**THE NATURE OF A PRIORI INTUITIONS:**

**ANALYTIC OR SYNTHETIC?[[1]](#footnote-1)**

David Papineau

Many philosophers take the distinguishing mark of their subject to be its a priori status. In their view, where empirical science is based on the data of experience, philosophy is founded on a priori intuitions. In this paper I shall argue that there is no good sense in which philosophical knowledge is informed by a priori intuitions. Philosophical results have just the same a posteriori status as scientific theories. My strategy will be to pose a familiar dilemma for the friends of a priori philosophical intuitions. I shall ask them whether their intuitions are supposed to be analytic or synthetic. And then I shall argue that, if the intuitions are analytic, they may be a priori, but will be philosophically uninteresting; while, if they are synthetic, they may be philosophically interesting, but will not merit being treated as a priori in the context of philosophical debate. At the end of the paper I explain that this does not mean that philosophy should abandon ‘armchair’ methods. We still need to uncover and examine the often unrecognized intuitions that drive our thinking. However this is not because they provide a distinctive source of a priori knowledge, but on the contrary because they may be leading us astray.

**1. How Is A Priori Knowledge Possible?**

Over the past decade or two there has been a heated debate about the importance of ‘intuitions’ in philosophy.[[2]](#footnote-2) Most of the participants fall into one of two groups. On the one side stand the friends of intuition, who hold that intuitions provide a distinctive source of a priori philosophical evidence. On the other side are the enemies of intuition, who hold that intuitions are an unreliable guide to philosophical truth and that philosophy should therefore ignore them.

It is a curious feature of the recent debate that it pays so little attention to the question of how a priori philosophical knowledge might be possible. For the most part, the enemies of intuition tend to argue that philosophical intuitions are unreliable, often appealing to studies in the tradition of ‘experimental philosophy’. In response, the friends of intuition seek to show that this evidence is not conclusive, and that not all intuitions are tarred with the same brush. But neither party stops to ask the more basic question of principle: how could a priori philosophical knowledge be so much as possible?

This is surprising, given the long philosophical tradition of doubts about a priori knowledge. There was a time when philosophers could take it for granted that God had imbued us with a ‘natural light of reason’ able to guide us to substantial knowledge of the world without the help of experience. But ever since David Hume’s attack on any such God-given faculty of reason, the category of a priori knowledge had been deeply problematic. It is easy enough to understand how our perceptual interaction with the world can ground knowledge of its nature. But how can there be such knowledge without any such perceptual interaction? How can we possibly find out anything about an independent world merely by sitting and thinking?

**2. Analytic-Synthetic Mistrust**

I presume that the surprising avoidance of this issue in the recent debate about philosophical intuitions is something to do with contemporary uneasiness about the analytic-synthetic distinction. As is familiar, this distinction has traditionally been used to focus the problematic nature of a priori knowledge. Once we distinguish analytic from synthetic truths, then it is natural to allow that analytic statements at least can be known a priori; but this will only be because their truth is guaranteed by the structure of our concepts, which means that they will convey no substantial information about an independent world. Synthetic statements, by contrast, can be highly informative, but this in turn seems to preclude their being a priori; given that their truth is not guaranteed by the structure of our concepts, how could we possibly get to know them without some perceptual interaction with the world?

The analytic-synthetic distinction thus poses an awkward dilemma for the friends of a priori philosophical intuitions. If these intuitions are restricted to analytic truisms, then they will fail to convey any philosophically interesting information. But if philosophical intuitions are supposed to extend into the synthetic realm, then it is hard to see how they can constitute reliable knowledge.

However, the analytic-synthetic distinction has fallen into disrepute. It is part of contemporary philosophical lore that Quine’s writings in the 1950s and 1960s somehow showed that analytic-synthetic distinction to be bogus and established that all statements have both an analytic and synthetic character: ‘The lore of our fathers … is a pale grey lore, black with fact and white with convention … I have found no substantial reasons for concluding that there are any quite black threads in it, or any white ones’ (Quine 1954, 132, see also Quine 1951 and 1960.)

One consequence of this eclipse of the analytic-synthetic distinction has been to defuse the traditional challenge to a priori knowledge. Without any distinction between analytic and synthetic statements, there is no obvious way of posing the dilemma—analytic and empty, or synthetic and problematic. Indeed, Quinean authority may even have served to encourage belief in the existence of substantial a priori knowledge. If there are no ‘quite black threads … or any white ones’, and all truths are inextricably both conventional and the factual, then perhaps there is room some both to be known a priori (in virtue of the partial analyticity) and yet to have substantial informative content (in virtue of the partial syntheticity).[[3]](#footnote-3)

This kind of thinking is particularly tempting when supposedly a priori philosophical intuitions are seen as deriving from the content of *theoretical* terms. One strand in Quinean thinking was the doctrine that the meanings of such terms are inextricably bound up with the empirical theories in which they are embedded. And this thought then encourages the idea that by analysing the content of our terms (which we can surely do a priori) we will acquire the information implicit in our theories (which will generally be substantial and synthetic).

In my view, the significance of Quine’s arguments is much overrated. Quine was certainly right to challenge the superficial understanding of analyticity prevalent in the first half of the last century, and he also has important things to say about the structure of scientific theories. But he by no means discredits the analytic-synthetic distinction altogether, not even in the theoretical realm. And this means that the friends of a priori philosophical intuitions still need to face the awkward dilemma outlined above.

**3. Analyticity**

Here is a notion of analyticity that will serve well enough for our purposes: a statement is analytic if the structure of the concepts expressed by its non-logical terms guarantees its logical truth. Plausible examples of statements of this kind include: *any vixen is a female fox*, *any square has four sides*, *any electron has negative charge*.

This characterization of analyticity is rough at best. But we can already see in outline how it might be possible to have a priori knowledge of statements that are analytic in this sense. The idea would be that the concepts expressed by the non-logical terms contain enough information to logically guarantee that the statement in question will come out true, whatever the actual world is like. So someone who grasps the relevant concepts will be in a position to know that the statement is true, without any further need of experiential information about the actual world. (Once you grasp that *vixen* implies female fox, or that *square* implies equilateral rectangle, or that *electron* implies small negatively charged particle, then you can be sure that the above statements are true.) I shall now address three immediate queries about this notion of analyticity. This will help explain how I am thinking of the analytic-synthetic distinction.

(a) Grasping Concepts. A first issue is whether any terms do express concepts that contain the kind of information that might logically guarantee analytic truths. To the extent that concepts have their referents fixed externally, via Kripkean causal chains or anything of that sort, rather than via some descriptive specification of conditions, there seems no reason to suppose that they will have the kind of structure required to generate analyticities.

Still, while many concepts do have their referents fixed externally, there are others which plausibly involve descriptive contents. Could somebody understand *square* without being in a position to know that *squares have four sides*? And what about terms introduced via explicit description (which will include many scientific terms)? If it is specified that *electron* is to be understood as referring to the small negative charged particles found in atoms, if there are such things, then surely the information that, say, *any* *electrons have negative charge* does seem to be built into the concept.

Perhaps this is inconclusive. It is arguable that even competent users of terms like *square* and *electron* could well lack the relevant information. Imagine people who are no experts but have picked up the terms from their linguistic community. They might foolishly think that some squares have five sides, or that electrons are positively charged—and be criticizable for their mistaken beliefs. This argues that even in these paradigm cases the relevant concepts do not guarantee any analytic truths.

Defenders of analytic knowledge will respond that it is specifically those thinkers who fully grasp the concepts involved who will be in a position to derive analytic truths. At this point the onus is on the friends of analytic knowledge to explain what it is to ‘fully grasp’ a concept, in a way that doesn’t trivialize their ascriptions of analytic knowledge. I must say that I have no clear conception of how this might be done. Still, I shall not press this difficulty. This is because it will not matter for my overall argument exactly how much analytic knowledge there may be. Recall my overall argumentative strategy. My aim is to show that the friends of a priori philosophical knowledge are skewered on the dilemma: analytic and empty, or synthetic and problematic. This dilemma will bite just as hard wherever the limits of analytic knowledge fall. So I have no special interest in denying my opponents’ claims that analytic knowledge is possessed by those who fully grasp concepts. It will still be empty.

(b) Deriving Knowledge. Another set of issues relate to the process by which a thinker is supposed to move *from* possessing some structured concept *to* knowledge of the analytic statement that is thereby logically guaranteed. If this is an inferential process starting with meta-information *about* the structure of the concept expressed by the relevant terms, then it is not obvious that this starting point will be appropriately a priori. Nor is it obvious exactly what will legitimate the ‘descent’ from the semantic meta-knowledge to first-order non-semantic knowledge about things like squares and electrons. Given these points, it would seem better to posit some sui generisnon-inferential mechanism which simply delivers this first-order knowledge directly in cases where it is analytically guaranteed. The idea would be that subjects are somehow sensitive to concepts whose structure guarantees the truth of certain statements, and in such cases are automatically and reliably led to knowledge of those statements (at least in those cases where subjects ‘fully grasp’ the concepts). It could be complained that this is simply assuming what needs to be explained. But again I have no need to press the point. As before, it will not matter to my argument if I am overly generous to the possibility of analytic knowledge. As I said, the dilemma will bite just as hard wherever the line is drawn.

(c) Logic Itself. I am working with the notion of an analytic statement as one where ‘the structure of the concepts expressed by its non-logical terms logically guarantee its truth’. This is similar to the Fregean notion of an analytic statement as one which can be reduced to logic with the help of definitions. For example, the structure of the concept *vixen* ensures that *any vixens are female foxes* is equivalent to *any female foxes are female foxes*, and the structure of the concept *electron* ensures that *any electron is negatively charged* is equivalent to *any small negatively charged particle found in an atom is negatively charged*, and so on.

Given this, we might seem to be left with worries about the analytic status of logic itself. Maybe our definition gives us a sense in which non-logical truths can be ‘made true’ by the concepts they involve—the structure of these concepts renders them equivalent to certain logical truths. But this doesn’t mean that logical truths are themselves in any way made true by the concepts that *they* involve.

Logical truths are of course logically guaranteed to be true. But nothing said so far shows that this hinges on the structure of logical concepts. Even if their truth owed nothing to the structure of logical concepts, logical truths would still be logically guaranteed to be true—simply because they are part of logic. Indeed, once we put pressure on the idea that logical truths themselves are ‘made true’ by the structure of logical concepts, it is unclear that any sound sense can be made of it. The concepts expressed by *non*-logical terms might logically guarantee the truth of certain *non*-logical statements, but this account of analyticity has no grip once we turn to logical statements themselves.

Some writers allow that there is no good sense in which logical truths are *metaphysically* analytic (‘made true’ by the concepts involved), but argue that they are nevertheless *epistemologically* analytic (in the sense that they can be *known* to be true via reflection on the structure of those concepts) (see Boghossian 1997). If this argument could be made good, then we would still have an account which offered a thoroughgoing account of analytic knowledge in terms of a grasp of conceptual structure. When it came to logical truths themselves, we would not go via a notion of metaphysical analyticity, but even so the explanation in terms of epistemological analyticity would ground a priori knowledge of logical truths in grasp of conceptual structure.

However, I am not convinced about this programme of explaining a priori knowledge of logic in terms of epistemological analyticity. Luckily, we need not pursue this knotty issue any further here. Even if logic is not epistemologically analytic, this does not undermine the notion of analytic knowledge I am working with. We can simply stick with the idea of an analytically true statement as one which is logically guaranteed in virtue of the structure of any *non*-logical concepts involved. Logical truths themselves may not be conceptually guaranteed in any sense, but they would still be analytic according to the letter of my definition, in the trivial sense that they are logically guaranteed.[[4]](#footnote-4)

Recall my argumentative strategy once more. I have no brief for or against analytic knowledge per se. My claim is only that, insofar as any exists, it is philosophical trivial. It is perfectly consistent with this strategy to take the analyticity of logic as given in the way I have just suggested. Analytic knowledge will still be philosophically trivial. For the truths of logic are not themselves philosophically significant[[5]](#footnote-5), nor is anything that reduces to them via conceptual structure.

**4. Quine on Theories**

Let me now return to the connection between theories and meanings, and in particular to Quine’s contention that there is no way of disentangling the analytic from the synthetic components of a theory. As I said above, it is probably Quine’s analysis of this issue that has done most to sow suspicion of the analytic-synthetic distinction.

The first thing to note is that Quine’s arguments hinge centrally on a ‘use-theoretic’ or dispositionalist approach to meaning. For Quine, semantic content is breathed into our terms by our *dispositions to apply those terms* in response to perceptual experience and to other judgments. Once this this dispositionalist starting point is granted, the inseparability of analytic and synthetic theoretical assumptions quickly follows. Consider any theoretically embedded term like *electron*, *radio wave*, or *virus*. For a dispositionalist, our theoretical assumptions involving such terms will fix their meaning: after all, there is nothing else to guide us in using these terms in response to perceptual experience and other judgments, apart from the set of theoretical assumptions in which they are embedded. But at the same time those theoretical assumptions express our factual commitments. Quine’s dispositionalist starting point thus quickly leads to the conclusion that theoretical claims have both a conventional and a factual role. (‘The lore of our fathers … is a pale grey lore, black with fact and white with convention.’)

Many commentators on Quine present the difficulty here as basically practical, stemming from the fact that scientists do not stop to specify which parts of their theories are supposed to be the revisable empirical assumptions and which the unrevisable conventional ones. If only scientists had some reason to take more care with such matters, this reading implies, the analytic-synthetic distinction would be preserved. From this perspective, Quine’s main insight is that scientific practice has no need for the distinction and proceeds perfectly well without it.

But in fact Quine’s denial of an analytic-synthetic distinction goes deeper than this. It is forced on him by his underlying assumption that meanings derive from dispositions to use terms. Once this use-theoretic commitment is in place, then there is no question of separating fact from convention. No amount of terminological care on the part of scientists would do the trick. It is the dispositionalism per se that undermines the analytic-synthetic distinction, not any sociological insights into scientific practice.

This is because even minimal sets of dispositions for using theoretical terms will have factual presuppositions. So taking meanings to be fixed by dispositions inevitably runs together fact and convention. Let me illustrate. Suppose that I am disposed to make judgments about *temperature* in response to readings on thermometers. This might seem to render *thermometers measure temperature* analytic and unrevisable. However, if my disposition relates to both mercury and alcohol thermometers, then it commits me to the manifestly factual and falsifiable consequence that mercury and alcohol thermometers will give the same result when simultaneously applied. So *thermometers measure temperature* turns out not to be purely analytic after all, but to contain factual as well as conventional content.

The point generalizes. If basic dispositions for applying even a marginally theoretical term like *temperature* carry synthetic presuppositions[[6]](#footnote-6), this will apply a fortiori to such paradigm theoretical terms as *electron*, *radio wave*, and *virus*. Within the dispositionalist framework, there is no way of isolating theoretical assumptions that play a purely conventional meaning-fixing role; some presupposed empirical content will inevitably be built into those assumptions too.

Now, none of this in fact argues against the idea of purely analytic theoretical claims. Rather it is a reductio of Quine’s dispositionalist starting point. To my mind, there is something fundamentally wrong with an approach to meaning according to which any ascription of meaning to a theoretically embedded term will involve synthetic commitments. Ascribing meaning to a term is one thing, making synthetic claims with it another. Apart from anything else, the notion that meanings have synthetic consequences generates the notorious ‘problems’ of ‘meaning-variance’ and ‘incommensurability’, by implying that thinkers who do not agree about the relevant synthetic assumptions cannot share meanings, even if they use the same words, and as a result cannot rationally discuss their disagreements.

**5. Analytic Carnap Sentences and Synthetic Ramsey Sentences**

Fortunately Quine’s use-theoretic account of meaning is now discredited, along with its paradoxical consequences. Kripke showed us clearly that the fixation of reference is one thing, the use of terms another. The whole world might recognize someone as *Martin Guerre*, say, even though the term in truth refers to someone else. By and large, semantic reference is fixed causally and historically, and independently of thinkers’ dispositions to use terms. So in general there is no reason to suppose that the semantic reference of a term coincides with that entity which competent users recognize as bearing it.

This is not to say that theoretical assumptions can *never* play a role in fixing reference. While most terms have their referents fixed causally or historically, there is no principled barrier to others having their reference fixed by description, as *the x such that Tx*.[[7]](#footnote-7) And it is arguable that a number of scientific terms fit this bill, referring to that kind or quantity which satisfies some theoretically specified description. Thus the reference of *electron* is arguably fixed as *those small negatively charged particles that orbit the nuclei of atoms,* and the reference of *phologiston* as *that substance that is given off in combustion and absorbed in reduction*.

However, once we reject Quine’s use-theoretic approach to meaning, we can view this kind of theoretical reference-fixation in a quite different light. Theories no longer instil semantic content by altering our dispositions to use terms, but rather by laying down conditions that referents must satisfy. To bring out the difference, consider thinkers who disagree on whether the phlogiston theory is true, say. Their dispositions to use the term *phlogiston* will diverge radically: for instance, the believers will apply this term to deoxygenated air, while the sceptics will withhold it in the same circumstances. A use-theoretic approach to meaning consequently has trouble avoiding the conclusion that they must mean different things by the term. But once we drop this dispositionalist approach, no such conclusion threatens. Both the believer and the sceptic can agree that the term *phlogiston* has its reference fixed by the description *substance that is given off in combustion and absorbed in reduction*, and consequently they can both use this term with a common content.

In line with this, there is no difficulty in discerning a purely analytic claim to which the concept *phlogiston* commits its possessors. While the possessors of this concept need not share any substantial synthetic theoretical commitments, they will all agree on the ontologically non-committal hypothetical claim that *if there is a specific substance given off in combustion and absorbed in reduction, then it is phlogiston*. The truth of this ‘Carnap sentence’ is guaranteed by the structure of the description that fixes *phlogiston’s* reference. By contrast the ‘Ramsey sentence’ which asserts that *there is a substance given off in combustion and absorbed in reduction* is a synthetic claim, which might or might not be endorsed by someone with the concept phlogiston. More generally, in any case where the reference of some term c is fixed via some theoretical description T, this will guarantee the truth of the analytic hypothetical Carnap sentence *if (Ex)(Tx), then Tc*, but will appropriately remain neutral on the truth-value of the synthetic Ramsey sentence *(Ex)(Tx)*.

Now, one obvious question about such reference-fixing by theoretical description is: *which* theoretical assumptions go into the defining T? One moral that should certainly be drawn from Quine’s work is there is often no fact of the matter about this. I suggested earlier that *electrons* could be defined as *those small negatively charged particles that orbit the nuclei of atoms*, and *phlogiston* as *that substance that is given off in combustion and absorbed in reduction*. But what rules out the more minimal alternatives that leave out orbiting (specifying only *those small negatively charged particles inside atoms*) or reduction (*that substance that is given off in combustion*)? By the same coin, what rules out fuller alternatives that add further theoretical assumptions to the specified conditions?

We can all agree with Quine that nothing in scientific and linguistic practice need decide these issues. And this does mean that it will often be unclear exactly which theoretical claims are analytic and which synthetic. Is it analytic that *if there are small negatively charged particles orbiting the nuclei of atoms, they are electrons*, or is the relevant analytic truth rather the stronger claim that *if there are small negatively charged particles inside atoms, they are electrons*, with *electrons orbit the nuclei of atoms* coming out synthetic?

However, this indefiniteness does not stem from any obscurity in the analytic-synthetic distinction itself. Rather it is an upshot of a quite different lacuna, namely, that theoretical terms are often *semantically indeterminate*. When terms like *electron*, *radio wave* and *virus* were introduced and subsequently became part of scientific parlance, nobody ever stopped to lay down exactly which conditions qualify an entity to bear these terms.

There is good reason for this underspecification. As long as the various assumptions at issue are all true, exactly the same actual-world entities will be semantically designated, whichever assumptions are built into the definitions. As a consequence, this kind of benign semantic indeterminacy is endemic to science and no barrier to its successful working.[[8]](#footnote-8) Indeed, as we shall see later, it is arguably also a feature of various everyday notions, including some that are of philosophical interest.

To the extent that terms like *electron* are semantically indeterminate, it will correspondingly be indeterminate which claims involving them are analytic and which synthetic. On one way of resolving the indeterminacy, *if there are electrons, they orbit the nuclei of atoms* comes out analytic, on another synthetic. But this is not because the analytic-synthetic distinction itself is in any way incoherent, but simply a corollary of the familiar phenomenon of semantic indeterminacy. If our terms do not have definite meanings, then it is not surprising that it will be undecided which claims involving them are analytic.

**6. The Analytic Horn of the Dilemma**

Now that we have reassured ourselves of the cogency of the analytic-synthetic distinction, let me return to my dilemma for the philosophical friends of a priori intuitions: are their intuitions restricted to analytic truths (but then how are they philosophically significant) or do they extend into the synthetic realm (but then how can they be a priori)? For the most part, the friends of a priori philosophical intuitions give surprisingly little indication of how they would respond to this challenge, no doubt encouraged by the thought that the analytic-synthetic distinction is somehow outmoded.[[9]](#footnote-9) Still, as I have shown, the distinction is perfectly viable, and the dilemma calls for a response.

Few of those who do commit themselves on this matter favour the first horn of the dilemma. It is not hard to see why. Analytic statements are empty. They tell us nothing significant about the world, but merely reflect relations between our concepts. It is hard to see how such empty truisms can make a significant philosophical contribution.

The reason that analytic truths tell us nothing significant was mentioned earlier. Analytic truths can be reduced to logic via definitions: for example, if a*ny vixens are female foxes* is analytic, that is because it is equivalent to *any female foxes are female foxes*. As such, analytic truths do not tell us anything that is not already a consequence of logic.

When I say that analytic truths reflect relations between our concepts, I am not committing the jejune fallacy of reading them as meta-representational statements *about* our concepts. *Any vixens are female foxes* reports on vixens all right, not on concepts. But even so it merely instances a logical truth. It is in this sense that analytic truths reflect relations between our concepts. They do not depend on anything except logic and the interlocking requirements that the structure of the relevant concepts places on their respective referents.

Given this, it is unsurprising that there are few explicit endorsements of the first horn of my dilemma. If analytic statements do not take is beyond what it guaranteed by logic, it is hard to see how they can be important for philosophy.

**7. The Canberra Plan**

Despite the points just made, there is one significant strand of contemporary philosophical thought that does explicitly present itself as embracing the first horn of my dilemma. It will be instructive to consider its arguments.

I am thinking here of the ‘Canberra planners’, inspired by David Lewis and led by Frank Jackson. This school views philosophy as typically proceeding in two stages. The first stage is supposed to trade entirely in analytic knowledge. Here we use conceptual analysis and reflection on possible cases to identify the structure of everyday concepts of philosophical interest, such as *person*, *mind*, *free will*, or *good*. Once these concepts have been satisfactorily articulated, we can then proceed to the second stage, and appeal to our most serious theories of the world to decide what if anything satisfies the relevant concepts. This second and ‘metaphysically serious’ stage depends on substantial synthetic theories rather than analytic intuition. But the first stage, where we formulate the initial philosophical issues, is supposed to appeal only to analytic information guaranteed by the structure of concepts (see Jackson 1998).

One might object to the Canberra approach on the grounds that there are few analytic truths to be had on philosophically interesting topics. It is by no means obvious that terms like *person*, *mind*, *free will*, or *good* have their reference fixed by theoretically specified descriptions, rather than in some more externalist manner. And, if that is so, then analytically guaranteed truths involving them will be thin on the ground. Such terms may enter into many intuitively obvious claims, but if they have their referents fixed externally rather than descriptively these claims will be synthetic and not analytically guaranteed. I have some sympathy with this worry, but I shall not press it here. Rather I shall make a different objection to the Canberra strategy. Even if there is a wide range of analytically guaranteed claims involving philosophically interesting terms, the Canberra planners are mistaken in thinking that they are philosophically important.

Let me make my position clear here. I do not wish to deny that the articulation of everyday *thought* can be an essential part of the philosophical enterprise. As I shall occasion to emphasize later on, the assumptions implicit in everyday thinking are often a central component in philosophical problems, and in such cases their explicit articulation and critical assessment will be an essential component of philosophical progress. However, in all such cases, I maintain, it is the *synthetic theories* implicit in everyday thought that matter, not the *analytic definitions*. What sets the philosophical agenda are the substantial Ramsey sentences that specify the synthetic commitments of everyday thinking, not the uninstructive Carnap sentences that express the definitional structure of the concepts with which we happen to convey those commitments.

As I say, I am all in favour of the idea that philosophy needs to identify the synthetic theoretical commitments of everyday thought and hold them up to serious metaphysical scrutiny. But this is not at all the same as saying that philosophy needs to concern itself with everyday *definitions*. To bring out the point, we need only consider cases where everyday thinking contains concepts whose reference is plausibly fixed by theoretical description, but where it rejects the theories in questions themselves. Examples would be concepts like *witch* or *soul*—or *phlogiston*, for that matter. We all know what these terms *mean*: they aim to refer to women who make pacts with the devil and cast spells, or to parts of persons that survive death, or to a substance given off in combustion—if there are any such entities. These *definitions* are present in everyday thinking all right. But the corresponding *theories* are not. And, in line with this, witches and souls and phlogiston raise no philosophical issues, at least not for those of us who think there are no such things. Philosophy certainly needs to examine the synthetic beliefs that we acquire as part of everyday culture. But it would be wasting its time to subject every outmoded concept in our culture to serious metaphysical inspection.

No doubt the reason we nowadays reject witches and souls and phlogiston is that there was a time when our intellectual ancestors did examine their metaphysical credentials and found them wanting. But this only drives the point home. At a time when most people upheld substantial synthetic theories about these entities, then there was of course every reason to ascertain whether or not those theories were correct. Substantial theories are worth assessing. But there is no point in assessing mere concepts, which after all make no claims about the world themselves, but are merely tools for potential claims.

As it happens, it is not always clear that the Canberra planners are properly sensitive to this difference between substantial synthetic theories and analytic definitions of concepts. Although they allude on occasion to the apparatus of Ramsey sentences and Carnap sentences (Jackson 1998, 37, 139-40), there are also times where they seem to forget the difference, and speak as if theories and concepts are pretty much the same things.

Thus we find Jackson defending the importance of a priori intuitions to philosophy in the following terms:

‘… my intuitions reveal my theory of free action … your intuitions reveal your theory … to the extent that our intuitions coincide with those of the folk, they reveal the folk theory.’ (Jackson 1998, 32)

And again:

‘My intuitions about which possible cases to describe as cases of K-hood … reveal my theory of K-hood’ (op. cit. 37).

It is hard not to read these passages as conflating theories and definitions in a way that lends a spurious plausibility to the view that philosophy involves a priori intuitions. As noted earlier, this kind of conflation can obscure the dilemma facing such intuitions (analytic or empty, or synthetic and unexplained). By thinking loosely of theories and definitions as somehow the same thing, we can end up with the impression that the relevant intuitions are both a priori, because they can be read off from mere definitions, and yet substantially synthetic, because they convey the content of theories.

There is a rather different factor that can obscure the philosophical insignificance of definitions. This is the semantic indeterminacy that characterizes many theoretically specified terms. I earlier illustrated this possibility in connection with scientific terms, like *electron* and *phlogiston*. But the same kind of indeterminacy can be present in philosophically significant cases. Take the concept of *freely willed* action. Are we to understand this concept as referring to any action which stems from an agent’s beliefs and desires? Or does it require in addition that the action be undetermined? It is not implausible that this question was left undecided by those who originally introduced the term, no doubt because they assumed that any actions satisfying the first requirement would satisfy the second too. But now that this assumption is questionable, how we decide the issue makes a difference to the terms of the debate. Should we deem stemming from beliefs and desires to be sufficient for free action, with the compatibilists, or should we require in addition, with the libertarians, that the action be undetermined?

This conceptual choice can certainly look like a substantial issue, and may thus foster the impression that the analysis of concepts matters to philosophy. (If the choice between compatibilism and libertarianism doesn’t matter to philosophy, what does?) But in truth the issue here is just conventional, an arbitrary choice about how to understand the term *free will*, and itself of no philosophical consequence whatever. Of course there are substantial and serious issues in the vicinity. *Are* any of the actions that stem from beliefs and desires actually undetermined? And, if none is, should this make a difference to the way we *blame* or *praise* agents? But these substantial issues are quite independent of the terminological choice, and can be posed however we choose to understand *free will*—or indeed without using the term at all, in the way I have just done. More generally, there are plenty of philosophical terms whose meaning is indeterminate, and this can create the impression that conceptual analysis is an important part of philosophy. But in all such cases the terminological options make no difference to the real issues, and philosophy would do far better to by-pass them.[[10]](#footnote-10)

**8. The Synthetic Horn**

The other horn of the dilemma is the synthetic one. Philosophical intuitions give us substantial information. Among those friends of a priori intuitions who do give some indication of how they would respond to my dilemma, this is unsurprisingly the more popular option. It allows that philosophy can deliver real information about the actual world, and not just express conceptual relations.

We should not be misled in this context by superficial talk of ‘conceptual analysis’. You might suppose that the outputs of ‘conceptual analysis’ would be restricted to analytic truths. But many of those who portray the philosophical enterprise as engaging in ‘conceptual analysis’ prove upon closer examination clearly to have in mind that philosophy deals in synthetic claims. They are thinking of philosophy as concerned with the assessment and elaboration of synthetic theories, not with analytic truisms.[[11]](#footnote-11) (No doubt their terminology is influenced by lingering use-theoretic semantic assumptions which make them think of ‘concepts’ as involving substantial theoretical commitments.)

At first sight, the idea of synthetic a priori intuitions might strike contemporary philosophical sensibilities as highly suspicious. How can we possibly get to know some claim without the help of experience, if it answers for its truth to the contents of the actual world? However, we will do well to remember that a priori does not just mean analytic. There is no contradiction in the idea of experience-independent access to synthetic truths. After all, until the eighteenth century no modern philosopher doubted that God had bestowed on us powers of reason that would enable us to arrive at perception-independent knowledge of a range of synthetic claims. And although this particular source of synthetic a priori knowledge is no longer taken for granted in philosophy, there are other possible ways of explaining such knowledge. Even if God did not build our brains, some mechanism did, and it should not be ruled out that this mechanism ensures certain items of knowledge independently of experience.

**9. Intuitions without Explanation**

Having said that, any meta-philosophy that posits synthetic a priori intuitions surely owes some positive explanation of how they are possible. Knowledge of synthetic facts must derive from some mechanism that tailors our judgments reliably to the facts. Perceptual interaction is one familiar such mechanism. But it is not at all obvious, to say the least, what else might fit this bill. To simply assume, without indicating any further explanation, that we have non-perceptual synthetic knowledge, courtesy of ‘rational insight’ or ‘intuition’, without saying how this works, smack more of faith than serious theory.

While few philosophers are prepared explicitly to posit such an unexplained faculty[[12]](#footnote-12), there is a contemporary school of thought which is implicitly committed to something very much like it. I am thinking here of those philosophers who hold that ‘*transparent’* concepts guarantee the apriority of necessary truths. According to this school of thought, associated with ‘two-dimensional semantics’, if a necessary truth is a posteriori, this must be because some of the terms involved are not transparent but ‘opaque’ (as for instance when reference is fixed by contingent description). The idea is that when we are of thinking of something opaquely, at arm’s length as it were, then it is only to be expected that some of its essential properties may not be apparent to us. By contrast, when we are thinking *transparently*, then all necessary truths must be a priori knowable.[[13]](#footnote-13)

Up to a point this doctrine is unobjectionable. Most examples of such transparently generated a priori knowledge are simply cases where the relevant concepts have a complex structure and the resulting knowledge is therefore analytic. It is scarcely surprising that someone who possesses the concept *sphere* should know that any sphere has a surface all of whose points are equidistant from some other point, or that someone with the concept *friend* should know that friends are always acquainted with each other… In such cases there is an obvious reason why anybody who possesses the concept will ‘know the nature of’ the referent. The concept has an internal structure which renders this knowledge analytic. The essential properties of the referent are built into the definition of the concept.

But those who trade in transparent concepts also take there to be cases where mere concept possession is also supposed to guarantee *synthetic* knowledge. In particular, they take this to hold with ‘phenomenal concepts’, the kinds of concepts of conscious mental experiences that are typically acquired as a result of having had those experiences themselves (as when Jackson’s Mary acquires a concept of *red experience* after seeing a red rose). Even though such phenomenal concepts are agreed to be unstructured, those who take them to be transparent argue that their possession delivers a priori knowledge of the nature of their referents—such as that the referents are not physical, are not constituted by causal structure, and so on.

This supposed a priori knowledge is now synthetic, and to my mind this renders it unacceptably mysterious. It is one thing to read off analytic information a priori from structured concepts like *sphere* and *friend*. But it would require a quite different kind of process for unstructured phenomenal concepts to deliver a priori synthetic information about the metaphysical nature of experience. The model of *sphere* and *friend* gets no grip here, given that phenomenal concepts do not have any internal structure which encodes metaphysical information about their referents. The kind of synthetic a priori information supposedly delivered by phenomenal concepts thus seems to presuppose that such concepts magically reveal the essential properties of their referents to the enquiring mind. In the absence of any further explanation of how this is supposed to work, I see no reason to take this kind of presumed synthetic a priori knowledge seriously.[[14]](#footnote-14)

**10. A Priori Tradition**

Let me now turn to some less question-begging hypotheses about synthetic a priori knowledge. One natural suggestion is that a priori intuitions carry information which is grounded in the efforts of our intellectual predecessors. When we articulate our intuitions—when we ‘analyse our concepts’, if you must—we are rehearsing items of synthetic theory that have the authority of tradition. On this conception, the everyday lore that we imbibe effortlessly as we grow up is not just a body of old wives’ tales, but rich with elements of information that have been tried and tested by our intellectual ancestors.

Of course, not all elements of traditional lore are to be trusted. Many of the ‘intuitions’ that are widespread in human populations are manifest nonsense that any serious thinker would do well to ignore. But there is no reason to suppose that the intuitions that feature in philosophical discourse are of this dubious sort. Participants in philosophical debate are highly trained intellectuals, and one thing that we can expect of their training is to filter out the less firmly grounded elements of everyday lore, ideally leaving us with a range of tutored intuitions which really do have the authority of tradition.[[15]](#footnote-15)

The idea that tradition and training might be a source of *a priori* knowledge can seem strange at first. If beliefs acquired from these sources are reliably true, can’t that only be as a result of experiential input at some point playing an essential role in the provenance of our beliefs? After all, what warrant could there be that such ideas track the facts, unless experience originally guided their development? So shouldn’t any knowledge acquired from training or implicit theories be counted as a posteriori on this account?

However this line of argument is far less compelling than it may at first seem. By way of comparison, consider biologically acquired knowledge. The idea of ‘innate’ biological knowledge is familiar enough. Might not our evolutionary heritage have bequeathed us genes which dispose us to develop certain beliefs independently of any specific ontogenetic experiential input? Assumptions about basic physical phenomena (physical objects don’t just evaporate when unobserved) and basic social phenomena (other people are aware of what is in their line of sight) would be possible examples.

You might feel that even such biological knowledge wouldn’t really be a priori. Mustn’t perceptual interaction with the world at some time have played some essential part in the origins of these beliefs—not in the ontological development of individual believers, admittedly, but at least in the ancestral selection of the genes which dispose to form the beliefs in question? Those ancestors who had the beliefs would have interacted with the perceivable world in way that allowed them to survive and reproduce, while those without them would have been less successful.

However, even if some such story about the ancestral role of perceptual interaction could be made good—and it is not obvious exactly how it would go—it is beside the point. A priority and a posteriority are terms that characterize the processes by which *individual* people acquire knowledge. These terms specify whether or not perception played an essential role in the *ontogenetic* provenance of the information, not in whether it played a role somewhere earlier along the phylogenetic line. After all, if some supernatural being instils knowledge in us, then all will presumably agree that it should be counted as a priori on that account, even if that being itself acquired the information via some species of perceptual interaction with the facts. We should view the biological provenance of knowledge in the same spirit. If it means that individual humans acquire information without the help of their own perceptions, then that information is a priori.

I am inclined to say just the same about information acquired from tradition. If this information derives from a reliable body of lore handed down from generation to generation, this suffices to qualify it as a priori knowledge. Perception may have played a role in its original formation, but this doesn’t mean it plays any role in its individual acquisition.[[16]](#footnote-16) There seems no relevant difference between the biological and cultural cases. Why count transmission via intergenerational training differently from transmission via genes?

Indeed separating the biological and the cultural in this context is of doubtful cogency in the first place. Notwithstanding the examples offered above, I find it highly doubtful that our genes ever produce any definite beliefs on their own, without the help of at least some informational input from parents and social surroundings. (Why would natural selection ever bother to write detailed information into the genes, given that this information will reliably be available from the cultural environment too?) And conversely, it is doubtful that we would be so quick to pick up the basic lore that our cultural environment offers us, if we did not have genes that made us extremely ready to learn those lessons. (Once our culture offers us biologically valuable information, there will be strong selection pressure for genes that help us acquire it.)[[17]](#footnote-17) In line with these points, I shall now stop separating biological and cultural traditions, and will simply speak of ‘natural tradition’ as a possible source of synthetic a priori knowledge.

**11. The Problems of Philosophy**

The last section argued that there is nothing wrong in principle with the idea of natural tradition as a source of synthetic a priori knowledge. But this leaves it open whether such knowledge has any role to play in *philosophy*. Even if the category of tradition-based synthetic a priori knowledge is not empty, it is not to be taken for granted that any of the intuitions appealed to in philosophy fall into this category.

It is one thing to argue that a few items of basic physical and social knowledge (physical objects don’t just evaporate when unobserved; other people are aware of what is in their line of sight) are given to us a priori by our intellectual tradition.[[18]](#footnote-18) It would be another to maintain this for the kind of intuitions that feature in philosophical argument (if two bodies swap memories, they swap persons; the conscious mind is non-physical; luckily true justified beliefs are not knowledge; and so on). Even if there is some basic synthetic a priori knowledge, it is by no means clear that intuitions like these qualify. Philosophical training no doubt does something to improve the quality of the intuitions appealed to in philosophical discourse. But more is needed to show that they can be relied on. After all, the historical record is not good. Any number of assumptions that past philosophers once took to be obvious are now regarded as quite mistaken (see Papineau 2013, 184).

In my view, the very nature of philosophy undermines the thesis that philosophical intuitions constitute synthetic a priori knowledge.[[19]](#footnote-19) Philosophical issues have a quite specific character, and this means that any intuitions involved cannot be trusted. When a philosophical problem arises, this shows that something in our thinking needs to be re-ordered. But it will characteristically be unclear where the fault lies. In this kind of context, the fact that our tradition supports some intuition is no kind of reason for upholding it. It is all too likely that tradition itself is the source of the difficulty. Once we are in the midst of a philosophical conundrum, every assumption we bring to it needs to be re-examined.

What makes something a philosophical topic? At first sight it might seem as if philosophy can be characterized by its distinctive subject matter: ethics, metaphysics, epistemology, and so on. But any attempt to characterize philosophy in such terms faces the objection that there is no limit to the range of intellectual contexts in which philosophical issues can manifest themselves. My favourite example is: why do mirrors reverse left-to-right but not up-to-down? This is not an issue that matters to anything else very much, certainly not to ethics, or metaphysics, or epistemology. But it is recognizably a philosophical problem, indeed an exemplary one. (Block 1974, Locke 1977.)

In truth, philosophical issues are not defined by their subject matter, but by an element of paradox. One strand in our thinking leads us to one conclusion, but another argues for the opposite. Something is amiss in our reasoning, but we are not sure what. Often some of the assumptions generating the conflict are deep-seated and implicit, which makes it all the more difficult to see how the conundrum should be resolved.

This is why philosophical problems are not restricted to traditional areas of philosophy. While there are certainly many difficult philosophical challenges in these traditional areas, there are also plenty elsewhere. For example, we find philosophical problems within biology (altruism can’t evolve, but it does) and physics (the wave packet must collapse, but this violates physical law). I am currently writing a paper on the mental aspects of sport (fast sporting skills are automatic reflexes, but the performer’s conscious mind-set is crucial to sporting success). And then there are the mirrors (the transmission and reflection of light is the same in all directions, yet the reversal is not).

This way of viewing philosophy casts light on its difference from empirical science. Both philosophy and science have the same eventual aim—to arrive at true synthetic information about the contents of the actual world. But they seek to overcome different obstacles in the way of this ambition. The empirical sciences are characteristically hampered by a lack of observational and experimental evidence. They are interested in questions that can be resolved with the help of additional empirical data. Philosophy is different. It normally has all the empirical data it could want, but still can’t see what the right answer is.[[20]](#footnote-20) With a philosophical problem, it’s not that we have too few theories, but too many. Some set of assumptions is pushing us to a mistaken answer, and we have to figure out what they are.

This explains philosophy’s typical reliance on ‘armchair’ methods. When we are faced with a philosophical problem, the first task is to make explicit the intuitive assumptions that are driving our thinking. Often these are assumptions we don’t even know we have, and it can take hard intellectual work to expose them to the light of philosophical scrutiny.

Reflection on possible cases can be a crucial tool here. What would you say about someone who is duplicated, who is a brain in a vat, whose memories have been substituted …? There is no need to view such thought-experimental reflection as a source of some distinctive kind of intuitive *knowledge*. Its importance for philosophy is perfectly well explained by recognizing that a prerequisite of successful philosophical analysis is a careful inventory of the implicit assumptions that are guiding our judgments.

We need to know what these implicit intuitions are, but we certainly shouldn’t trust them. Remember the characteristic philosophical predicament. Different ideas are pushing us in contradictory directions, and we need to figure out which to endorse. In this kind of context it would be perverse to accord any authority to our intuitive inclinations. Our problem is precisely that there is some flaw in the collective body of assumptions that come naturally to us. If we want to end up with a coherent overall synthetic theory that accords with the empirical facts, we will need to assess every assumption on its merits. To privilege those that strike us as intuitively correct can only handicap us.

When the foundations for our modern intellectual world were first laid in the sixteenth and seventeenth centuries, a crucial element was the turn against tradition. Nothing should be accepted simply on the authority of past doctrine. Everything should be assessed on its merits. ‘Nullius in verba’ insisted the Royal Society. Take nobody’s word for it. It is ironic that philosophy, of all disciplines, seems to be in danger of forgetting this lesson.

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1. This is a slightly revised version of a paper originally published in E Fischer and J Collins eds *Experimental Philosophy, Rationalism and Naturalism* Routledge 2015. The changes are in section 6, and correct a mistake in the original pointed out by Joachim Horvath in *Notre Dame Philosophical Reviews* 10 Jan 2016. [↑](#footnote-ref-1)
2. See DePaul and Ramsey 1998, Knobe and Nicholls 2008, Pust 2012. [↑](#footnote-ref-2)
3. Given Quine’s own attitude to a priori knowledge, there is some irony in the thought that his work may have encouraged its defenders. But the contemporary metaphilosophy literature makes it difficult to avoid this impression. [↑](#footnote-ref-3)
4. What about the *epistemic* status of logic—a priori or a posteriori? If the epistemic analyticity programme does not go through and our entitlement to logic is not itself due to a grasp of conceptual structure, we cannot take it for granted that logical knowledge is a priori, even if we deem it analytic by definition. I am happy to leave this question open. For what it is worth, I am inclined to consider logic as a species of non-conceptually-guaranteed a priori knowledge, and I shall touch on this briefly later on. But my overall argument is independent of this issue. Whether or not logic is a priori, analytic knowledge as I have defined it will be philosophically insignificant. If logic is a priori, then analytic knowledge will be a priori through and through; if it is not, it will only be a priori in the relative sense of reducing a priori to non-a-priori logic. But either way it will be trivial. [↑](#footnote-ref-4)
5. Is not Gödel’s theorem of philosophical interest? Indeed. But Gödel’s theorem is a piece of mathematics, not pure logic, and it is doubtful that mathematical theorems, along with other ontologically committal claims, are analytic. Some may maintain that pure logic itself contains some philosophically significant findings. If so, I shall let the point pass—a few pure logical theorems will not take the friends of a priori philosophical intuitions very far. [↑](#footnote-ref-5)
6. It might seem that a verificationist could avoid mixing fact with meaning by introducing two distinct terms, *mercury temperature* and *alcohol temperature* and abjuring talk of *temperature* per se. But that wouldn’t do the trick either, since there are many numerically different mercury thermometers and alcohol thermometers, and it is still a synthetic presupposition that all the different particular thermometers within each kind will give consistent results. So if verificationists want to keep fact and convention separate they will be driven to an unworkable caricature of language which distinguishes *mercury-thermometer1 temperature* from *mercury-thermometer2 temperature* … This was the lesson of Percy Bridgman’s failed ‘operationalism’ from the 1920s (Bridgman 1927). [↑](#footnote-ref-6)
7. I shall assume that singular terms which have their reference so fixed by description refer to the unique entity which is T, if there is one such, and to fail of reference otherwise. [↑](#footnote-ref-7)
8. For further discussion of semantic indeterminacy in science, see Papineau 1996. [↑](#footnote-ref-8)
9. Here is a sample of influential articles about philosophical intuitions that do not so much as mention the analytic-synthetic distinction: Weinberg, Nichols and Stich 2001, Goldman 2007, Nagel 2007, Pust 2012. Examples could be multiplied. [↑](#footnote-ref-9)
10. I first got clear about this issue because of the 1990s debate on whether connectionism shows that we have no beliefs. It wasn’t nearly as obvious as it should have been that this discussion ran together both a substantial issue—do mental states lack compositional structure, as some connectionists claim?—with a conventional one—is it part of our concept of *belief* that beliefs must have compositional structure? Ideally the debate should have recognized that the latter question was at best a matter for terminological decision, and focused rather on the former. See Ramsey, Stich and Garon 1990, Papineau 1996, Stich 1999. [↑](#footnote-ref-10)
11. We have already seen how Frank Jackson seems to slide from his official commitment to folk analyticities to a concern with synthetic folk theories. Others are explicit that ‘conceptual analysis’ is a matter of articulating synthetic claims. See for example Brandon 1994, 2001, Jenkins 2008a, 2008b, 2012. [↑](#footnote-ref-11)
12. But see Bonjour 1998. [↑](#footnote-ref-12)
13. ‘Two-dimensionalists’ hold that any term that does not have a ‘primary intension’ different from its ‘secondary intension’ will be transparent (Chalmers 1996, Jackson 1998, see also Bealer 2002). Others are not so ambitious, and recognize a more limited range of transparent concepts, typically including ‘phenomenal’ concepts (Nida-Rümelin 2007, Goff 2011). [↑](#footnote-ref-13)
14. Advocates of such magical revelation sometimes suggest that it is only ‘*primary*’ uses of phenomenal concepts that expose the essential features of experience, where ‘primary’ here means that the experience itself is involved in the thinking, as when I think *about* red experience *while* (and perhaps *by*) actually *having* a red experience. (Cf Chalmers 2003, Goff forthcoming.) This might seem to render the revelation rather less mysterious, given that some kind of direct introspection can now be appealed to, as well as pure thought. However, a species of introspection that is guaranteed to reveal all the essential features of its object strikes me as magical too. (I myself recognize unstructured phenomenal concepts all right, and primary uses of them as special in various in ways; but I see no reason to accept that any such phenomenal thinking is guaranteed to reveal the essential properties of experience.) [↑](#footnote-ref-14)
15. Cf Williamson 2007 2012. [↑](#footnote-ref-15)
16. Of course the aural or visual perception of *sentences* is likely to play some role in the individual acquisition of traditional knowledge. But I am happy to count this role as causal rather than justificatory, and thus as consistent with the a priori status of the knowledge. See Burge 1993. [↑](#footnote-ref-16)
17. For both these points, see Papineau 2006. [↑](#footnote-ref-17)
18. I would also be inclined to place basic logic in this category of tradition-based a priori knowledge. (True, logic isn’t synthetic, given the letter of my earlier definition, but trivially metaphysically analytic. Still, as I explained earlier, this leaves open its epistemological status. My suggestion now is that it is a priori courtesy of natural tradition rather than conceptual structure.) [↑](#footnote-ref-18)
19. Nor do I even accept that philosophical intuitions qualify as *defeasible* sources of a priori *justification*. The points below argue against intuitive force carrying any weight at all in philosophical debate. [↑](#footnote-ref-19)
20. Of course there will be also cases where we are both threatened with paradox *and* short of empirical data. Perhaps these are the most interesting. In such cases philosophical analysis can help to clarify which empirical data will decide which issues. [↑](#footnote-ref-20)