I have appealed freely to the notion of a priori justification: justification independent of experience. I have also appealed freely to derivative notions such as a priori knowledge, a priori knowability, a priori sentences, a priori inferences, and so on. While these notions have a venerable history in philosophy, they have also attracted some skepticism. The most prominent source of skepticism arises from Quine’s critique of the analytic/synthetic distinction, which is the focus of the next chapter. In this excursus, I focus on some more recent doubts about the a priori, articulated by John Hawthorne in his article ‘A Priority and Externalism’ (2007) and by Timothy Williamson in his book The Philosophy of Philosophy (2007).

Hawthorne raises doubts about a priori knowledge tied in the first instance to externalist constraints on knowledge. He first stipulates a strongly internalist notion of a priori knowledge: x’s believing p is a case of a priori knowledge iff for any possible intrinsic duplicate y, the counterpart in y of x’s belief that p is a case of knowledge. Here the idea is that a priori knowledge is knowledge that depends only on features intrinsic to a subject. He also assumes that knowledge requires safety: to know that p, it should be the case that there are no close worlds in which one makes a mistake about p. (Strictly: there are no close worlds in which one makes a mistake that is relevantly similar to one’s actual belief that p.)

Hawthorne then argues that given these two constraints, there can be no a priori knowledge. For any subject with a belief that p that putatively counts as a priori knowledge, there will be an intrinsic duplicate whose belief that p is not safe, and therefore is not knowledge. The key case involves ‘a priori gas’: a gas that if inhaled causes the subject to make all sorts of mistakes in a priori reasoning. If one is surrounded by a priori gas, then one’s beliefs are not safe: even if one has not inhaled the gas, there are nearby worlds in which one inhales the gas and makes mistakes. And for any subject, there is an intrinsic duplicate subject who is surrounded by a priori gas. So for any subject, there is an intrinsic duplicate subject whose beliefs are not safe, and who therefore (by the safety criterion) lacks a priori knowledge. So no belief by any subject satisfies the definition of a priori knowledge above.

Now, I think this definition of a priori knowledge should clearly be rejected. I think there are possible subjects who have a priori knowledge enabled by
extrinsic conditions (see the discussion in the thirteenth excursus), and I think there is some empirical knowledge (e.g., knowledge of one's own consciousness) that depends just as strongly on intrinsic conditions as does a priori knowledge. So even if my intrinsic duplicate surrounded by a priori gas lacks a priori knowledge, I think it does not follow that I lack a priori knowledge. Still, the question of whether external constraints such as safety can undermine a priori knowledge is an interesting one. If we allow that the subject surrounded by a priori gas lacks a priori knowledge, then the status of our beliefs as a priori knowledge is at least vulnerable to the state of the environment. That alone does not undermine the existence of a priori knowledge, but it may weaken its epistemic security a little.

I do not think it is obvious that the subject surrounded by a priori gas lacks a priori knowledge, but I also do not think it is obvious that they have a priori knowledge. Rather than settle the matter, I am more interested in whether there is a positive epistemic status that their belief possesses despite the a priori gas. In particular, I am inclined to think that if I have a priori justification for believing $p$, then so does my twin surrounded by a priori gas. Even if safety is an absolute constraint on knowledge, it is not an absolute constraint on justification. Correspondingly, while the gas may or may not undermine my twin's knowledge, it does not undermine his justification. If there are cases in which intrinsic twins differ in whether corresponding beliefs are a priori justified (see 8.4), I do not think these cases are among them.

If this is right, Hawthorne's arguments do not undermine the existence of a priori knowledge, although they may suggest that the status of a belief as a priori knowledge is extrinsic. They also do not undermine either the existence or the intrinsicalness of a priori justification. Hawthorne goes on to argue against a conception of internal a priori justification that depends on an inner 'glow', but he does not argue against other conceptions. So I take it that the existence and even the intrinsicalness of a priori justification are left standing.

Williamson (2007, pp. 165–9) argues for a deflationary view of the a priori/a posteriori distinction. He devotes much more space to the analytic/synthetic distinction, arguing that there are no metaphysically or epistemologically analytic truths. I am not committed to analytic truths, and it is clear that Williamson's arguments against them do nothing to undermine the a priori, so I will not engage these arguments here (although see 'Verbal Disputes' and the seventeenth excursus for some relevant remarks). He also devotes a few pages to the a priori/a posteriori distinction, however, arguing that it is not an important or natural distinction, and in particular that it does not yield a natural way to classify the role of experience in certain cases.

Williamson's central case involves knowledge of the counterfactual ‘If two marks had been nine inches apart, they would have been at least nineteen centimeters apart’. The subject in question does not know a conversion ratio, but
instead imagines two marks nine inches apart and uses visual recognitional capacities to judge that they are nineteen centimeters apart. Williamson argues that sense experience does not play a ‘directly evidential’ role: one does not recall past experiences, or deploy premises grounded in experience. But he argues that it plays a more than enabling role: one uses skills for judging lengths that are deeply grounded in past experience. So he suggests that the knowledge in question is not naturally classed as either a priori or a posteriori.

Here Williamson focuses on a certain traditional way of dividing the possible roles of experience in belief. Experience might play a merely enabling role, enabling one to possess the concepts involved in a belief, or it might play an evidential role, giving one evidence for the belief. A priori knowledge allows experience to play an enabling role but not an evidential role. I think it is obvious that this distinction is not exhaustive, however. A distinction that is closer to exhaustive is the one I made earlier between causal and justificatory roles. Experience might play all sorts of causal roles in forming a belief that are neither enabling nor evidential: for example, a pang of fear might cause one to think about mathematics and thereby acquire knowledge. A justifying role may come to much the same thing as an evidential role, but importantly, there can be indirect justifying and evidential roles that are not ‘directly evidential’, as when past experience justifies a pattern of inference used to form a belief. On this picture, the key question for apriority is whether experience plays a justificatory role or a merely causal role (or no role at all).

From this perspective, Williamson’s observation that experience does not play a directly evidential role does little to settle the matter. The question is whether experience plays a justificatory role, including indirectly evidential roles. Insofar as we accept Williamson’s view that the subject does not have mediating beliefs relating inches to centimeters, then the subject will be deploying some sort of inference from two marks being nine inches apart to their looking a certain way (perhaps invoking a certain mental image), and another inference from their looking that way to the two marks being more than nineteen centimeters apart. It might be natural to hold that these inferences turn on beliefs that nine inches look that way, and so on, but Williamson will presumably deny that such mediating beliefs must be involved. If so, the two inferences will be direct in the sense discussed earlier (under the objection from empirical inference). The key question is then the status of these inferences: are they justified by experience, or not?

Now, I think that Williamson’s case is underspecified. There are plausibly versions of the case in which the inference is justified by experience and versions where it is not. If the subject has a deferential conception of a centimeter, roughly picking out a centimeter as what people around here call ‘a centimeter’, then the inference in question will plausibly be empirical: it will be grounded in evidence
that people around here call certain lengths ‘a centimeter’. If the subject picks out a centimeter as one-hundredth of the length of the meter stick in Paris, then likewise. If the subject is a nondeferential user of the term who has a conception of one centimeter as a certain visual length, on the other hand, then the inference may well be a priori: experience may have played an enabling role in acquiring the conception and other causal roles, but there is no need to postulate a justificatory role. So in some versions of the case the knowledge is empirical, and in other cases it is a priori, with everything coming down to the justificatory role of experience in acquiring the inferential capacity.

The matter is clearer in another case that Williamson discusses: ‘If two marks had been nine inches apart, they would have been further apart than the front and back legs of an ant’. If understood analogously, this case will involve direct inferences between premises about length and conclusions about ants, or perhaps between premises about ants and conclusions about their looking a certain way, or something in the vicinity. In this case, it is plausible that if the inferences are justified, they will be justified by experience: in particular, by one’s past experiences of ants and their sizes. So the current framework classifies these cases correctly.

One can count this sort of justificatory role for experience as an evidential role in a broad sense. Williamson suggests that if we count the role of experience as evidential in this case, then one may also have to do so in other cases that are paradigms of the a priori: for example ‘It is necessary that whoever knows something believes it’. But even if this case turns on an analogous direct inference between premises about knowledge and conclusions about belief, there is no analogous reason to think that experience plays a justifying role in the inference in this case. At least if we stipulate nondeferential possession of the concepts involved, then in paradigm cases there is no obvious justifying role for experience analogous to the obvious role of experiencing ants. Williamson notes that our judgment depends on the skill with which we deploy concepts, which itself depends on past experience; even so, nothing here begins to suggest a justificatory role for experience. So although the status of this judgment depends on the details of the case, it is prima facie plausible that there are at least some cases in which the inference is justified a priori.¹

¹ Williamson (forthcoming) makes similar arguments about (1) ‘All crimson things are red’ compared to (2) ‘All recent volumes of Who’s Who are red’. He invokes a subject who knows both of these things by imagining the relevant objects and judging that they are red, and argues that the role of experience is the same in both cases: ‘The only residue of his experience of recent volumes of Who’s Who active in his knowledge of (2) is his skill in recognizing and imagining such volumes. That role for experience is less than strictly evidential’. On the present account, past experience plays a justifying role in these skills, most obviously in justifying the imaginative judgment ‘Recent volumes of Who’s Who look such-and-such’. It need play no analogous role in justifying the imaginative judgment ‘Crimson things look such-and-such’.
Of course one can use words such as ‘evidential’ and ‘a priori’ as one pleases. The non-verbal point is that a justificatory role for experience in inference clearly renders a resulting belief a posteriori on an extremely natural way of drawing an a priori/a posteriori distinction. Williamson does not consider this sort of justificatory role for experience in his argument. Perhaps he would deny that there is a coherent or natural distinction between cases in which inferences are justified by experience and cases in which they are not, but he has not given an argument against that distinction here.

Williamson suggests at one point that the a priori/a posteriori distinction can be drawn in various ways, but that however it is drawn it will not be an important distinction, because of the similarity between cases of a priori knowledge and cases of a posteriori knowledge. I think the different sources of support make a difference worth marking, however. For my purposes the crucial distinction is that between sentences or propositions that are a priori knowable and those that are not, and especially that between those that have a conclusive a priori warrant and those that do not. These are importantly different classes. The explanatory role of that distinction can be brought out in many ways: for example, by its many applications in the current project.

That said, there are cases that pose a harder problem for the traditional distinction. These cases (discussed briefly in chapter 2) involve mechanisms that deliver reliably true beliefs of the sort that are typically delivered by a posteriori mechanisms, but that are not grounded in the subject’s perceptual or introspective evidence. For example, such a system might reliably deliver true beliefs about scientific laws (e.g., the law of gravity) and enable reliable inferences that use those laws. One case involves a lucky mechanism: an internal mechanism that develops without any experiential justification and that through luck delivers reliably true beliefs about laws. Another case involves an evolved mechanism: an innate mechanism that has been shaped by selection in the evolutionary past so that it reliably delivers true beliefs about laws. Many advocates of the a priori, including me, will not want to count the beliefs produced by these mechanisms as a priori knowledge, but it is not entirely obvious why they do not fit the definition.

These cases will not yield conclusive a priori knowledge, as the mechanisms cannot plausibly produce justified certainty. An opponent might suggest that complete reliability in these cases will produce a kind of justified certainty; but I think it is antecedently clear that the paradigmatic sort of conclusive certainty that may be possible in logical cases is not possible here. So the notion of conclusive apriority, which I take to be the most important sort of apriority, is not

2 Hawthorne discusses lucky mechanisms and evolved mechanisms in his 2002 and 2007 respectively, although he uses them to illustrate consequences of externalist conceptions of apriority rather than to undermine the traditional a priori/a posteriori distinction.
thrown into question by these cases. Still, the question arises of whether these mechanisms produce nonconclusive a priori knowledge. If they do not (as many advocates of the a priori will hold), we need to know why not, given that the subject’s experience does not play a justifying role.

A traditionalist may deny that the lucky mechanism produces knowledge, perhaps because it is not appropriately grounded in reasons and evidence. It is harder to take this line for the evolved mechanism, as doing so may undermine much knowledge produced by evolved mechanisms. Still, as in chapter 2, one can at least stipulate a notion of evidentialist knowledge that works this way. Alternatively, one could suggest that the evolved mechanism produces a posteriori knowledge because it is justified by other subjects’ past experience. I think there is something to this response, but it requires a greatly elaborated treatment of cross-subject justification. Perhaps the simplest response is to count these mechanisms as producing basic empirical evidence that is not itself experiential evidence. The residual question will then be how to characterize empirical evidence if not in terms of experience. One might try putting weight on interactions with the external world, but the lucky mechanism need not involve such interactions. A better option may be to characterize the a priori in positive rather than negative terms. For example, one might hold (with BonJour 1998) that a priori justification involves justification by reason alone, rather than justification independent of experience. The residual question is then to pin down the notion of justification by reason at least sufficiently well to yield a principled classification of basic evidence as a priori or empirical.

If we were instead to allow that these cases involve nonconclusive a priori knowledge, it might then turn out that most truths can be nonconclusively known a priori. This would suggest in turn that most truths are nonconclusively a priori scrutable from any base, at least in the modal sense where a priori scrutability is understood in terms of the possibility of a priori knowledge. If so, an A Priori Scrutability thesis using the modal notion of nonconclusive a priori knowability would be trivialized. Still, the version of A Priori Scrutability that relies on evidentialist knowledge will not be trivialized, and neither will the version that relies on conclusive a priori knowledge. All this tends to reinforce the view that at least for the purposes I am concerned with, conclusive apriority is the most important notion.