field (2001, 118) distinguishes between empirical justification and empirical evidence, and maintains that

evidence involves something like *ideal* justification, ideal in that limitations of computational capacity are ignored. The idea is that reflection on the logical facts reveals that evidence for p doesn’t raise the ‘ideal credibility’ of the logical truth $((p \supset q) \supset p) \supset p$: for ideally that would have been fully credible to begin with. If an observation doesn’t raise the *ideal* credibility of the claim it shouldn’t count as evidence for it. Similarly, an observation must lower the *ideal* credibility of a claim to count as evidence against it.

The accounts of Harman and Field share two features. First, both allow that there are propositions or rules that one can justifiably or reasonably believe in the absence of any evidence or justification. Second, both maintain that such propositions or rules have a priori status because they are justifiably or reasonably believed in the absence of empirical evidence or justification. There are two differences in their accounts. First, Field classifies such propositions or rules as weakly a priori, whereas Harman maintains that they are unqualifiedly a priori given Bonjour's characterization of the a priori. Second, Harman does not balk, at least explicitly, at the consequence that all foundational beliefs are a priori on the general foundations theory, whereas Field does balk at the consequence that all default reasonable propositions are a priori. Hence, he includes the empirical indefeasibility requirement in his definitions of a priori propositions and rules.

Crispin Wright's position emerges within a broader context of addressing sceptical arguments:

Call a proposition a *cornerstone* for a given region of thought just in case it would follow from a lack of warrant for it that one could not rationally claim warrant for *any* belief in the region. The best—most challenging, most interesting—sceptical paradoxes work in two steps: by (i) making a case that a certain proposition (or restricted type of proposition) that we characteristically accept is indeed such a cornerstone for a much wider class of beliefs, and then (ii) arguing that we have no warrant for it. (2004b, 167–168)

Wright's focus is on the second step. The sceptic supports the second step by arguing that one cannot acquire evidence for the cornerstone. In the case of one version of the Cartesian sceptical argument, the cornerstone is

(C) I am not right now in the midst of a persistent coherent dream.

Empirical observations, according to Field, can raise or lower the nonideal credibility of logical truths but not their ideal credibility. Hence, such observations are not evidence for or against logical truths.

Field's proposal faces a number of questions. First, it entails that there is no evidence, empirical or nonempirical, for or against any logical truth. Hence, the concept of evidence can play no role in distinguishing between epistemically acceptable and epistemically unacceptable acquisition or revision of beliefs regarding logical truths. In effect, it tells us little about the *actual*, as opposed to the *ideal*, epistemology of logic. Second, since a person who believes a complex and unobvious logical truth, in the face of empirical observations that well-respected logicians do not accept it, is not justified in believing it and does not know it, the relationship between the concepts of evidence, ideal justification, and ideal credibility—as opposed to the concepts of justification and nonideal credibility—and the concept of knowledge remains unclear.

Since (C) is an empirical proposition, warrant for (C) would presumably consist in empirical evidence. The sceptic, however, maintains that evidence for (C) cannot be any stronger than my independent warrant that I actually gathered that evidence rather than merely dreamed that I did. Therefore, I cannot acquire a warrant for (C).

Wright notes that the sceptical argument involves a crucial assumption:

- (A) If one cannot acquire evidence for a cornerstone then one has no warrant for it.

It is this assumption that Wright proposes to attack:

Suppose there is a type of rational warrant which one does not have to *do any specific evidential work* to earn: better, a type of rational warrant whose possession does not require the existence of evidence—in the broadest sense, encompassing both *a priori* and empirical considerations—for the truth of the warranted proposition. Call it *entitlement*. (2004b, 174–175)

If there are such entitlements, then one can reject (A) by maintaining that the cornerstones are warranted despite the fact that they are unsupported by evidence.

Wright goes on to articulate several varieties of entitlement. An *entitlement of cognitive project* is a presupposition of a particular cognitive project, where

P is a *presupposition* of a particular cognitive project if to doubt P (in advance) would rationally commit one to doubting the significance or competence of the project,

that meets two further conditions:

- (i) We have no sufficient reason to believe that P is untrue

and

- (ii) The attempt to justify P would involve further presuppositions in turn of no more secure a prior standing...and so on without limit; ... (2004b, 191–192)

Wright explains the rationale for the entitlement as follows:

wherever we need to carry through a type of project, or anyway cannot lose and may gain by doing so, and where we cannot satisfy ourselves that the presuppositions of a successful execution are met except at the cost of

making further presuppositions whose status is no more secure, we should—are *rationaly entitled* to—just go ahead and *trust* that the former are met. (2004b, 192)

The entitlement is not an entitlement to believe the presuppositions in question but to accept or trust them, where acceptance is a more general propositional attitude than belief that includes belief and trust as subcases. We are entitled to accept cornerstones, such as (C), despite the fact that we cannot acquire evidence in support of them. Entitlement is a species of warrant that does not require evidence.

Wright (2004a, 159) exploits this variety of entitlement to provide an account of the epistemological status of the basic laws of logic that differs from the three available accounts on the contemporary scene—that is, that they are justified either empirically (Quine), or a priori inferentially (Boghossian), or a priori non-inferentially (Intuition)—but is, nevertheless, a priorist. Here Wright maintains:

We have recognized two arguable species of entitlement of cognitive project: to the proper functioning, on an occasion, of relevant cognitive faculties, and to the co-operativeness of the prevailing circumstance in the successful operation of those faculties. . . . Basic logic is clearly a third potential kind of example—we can anticipate exactly this kind of rational entitlement to rely on the validity of the *basic inferential machinery*, if any, involved in the execution of the project. (2004a, 166)

Wright (2004a, 174) articulates his alternative account as follows: “what we have, at the level of the most basic laws of logic, is not knowledge, properly so regarded, at all but something beneath the scope of cognitive enquiry,—a kind of rational trust, susceptible [neither] to corroboration nor rebuttal by any cognitive achievement.”¹⁸

Wright’s account differs from the accounts of Harman and Field in a crucial respect. The entitlement that we have to basic logical principles is not an entitlement to believe that they are valid; it is an entitlement to trust or accept that they are valid. Entitlement is a species of positive epistemic status that does not underwrite either justified belief or knowledge. Wright’s account, however, has two important features in common with the accounts of Harman and Field. First, Harman and Field allow that there are propositions and rules that one can justifiably or reasonably believe in the absence of any evidence or justification. Wright allows that there

18. The text actually reads: “a kind of rational trust, susceptible beneath to corroboration nor rebuttal by any cognitive achievement,” which I assume is an oversight.

are propositions and rules that one is rationally entitled to accept without any evidence or justification. Second, Harman and Field maintain that such propositions and rules have a priori status. Wright maintains that, on his account, the epistemological status of basic logical principles is a priori, although he does not explicitly address whether other entitlements to cognitive project are a priori.

Harman, Field, and Wright all maintain that a propositional attitude (belief or acceptance) can have a positive epistemic status (justified, reasonable, or entitled) in the absence of any evidence or justification. Moreover, both Harman and Field note that this result, in conjunction with the following negative characterization of a priori justification

- (APJN) S's belief that p is a priori justified (reasonable) if and only if the justification (reasonableness) of S's belief that p does not depend on empirical evidence

yields the result that many beliefs that are typically regarded as a posteriori come out a priori. For Harman, all of one's beliefs are *prima facie* justified a priori. For Field, all default reasonable propositions are weakly a priori.

Wright maintains that he is offering an account of the epistemological status of basic logical principles on which they are a priori. Although he is not explicit on the issue, his claim that his account has the consequence that basic logical principles are a priori appears to presuppose an analogue of (APJN):

- (APEN) S's acceptance that p is a priori entitled if and only if the entitlement of S's acceptance that p does not originate in empirical evidence.

If this is correct, then it follows that, on Wright's account, all entitlements of cognitive project are a priori, including one's acceptance that one's cognitive faculties are properly functioning and that one's environmental circumstances are suitable for their successful operation.

Harman neither endorses nor rejects (APJN). Moreover, he does not embrace or reject the view that all of one's beliefs are *prima facie* justified a priori. He simply notes that it is a consequence of the conjunction of Bonjour's conception of a priori justification with a general foundations theory. Wright does not explicitly discuss the application of the a priori–a posteriori distinction at the level of entitlements, or the apparent consequence that the conjunction of his account with (APEN) yields the result that all entitlements of cognitive project are a priori. Field, however, is aware that the conjunction of his account with (APJN) yields the result that all default reasonable propositions are a priori and wishes to resist it. Hence, he adds to (APJN) an empirical indefeasibility condition.

Whatever one thinks of the plausibility or implausibility of classifying propositions such as “I am not now dreaming” or “People generally tell the truth” as a priori, the traditional conception of a priori knowledge does not have this consequence. The traditional conception is *positive*: it requires that a priori justified beliefs *have* a particular type of justification rather than that they *lack* a particular type of justification. The traditional conception maintains:

- (APJ) S’s belief that p is a priori justified (reasonable) if and only if the justification (reasonableness) of S’s belief that p derives from some nonexperiential source.

On the traditional conception, neither Harman’s foundational beliefs nor Field’s default reasonable propositions nor Wright’s entitlements of cognitive project are a priori.¹⁹ Moreover, such foundational beliefs, default reasonable propositions, and entitlements to cognitive project are not a posteriori. They are neither a priori nor a posteriori.

We are now faced with a dilemma. The traditional conception of the a priori, in conjunction with the family of views articulated in this section, entails that some knowledge (justified belief) is neither a priori nor a posteriori. Yet it is part of the traditional story regarding the a priori that all knowledge (justified belief) is either a priori or a posteriori. That story is premised on the assumption that all justification originates either in evidence or in some cognitive state or process of the believer. The family of views articulated in this section deny that assumption.²⁰ Some warrant is “for free,” to use Wright’s term: some acceptances are entitled merely in virtue of being accepted; some beliefs are justified merely in virtue of being believed. Nothing more is necessary to confer positive epistemic status. Faced with these new theories, there are two options. First, embrace (APJN) and maintain that all knowledge and justification is either a priori or a posteriori. Second, embrace (APJ) and deny that all knowledge or justification is either a priori or a posteriori. One must choose between the traditional conception of a priori knowledge (justified belief) and the traditional view that all knowledge (justified belief) is either a priori or a posteriori.

If some warrant, whether it be entitlement or justification, is for free, then propositional attitudes having positive epistemic status fall into three distinct categories:

19. Strictly speaking, (APJ) is silent on the a priori status of entitlements. The more general principle (APW), which is introduced below, has the consequence that entitlements are not a priori.

20. Strictly speaking, Wright’s view does not deny that assumption but only the more general assumption that all warrant originates either in evidence or in some cognitive state or process of the believer.

- (PES1) Attitudes whose warrant derives from experiential evidence or, more broadly, from some experiential source;
- (PES2) Attitudes whose warrant derives from nonexperiential evidence or, more broadly, from some nonexperiential source; and
- (PES3) Attitudes whose warrant does not derive from any evidence or, more broadly, from any source.

Given these three categories, my contention is that the following analogue of (APJ),

- (APW) S's attitude that p is a priori warranted if and only if the warrant of S's attitude that p originates in some nonexperiential source,

is preferable to the following analogue of (APJN),

- (APWN) S's attitude that p is a priori warranted if and only if the warrant of S's attitude that p does not originate in some experiential source,

since it results in a more natural classification of attitudes having positive epistemic status.

Embracing (APWN) entails that the category of a priori warranted attitudes includes all the attitudes in categories (PES2) and (PES3), and that the category of a posteriori warranted attitudes includes only the attitudes in category (PES1). The resulting category of a priori warranted attitudes is unnatural since it includes both attitudes whose warrant originates in some nonexperiential source and attitudes whose warrant does not originate in any source. The latter attitudes have no more in common with attitudes whose warrant originates from some nonexperiential source than they do with attitudes whose warrant originates from some experiential source, and they are as different from attitudes whose warrant derives from some nonexperiential source as they are from attitudes whose warrant derives from some experiential source. Moreover, the resulting classification obscures, or at least fails to highlight, the fact that attitudes falling into category (PES3) have a unique epistemic feature that differentiates them from both attitudes falling into category (PES1) and attitudes falling into (PES2).

Embracing (APW) results in a tripartite classification that respects both the similarities and differences among the three types of positive epistemic status. The a priori–a posteriori distinction becomes a distinction that, at its most fundamental level, is between two sources of warrant: experiential and nonexperiential. Where warrant is for free and does not derive from any source, the distinction does not apply since the basis for the distinction is absent. This approach

avoids the unnatural union of attitudes in categories (PES2) and (PES3) into the category of a priori warranted attitudes. That category includes only the attitudes in (PES2). Moreover, it highlights the unique epistemic status of attitudes in category (PES3) by placing them in a third category. The warrant of the attitudes in (PES3) does not originate in some source; it is for free. The warrant of the attitudes in (PES1) and (PES2) is not for free; it originates in some source.

The tradition embraces two theses regarding a priori knowledge:

- (T1) A priori (a posteriori) knowledge is knowledge whose justification originates in some nonexperiential (experiential) source.
- (T2) All knowledge (justification) is either a priori or a posteriori.

The three views considered in this section maintain that some warrant does not originate in any source: Harman and Field maintain that some knowledge and justification does not originate in any source; Wright maintains that entitlement does not originate in any source. If some knowledge and justification does not originate in any source then, according to (T1), it is neither a priori nor a posteriori and (T2) is false. Moreover, if entitlement does not originate in any source then, according to (APW), entitled attitudes are not a priori. One can retain (T2) by rejecting (APJ) and embracing (APJN). Similarly, one can retain the view that entitled attitudes are a priori by rejecting (APW) and embracing (APEN). But, as I have argued, embracing (APJN) and (APEN) results in an unnatural classification of attitudes having positive epistemic status. The superior resolution is to endorse the traditional conception of a priori knowledge and embrace the consequence that some knowledge (justification) is neither a priori nor a posteriori. Similarly, the superior resolution with respect to entitlement is to endorse (APW) and to embrace the consequence that entitled attitudes are neither a priori nor a posteriori.²¹

REFERENCES

- Alston, William. 1992. "Foundationalism." In *A Companion to Epistemology*, ed. J. Dancy and E. Sosa. Oxford: Blackwell.
- BonJour, Laurence. 1998. *In Defense of Pure Reason*. Cambridge: Cambridge University Press.
- Burge, Tyler. 1993. "Content Preservation." *Philosophical Review* 102: 457–488.
- Casullo, Albert. 1988. "Revisability, Reliabilism, and A Priori Knowledge." *Philosophy and Phenomenological Research* 49: 187–213.
- . 2003. *A Priori Justification*. New York: Oxford University Press.

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- . 2009. “Analyzing A Priori Knowledge.” *Philosophical Studies* 142: 77–90.
- Chisholm, R. M. 1977. *Theory of Knowledge*. 2d ed. Englewood Cliffs, NJ.: Prentice-Hall.
- Field, Hartry. 2000. “Apriority as an Evaluative Notion.” In *New Essays on the A Priori*, ed. P. Boghossian and C. Peacocke. Oxford: Oxford University Press.
- Harman, Gilbert. 2001. “General Foundations versus Rational Insight.” *Philosophy and Phenomenological Research* 63: 657–663.
- Hawthorne, J. 2007. “A Priority and Externalism.” In *Internalism and Externalism in Semantics and Epistemology*, ed. Sanford Goldberg. Oxford: Oxford University Press.
- Jenkins, C. S. 2008. *Grounding Concepts*. Oxford: Oxford University Press.
- Kant, Immanuel. 1965. *Critique of Pure Reason*. Trans. Norman Kemp Smith. New York: St. Martin’s Press.
- Kitcher, Philip. 1983. *The Nature of Mathematical Knowledge*. New York: Oxford University Press.
- . 2000. “A Priori Knowledge Revisited.” In *New Essays on the A Priori*, ed. P. Boghossian and C. Peacocke. Oxford: Oxford University Press.
- Moser, Paul. 1987. “Introduction.” In *A Priori Knowledge*, ed. P. Moser. Oxford: Oxford University Press.
- . 1989. *Knowledge and Evidence*. Cambridge: Cambridge University Press.
- Williamson, Timothy. 2007. *The Philosophy of Philosophy*. Oxford: Blackwell.
- Wright, Crispin. 2004a. “Intuition, Entitlement and the Epistemology of Logical Laws.” *Dialectica* 58: 155–175.
- . 2004b. “Warrant for Nothing (and Foundations for Free)?” *Proceedings of the Aristotelian Society*, supp., 78: 167–212.



