THE FUTURE OF THE A PRIORI

GILBERT HARMAN
PRINCETON UNIVERSITY

ABSTRACT: Two conceptions of a priori methods and assumptions can be distinguished. First, there are the assumptions and methods accepted prior to a given inquiry. Second, there are innate assumptions and methods.

For each of these two types of a priori methods and assumptions, we can also allow cases in which one starts with something that is a priori and is justified in reaching a new belief or procedure without making any appeal to new experiential data.

But we should not suppose there is some further sort of a priori explained in terms of some other notion of justification.

If we try to construct a notion of the a priori by considering ways in which knowledge, belief, or reasoning might be though to be directly a priori, via direct insight, inability to imagine something false, intentions about use of language, and the language faculty, the resulting conception of the a prior in each of these cases reduces to either of the first two conceptions.

Fifty years ago, in "Two Dogmas of Empiricism," W. V. Quine (1953) launched a discussion of philosophical notions of analyticity and the a priori. On this occasion, I want to try to arrive at a judgment about the upshot of that discussion.

I will not engage in exegesis. I do not think of Quine's writings as sacred texts or as existing independently of the discussions of others then and now. These discussions in the aftermath of "Two Dogmas," "Carnap on Logical Truth," and *Word and Object* (Quine, 1960a, 1960b) raised serious challenges to philosophical reliance of the notions of analyticity and a priority, and led in turn to various defenses of these notions. Discussion continues to this day

as in the recent collection edited by Boghossian and Peacocke (2000). I will not try to summarize or respond directly to any of this discussion.

Instead, I will attempt to follow one aspect of Quine's method (and Carnap's) by trying to distinguish different senses of a notion, some which make good sense and others which do not. In particular, I will argue that certain ways of thinking of the a priori have no future. For there are various conceptions of the a priori, various senses of the phrase *a priori*.

1. VANILLA CONCEPTIONS

First, something might be *a priori in relation to a given inquiry* or investigation by being known or assumed *prior* to that inquiry, something known or assumed ahead of time and taken for granted in the inquiry. What is a priori in this sense can include certain procedures of inquiry and methods of reasoning as well as particular beliefs or assumptions. (There is probably no sharp distinction between procedures and beliefs.) I think that this is the most basic notion of the a priori.

Inquiry might cast doubt on something that has been assumed or taken for granted. The a priori justification that something has in this first sense is therefore defeasible.

Second, something might be *biologically a priori* through being innate or the result of innately determined development rather than having to be learned from scratch. Philosophers from Plato to Descartes argued that some hypothesis about what is innate is needed to explain our knowledge of mathematics and our ideas of mathematical objects and God. It is of course clear that something about our innate constitution distinguishes our abilities to reason and have justified beliefs from the abilities of other creatures. In present times, psychologists and linguists investigate how much of our conception of the world's contents and how much of language is determined by our biological endowment and not simply learned from scratch, allowing also that experience may be involved in setting parameters or otherwise tuning procedures and assumptions that are mainly innate.

We may of course come to discover that our innate conceptions are in some ways inadequate. Innately based common sense physics is erroneous in certain cases, leading people to think that, if something is dropped from a moving train or plane, it will fall straight down rather than in the sort of arc predicted by Newtonian theory. This innately supported belief led early airplane bombers to overshoot their targets. In the same way, innately based folk geometry and folk psychology are not wholly correct.

So here are two relatively clear and sensible conceptions of the a priori, something's being prior to inquiry and something's being innate. They are worth thinking about. It is often worthwhile to try to determine the presuppositions of a given inquiry. It is often useful to determine to what extent cognitive resources are innately based and to what extent they are acquired on the

basis of experience, a point that has been extremely important in the explosion of linguistic discoveries in the thirty years. I do not want to suggest that the a priori in either of these senses "has no future."

2. JUSTIFICATION AND EXPERIENCE

Matters are somewhat different for a third sense of the a priori that turns out to be much harder to explain. A crude first stab might be to say that the a priori in this third sense is anything that is justified without appeal to experiential evidence.

Now, we might understand what is a priori in this third sense in terms of what is a priori in the first sense as follows. Using beliefs and procedures that you start out with, you are justified in arriving at a new belief or procedure without relying on additional experiential evidence. The result is something that is a priori in sense 3.1, let's say.

Or we might understand what is a priori in the third sense in terms of what is a priori in the second sense in a similar way. Using beliefs and procedures that are innate, you are justified in arriving at a new belief or procedure without relying on additional experiential evidence. The result is something that is a priori in sense 3.2.

I do not want to object to either of these notions, the notions of the a priori in senses 3.1 and 3.2. However, someone might object that neither of these senses captures the intended meaning of the third sense of the a priori, because these are not senses in which a person is justified in believing something without appeal to experiential evidence. The thought behind the objection is that prior beliefs and procedures and innate beliefs and procedures are not always justified, which means that, even if you justifiably reach a new belief or procedure in one of the suggested ways, you may not be justified in having that belief or procedure. Furthermore, it may be said, even if you are justified in your initial beliefs and procedures or in your innate beliefs and procedures, your being so justified may depend on experiential evidence, so the result is not justified without appeal to experiential evidence.

However, I doubt that there is any way to make independent sense of this objection and of the resulting third conception without invoking a clearly inadequate "special foundations" theory of justification. Because the special foundations theory of justification has no future, I say that this third sort of a priori has no future if it is to be distinguished from the first two types and from types 3.1 and 3.2.

2.1 GENERAL CONSERVATISM

What I take to be the right theory of justification goes something like this (Goodman, 1955; Quine, 1960a; Quine and Ullian, 1978; Rawls, 1971). In deciding what to believe or what to do, you have to start where you are with your current beliefs and methods of reasoning. These beliefs and methods

have a privileged status. You are justified in continuing to accept them in the absence of a serious specific challenge to them, where the challenge will typically involve some sort of conflict in your overall view. Conflict is to be resolved by making conservative modifications in your overall view that make your view more coherent in certain ways. Your goal in resolving conflict is to reach what Rawls calls a "reflective equilibrium," in which your various views are not in tension with each other. (There are, of course, various other aspects of inquiry and reasoning, discussed, e.g., in Harman, 1986; 1999).

The crucial point in this view is that, to a first approximation, continuing to accept what you accept does not require justification. What requires justification is making changes on your view.

This conception of justification is widely accepted by philosophers outside of epistemology. I will call it *general conservatism* because of its contrast with (among other views) a *special foundationalism* according to which most beliefs and methods of reasoning are justified only if they can be associated with a justificatory argument of a certain sort. The relevant sort of justificatory argument appeals to certain premises and methods of reasoning, which may in turn require their own justificatory arguments. However, in this view, there are certain special basic foundational beliefs and methods of reasoning that are justified all by themselves without appeal to other beliefs and methods.

2.2 STRONG SPECIAL FOUNDATIONS

In some developments of special foundationalism, the starting points are foundational in the strong sense that they are very secure, like the foundations of a building. They are to be relied on, they will not crumble or lead you wrong. By contrast the starting points in general conservatism are not foundational in that sense, although they are foundational in the sense of being starting points from which you begin. According to general conservatism, having rational beliefs is not like having a house built on a foundation of rock. In Neurath's image, it is like having a boat that cannot be brought into dry dock for repair; corrections must be made as you go along at sea (Neurath, 1959). General conservatism does not suppose that you start only with secure foundations; the starting points have only a prima facie and defeasible justification. In *strong special foundationalism*, the foundational starting points have a justification that is not defeasible.

Strong special foundationalism holds that you are not really justified in believing something or in using a particular method of reasoning unless, either that belief or method of reasoning is itself strongly foundational and indefeasible, or it has a justification that ultimately depends only on strongly foundational and indefeasible beliefs and methods.

What could the strong foundational beliefs and methods be? The standard approach sees two types of foundational beliefs. First, there are beliefs about experiences, beliefs you are indefeasibly justified in believing because you

are having those experiences. Second, there are self-evident logical or mathematical axioms as well as elementary methods of reasoning that are self-evidently justified. These latter beliefs and methods are the a priori foundations. Other nonfoundational beliefs and methods are a priori if they have justifications that are based entirely on such foundational beliefs and methods.

Well known problems arise for strong special foundationalism. First, it is difficult to maintain that the special foundational beliefs and methods are indefeasible. Various beliefs and methods that have seemed foundational have turned out to be false. You may be convinced that you are in pain but then sheepishly realize that the dentist hasn't actually started. Seemingly self-evident axioms of set theory and geometry have turned out to be mistaken.

Consequently most contemporary special foundations theorists allow that the special foundations are only defeasibly justified. Their prima facie justification can be overridden by other considerations, such as conflict with other prima facie justified beliefs and methods.

This transforms the original version of special foundationalism into a limited conservatism. The question now arises how to distinguish the special foundational beliefs and methods from any of your other initial beliefs and methods, given that the special foundations are no longer conceived as foundations in the sense of things you can absolutely rely on.

2.3 EXPANDING FOUNDATIONS

These questions are exacerbated by a noticeable tendency among defenders of special foundationalism to expand the foundations in order to avoid skepticism. When the initial stock of foundational methods and beliefs is limited to intuitively obvious axioms and methods and beliefs about your present experiences, hardly any of your actual beliefs about the world can count as justified. You don't know where you are or what your name is or that there are such things as people or objects in the external environment or a past or a future. *Narrow special foundationalism* leads directly to skepticism. Since skepticism is wrong about what you are justified in believing, narrow special foundationalism is wrong.

Nonskeptical defenders of special foundationalism extend the foundations by allowing perceptual beliefs about the environment to be foundational, also memory beliefs, also various sorts of inductive inference, including the inferences involved in the acceptance of testimony, etc. etc. But now it is hard to see what the difference is supposed to be between extended foundationalism and general conservatism, according to which *all* of your present beliefs and methods are foundational in the relevant sense.

Another factor pointing in the same direction is that people simply do not associate justificatory arguments with their beliefs and inferential methods. Since special foundationalism says that beliefs and methods are justified only if they are foundational or are based on associated justifications from special

foundations, there is a choice: either most of your beliefs and methods are unjustified or they are foundational in the relevant sense. The latter position is simply general conservatism. The former view is skepticism.

Now recall that the a priori in the third sense is supposed to be what is defeasibly justified without appeal to experiential evidence. Since general conservatism is correct, everything one starts out with is defeasibly justified without appeal to anything else, so everything one starts out with is a priori in the third sense. Since general conservatism is true, the third type of a priori is the same as the first type plus whatever results from the third type of a priori beliefs and processes without appeal to additional experiential data. This is what I am calling type 3.1.

What is a priori in the third sense does have a future, about the same future as what's a priori in the first sense. What does not have a future is the attempt to combine the third type of a priori with a special foundations approach to justification.

2.4 REASONING AND ARGUMENT

There is, by the way, a further and extremely important worry about any sort of special foundations theory as a theory of justified belief, when it identifies justification with an argument. This is to confuse the reasoning that might justify acceptance of a new belief or method with the construction of an argument from premises via intermediate steps to a conclusion. That is, it confuses the theory of justification and reasoning with the theory of implication.

In reasoning, you start with your present beliefs and methods and make various changes in the interest of improving the coherence of your view and for the sake of finding answers to questions in which you are interested. Typically, this involves giving up some of your initial beliefs and methods. The process cannot in general be represented as an argument whose premises are your initial beliefs, whose rules are the rules of your initial methods, and whose conclusion is your new beliefs and or methods. Your justification for believing the new beliefs or accepting the new methods cannot be such a justificatory argument from justified premises using justified steps to a justified conclusion, because at the end of your reasoning you are no longer justified in believing all of the "premises" and may not be justified in using those methods.

Nor does this mean that your reasons are given by some sort of *reductio* argument where you assume something in order to show it leads to a contradiction. The point is rather that reasoning is one thing and argument construction is another. Reasoning sometimes (but not always) involves the construction of an argument or argument sketch but cannot be identified with that argument. This fact about reasoning is boringly familiar and I won't emphasize it further (Harman, 1986, chapters 1–3). My point is that standard special foundationalism depends on confusing reasoning with argument construction.

2.5 VERDICT ABOUT THE THIRD TYPE OF A PRIORI

My conclusion so far is that there is no reason to believe that there is a distinctive third sense or kind of a priori according to which the a priori is what is justified without appeal to empirical evidence. Any intelligible notion of this sort reduces to the first sense of a priori, according to which the a priori is that which you know or assume ahead of time at the start of inquiry or that which your initial procedures and beliefs lead you to accept without appeal to new experiential data.

3. CONSTRUCTIVE ACCOUNT OF THE A PRIORI?

What I have said so far may seem unsatisfactory for a number of related reasons. First, it may seem that there is a pretty clear distinction between at least some cases of a priori knowledge or justification and other cases of a priori knowledge or justification. Perhaps by concentrating on these clear cases, it will be possible to give a more satisfactory account of the a priori than any considered so far.

Second, it may seem to be a mistake to have concentrated on justified belief rather than knowledge. It may be true that one may be justified in continuing to believe something even though one has forgotten one's original reasons, but these reasons might nevertheless be important to the question whether one's belief is a case of knowledge.

Putting these thoughts together, let us consider the view that a priori knowledge can be defined as follows. First, explain how something might be known or believed directly a priori. Second, explain how something might be inferred a priori from other things. Third, say that something is known a priori if it is known because it was arrived at directly a priori or because it was a priori inferred from other things that were known a priori. This might be understood to allow for cases where what is known is retained in memory without the original reasons being retained, or is even acquired from the testimony of others who knew it a priori (Burge, 1993).

Alas, this approach to the a priori reduces to one of the vanilla approaches already considered. This can become clear through considering ways in which philosophers have thought something might be directly a priori, either as a self-evident axiom or as an instance of obviously justified reasoning.

Philosophers have suggested two ways in which something might be directly a priori. One appeals to some sort of faculty of a priori insight, the other appeals to a linguistic or symbolic theory of the a priori.

3.1 A PRIORI INSIGHT

Let me put off the symbolic theory of the a priori for a moment. Then there seem to be two ways in which there might be a faculty of a priori insight,

corresponding to two ways in which you might come to accept something as a basic a priori truth or consequence. First, sometimes something immediately strikes you as true or as following from something else. Second, there are cases in which you cannot imagine how something could be false.

3.1.1 FACULTY OF A PRIORI INSIGHT

Consider the first of these in which you ask yourself a question and are immediately struck with the answer. You ask yourself, "What is the sum of one and one?" and immediately answer "two." You ask, "is it always the case that something is always identical with itself?" and you immediately answer "yes." You ask, "Could something be the case and not be the case at the same time?" and you answer "no."

What happens in such cases? You start out with certain more or less unconscious procedures for answering questions of this sort and these procedures automatically produce these answers. The question is asked and your procedures automatically produce the answer. These procedures are a priori in the first sense, namely, it is what you start out with as you consider the question. Given those procedures, you do not need any additional empirical evidence to answer the questions, so the acceptance of your answer is type 3.1 a priori justified—it is the result of type one a priori procedures without the need for further empirical data.

This isn't quite what certain philosophers have had in mind. Other examples of the same sort of thing might be: Someone asks you your name and you immediately produce it. Someone asks you to say something that rhymes with "blood" and you say "flood." Someone asks you whether the pronoun can have the name as an antecedent in "Mary does not like her," and you say "No." They ask you about "Mary does not like herself," and you say, "Yes, here the pronoun does have the same name as its antecedent." These are all a priori in the same way. They are the product of things that are a priori in the first sense without further empirical data.

So, this does not provide any sort of new and different notion of what is a priori.

3.1.2 IMAGINATION AND POSSIBILITY

Another sort of a priori insight occurs when you accept something because you cannot imagine how it could be false. This is clearly different from the first type, because beliefs and knowledge that pass the immediate judgment test can fail this test. For example, you can easily imagine yourself having a different name. So, while it is a priori for me by the first criterion that I have the name "Gilbert," my having that name is not a priori for me by this second criterion.

Of course, what you can and cannot imagine is itself determined by various of your internal procedures and routines and how you exercise them. Some people have very limited imaginations; others have wider imaginations.

Can you imagine things that are impossible? There can be pictures of things that are impossible, as in some of Escher's prints, where stairs go always down yet arrive back at the same place. Is that a case of imagining the impossible?

Consider the question whether something can be red all over and green all over at the same time. It may seem to you (as it has seemed to many others) that you cannot imagine such a possibility. From that you might conclude that there is no such possibility. But maybe it is just a lack of imagination.

The color an object looks to have can change depending on the angle with which it is viewed. Imagine that a surface looks red all over when viewed from one position and green all over when viewed from another. Perhaps that is a case in which the object is red all over and green all over at the same time, although not from the same place.

When you thought you could not imagine an object that was red all over and at the same time green all over, you were not considering that possibility. Perhaps you were thinking that you cannot imagine an object appearing to be both red all over and green all over at the same time.

But go back to the surface whose color appearance changes depending on how it is viewed. Suppose that only a slight change in viewing location is enough to get a change from red to green. Suppose that the object looks red to your right eye and green to your left eye. (Or if you are blind or color blind or have sight in only one eye, suppose that this happens to someone else.) When you imagine an object looking red to your right eye and green to your left eye, that might be to imagine that it looks both red and green all over at the same time. Or is it? How can you tell? Psychologists have investigated what happens when you see something as red with one eye and green with the other. Can you tell just through the exercise of imagination what the results of the psychological experiments are?

When you decide that something is true because you cannot imagine that it is false, you are using prior beliefs and exercising prior procedures for imagining things, so perhaps this is an instance of type 3.1 a priori. You do not get any new experiential data. You are just applying your prior procedures to your prior beliefs.

Philosophers sometimes argue about whether this sort of exercise of imagination involves getting experiential data, namely, data about what you have been able to imagine. Similarly, someone might argue that when you do some reasoning, you are getting experiential data about what your reasoning leads you to conclude. Others reply that the reasoning, construed as an argument, is your justification in the latter case and that argument does not appeal to experiential data, so your justification does not appeal to experiential data. However, this is simply the confusion mentioned earlier between reasoning and argument construction. It seems to me that the question whether one is appealing to experiential data in these cases is an uninteresting purely verbal matter.

I conclude that both rational insight approaches fail to distinguish the third type of a priori from the first type or type 3.1.

3.2 ANALYTICITY

Finally, I want briefly to discuss a couple of attempts to explain the third type of a priori via analyticity. Both of these attempts supposes that the third type of the a priori has a source in linguistic or symbolic meaning. One approach appeals to meaning conventions or intentions. The other appeals to certain facts about the language faculty.

3.2.1 SYMBOLIC INTENTIONS

The first of these ideas goes something like this.

You think using symbols or representations. You have certain intentions about how you are using these symbols. In particular, you intend to be using symbols in such a way that certain combinations of symbols express something true. Suppose you intend to be using symbols so that the expression E is true. Then, given your intentions, E is analytic and, in having the thought that you express to yourself using E, you are a priori justified and know a priori what it is that you are thinking in having that thought.

Someone might object that this could not give you knowledge of the fact expressed by E; it could at best give you knowledge that E is true given the way you are using symbols. But this objection misses the point. Suppose you have the relevant intentions and consequently use E to make a judgment. That judgment makes use of E but is not a judgment about E. The claim involved in this version of the symbolic theory of the a priori is that, given your intentions about how to use the terms in E, you are a priori justified in making that judgment using E and therefore have a priori knowledge of the fact expressed by E (whatever that fact is).

Quine (1936) discusses the case in which you have intentions about how to use certain logical vocabulary and observes that intentions of this sort could not suffice to make all of the logical truths expressible with that vocabulary true by virtue of your intentions.

A more important objection is that it is unclear how you are to distinguish your meaning giving intentions from other assumptions you make using these symbols. You intend to be expressing certain truths, but which of your intentions determine meaning and which merely reflect your beliefs?

Without an answer to the last objection, this version of the analytic theory of the a priori reduces to what is a priori in sense one, or in sense 3.1.

3.2.2 LANGUAGE FACULTY

Quine (1953) argues that there is no scientifically acceptable distinction between analytic and synthetic truths. Chomsky (2000) agrees that this is so for the language of science but disagrees about natural language. An expression in natural language is analytic if its truth follows from the language faculty.

In elaborating this claim, Chomsky observes that a speaker of English can recognize such things as the following. *Smith killed Jones* implies *Jones died* in a way that it does not imply *Smith died*. *Smith persuaded Bill to leav*e implies *Bill intended or decided to leave* in a way that it does not imply *Smith intended or decided to leave*. *Mary does not like herself* implies *Mary does not like Mary* in a way that *Mary does not like her* does not imply *Mary does not like Mary*. Chomsky argues these and other often quite complicated aspects of meaning are not explicitly learned but are available from the start of language learning in the makeup of the initial language faculty.

The resulting knowledge in these cases is a priori in the second way. It is innate or based on assumptions and procedures that are innate in the language learner. The are therefore a priori in the same sense in which common sense physics and geometry and psychology is a priori. I have no quarrel with this sort of a priori.

3.2.3 CHANGE IN VIEW AND CHANGE IN LANGUAGE

Some say the analytic propositions are those that cannot be given up without change in meaning. But whether there is change in meaning between one use of language and another is a matter of how best to translate between the one language and the other and has nothing to do with what is a priori.

4. CONCLUSION

In this paper I have distinguished a number of different types of the a priori. The first type of a priori consists in what is prior to a given inquiry: those beliefs, assumptions, and procedures with which you begin the inquiry. The second type of a priori consists in what is innate. For each of these types of a priori we can also allow cases in which one starts with something that is a priori and is justified in reaching a new belief or procedure without making any appeal to new experiential data. I have argued that we should not suppose there is some further sort of a priori explained in terms of a notion of justification what would require a false theory of justification appealing to some sort of special foundations.

In addition to expressing doubts about special foundationalism, I discussed the possibility that one might try to construct a notion of the a priori by considering particular ideas about how knowledge, belief, or reasoning might be directly a priori, direct insight, inability to imagine something false, intentions about use of language, and the language faculty. The resulting notion of the a priori in all of these cases will be either a version of type one a priori or type two a priori or some mixture of the two.

BIBLIOGRAPHY

Boghossian, P., and C. Peacocke. 2000. *New Essays on the A Priori*. Oxford: Oxford University Press.

Burge, T. 1993. "Content Preservation." *Philosophical Review* 102: 457–488.

Chomsky, N. 2000. *New Horizons in the Study of Language and Mind*, with a foreword by Neil Smith. Cambridge: Cambridge University Press.

Goodman, N. 1955. *Fact, Fiction, and Forecast*. Cambridge, Mass.: Harvard University Press.

Harman, G. 1986. *Change in View: Principles of Reasoning*. Cambridge, Mass.: MIT Press.

——— . 1999. *Reasoning, Meaning, and Mind*. Oxford: Oxford University Press.

Neurath, O. 1959. "Protocol Sentences." In *Logical Positivism*. Edited by A. J. Ayer. New York: Free Press, 199–208.

Quine, W. V. 1936. "Truth by Convention." In *Philosophical Essays for A. N. Whitehead*. Edited by O. H. Lee. New York: Longmans, 90–124.

——— . 1953. "Two Dogmas of Empiricism." In *From a Logical Point of View*. Cambridge, Mass.: Harvard University Press.

——— . 1960a. *Word and Object*. New York: Wiley.

——— . 1960b. "Carnap and Logical Truth." *Synthese* 12: 350–374.

Quine, W. V., and J. S. Ullian. 1978. *The Web of Belief*, Second Edition. New York: Random House.

Rawls, J. 1971. *A Theory of Justice*. Cambridge, Mass.: Harvard University Press.