1. INTRODUCTION

For many philosophers, a concern with epistemology as a discipline is inseparable from an engagement with philosophical scepticism: if we cannot acknowledge the prima facie force of sceptical arguments, we are not engaged in epistemology. For such thinkers, Quine’s famous proposal that we should ‘surrender the epistemological burden to psychology’ (OR: 75), that the scientific (specifically psychological) study of how we arrive at beliefs on the basis of our sensory experience can meet our epistemological needs, simply misses the point. Although the scientific study of cognition is important and rewarding, it does not address the questions about knowledge that interest philosophers. Others do not agree: the fundamental problem for epistemology was always the explanatory one of making sense of how we can arrive at our view of the world on the basis of our experience. It is only if our naturalistic explanatory story threatens to self destruct, if it begins to suggest that we cannot understand our surroundings as well we hope to, that scepticism becomes a problem. In this essay, I do not aim to settle these issues. Instead I want to try to understand Quine’s reasons for thinking that his understanding of the epistemological task is not an unwarranted change in how we use the word ‘epistemology’. And I shall do this by exploring some of the observations Quine makes about the philosophical interest of sceptical challenges.

By way of introduction, it will be useful to distinguish two routes through which sceptical worries are introduced into the philosophical study of knowledge. One of these is associated with the tradition in epistemology that goes back to Descartes; the other is suggested by the writings of ancient Pyrrhonian sceptics such as Sextus Empiricus. The former exploits some assumptions or discoveries about the nature of perceptual experience; and the latter depends on some rather different assumptions about the nature of self-critical reflection, about the ways in which we think about our beliefs and inquiries in the attempt to ensure that they are well grounded. The distinction is a little artificial – in most discussions of scepticism, they are closely intertwined. But it is useful to separate them here. When Quine discusses scepticism, he is
usually most concerned with the former. Those philosophers who take a concern with scepticism to be fundamental to the epistemic project are more likely to be concerned with the latter issue.

The first route to scepticism rests on the assumption that the empirical basis for the justification of our beliefs and theories concerns the content of our subjective experience: we can have knowledge of how things appear to us, or of the qualitative character of our subjective sense data, but that is an inadequate basis for justifying beliefs about the external world. This argument does appear to rest upon a psychological claim: experience confronts us with ideas and impressions and we need to infer from our beliefs about our own experience to conclusions about the external world that lies behind those ideas. We have to breach the ‘veil of perception’ in order to discover how things really are. We know about the ideas; and we need to use this as a basis for drawing conclusions about their causes. We have no direct knowledge of these causes, so our knowledge about them must be inferred from our knowledge of their effects. It is important that this route depends upon a specific scientific theory of perception: the ‘idea’ theory that is found in the work of Descartes, Locke, Hume and others. The suggestion that epistemology as a subject depends upon acceptance of this theory of perception is hard to swallow. In part, this is because we think that most epistemological issues retain their interest even if this psychological theory of perception is rejected.

As we have noted, this first approach is compatible with the claim that the task for epistemology is an explanatory one: we want to explain how we can be reliable in coming to knowledge of our surroundings on the basis of experience. And if the ‘idea’ theory of perceptual experience is correct, then, it seems, that we cannot provide the required explanation. But if we can provide a better theory of perception, one that does not cut us off from our surroundings, then perhaps we can produce a better explanation of how we can be reliable in forming beliefs about our surroundings. If this explanation vindicates our common-sense belief that we are very reliable in obtaining information about the external world, then we can successfully seek our epistemological explanations without having to worry about scepticism. As we shall see, Quine’s naturalistic response to scepticism fits this pattern. He does see epistemology as concerned with this explanatory question; and he rejects the ‘idea’ theory of experience.

Critics of naturalised epistemology feel that this misses the point. Sceptical arguments can become pressing even if we do not accept the ‘idea’ theory of experience. Sometimes this is expressed by saying that epistemology is a normative discipline, one that is concerned with the possibility of our grasping epistemic norms (see Blasco and Grimaltos 1997: 31-33). To treat epistemology as concerned with explanation is simply to ignore this fact about normativity. This response is important, but it is not easy to see how it should be understood: it is not easy to see where and why normativity is relevant. The important point is that, when we try to form beliefs about any subject matter, we can reflect upon how we do this. One way to think about this epistemic reflection is that we can raise questions about our beliefs, our evidence, and our deliberations. Since we know that we are fallible, we can ask whether our evidence was collected in reliable and responsible ways. Perhaps our background knowledge was at fault and led us to misdescribe what we say. We can also ask about how far our evidence – even if it is accurately described – supports the conclusions we want to draw.
from it. Since the evidential force of our experience may depend upon our background knowledge, we may wonder about how trustworthy this background knowledge is. And if we do begin to wonder about these things, we can raise analogous questions about the information we want to make use of in trying to settle our wondering. Without relying upon any assumptions about the content of our experience, we may begin to worry that an endless sequence of reflective questions can be raised. And in that case, we begin to worry that reflection will never come to an end. If we simply refuse to consider these reflective questions, that seems like epistemic irresponsibility. But if reflection never comes to an end, it seems, we shall never arrive at the stable reliable belief that we seek. We are forced to worry about scepticism because we try to be careful and responsible in the ways in which we reflect upon our beliefs and our deliberations. If we think that epistemological problems emerge when try to see how we can be confident in our ability to form beliefs and deliberate in a reflective manner, then a psychological story about how experience gives rise to scientific theories and beliefs does not promise much help.

In the next section, I shall describe Quine’s views about the nature of epistemology and about why we can ignore scepticism. We shall see that his position appears to deal only with the first route to scepticism, and we shall identify some of the different themes in his account of how experience leads us to form reliable beliefs. The following section will examine some passages in which Quine discusses the nature of reflection, and we shall see that he would not take the patterns of reflection just described seriously. The final section attempts to bring these themes into harmony and understand why Quine may be right that he can address the central concerns of epistemology.

2. THE ROOTS OF REFERENCE

At the very beginning of *Roots of Reference*, Quine begins:

Given only the evidence of our senses, how do we arrive at our theory of the world? Bodies are not given in our sensations, but are only inferred from them. Should we follow Berkeley and Hume in repudiating them?

(1) Agreeing with the gestalt psychologists that ‘what are sensed are not primarily those sensory elements, but significantly structured wholes’, he insists that we go through ‘none of Berkeley’s inferential construction of the depth dimension’. Rather we directly [sense] a body in depth. The moral he draw from this is that traditional epistemologists were wrong to think that ‘their atomistic attitude toward sense data was grounded in introspection.’ Rather, they derived it from their knowledge of the physical world. Berkeley took sense data to be two dimensional ‘for no other reason than the physical fact that the surface of the eye is two dimensional.’ (2) This was a fact that those epistemologists would have been reluctant to acknowledge, because it would be circular to take for granted facts about the external world when ‘their problem was that of challenging or substantiating’ that very knowledge.

Notice, then, that the sceptical problem confronting these philosophers depended upon some substantive views about perceptual experience. And these philosophers made a mistake: they took these views to be utterly manifest and evident to introspec-
tion, when, in fact, they were derived from some substantive views drawn from theoretical or experimental science. The same holds, Quine tells us, of ancient scepticism, where the sceptical challenges exploit ‘familiar illusions to show the fallibility of the senses’. He argues that the concept of illusion itself depends upon science, ‘since the quality of illusion consisted simply in deviation from external scientific reality.’ So, for Quine: since the sceptic relies upon science in mounting her sceptical challenges, then the philosopher is free to use science in order to challenge them.

The challenge facing the epistemologist is then posed as follows: given what science teaches us about the ways in which objects affect our sensory surfaces, how can we explain our ability to know this science. The sceptical worry is that science tells us that our evidential base is too meagre to explain our possessing knowledge of the external world and of physics. ‘In short, if science were true, then how could we know it?’ And Quine is surely right to say that if that is the problem, then there is no principled basis for denying us the right to use science to answer it. The sceptical challenge is that science cannot explain how we know science; and the response is simply to show that science can do this, after all.

The new epistemology, which appeals to ‘physical receptors of sensory stimulation’ does not look like its predecessor which refuses to rely upon such technical and theoretical knowledge. But the source of this difference is that the old epistemologist was self-deceived, not recognizing how far its arguments rested upon physical science. Quinean epistemology is ‘enlightened persistence … in the original epistemological problem’, enlightened because it has escaped this self-deception. If we give up on science in doing epistemology, we lose the original sceptical arguments as well as the means to answer them.

On this view, the important difference between traditional epistemologists and their ‘enlightened successors’ does not concern their view of the central task of epistemology. Both believe that it addresses a question about how to explain our cognitive successes. They differ in their views about the sorts of explanations that are appropriate and about the sorts of mechanisms that are involved in cognition. Traditionalists think that cognitive processes all involve inferences and argument; we solve the explanatory problem by showing how we can infer conclusions about the external world (for example) from premises about what we experience. The enlightened doubt that this is the correct way to understand cognition; we can account of how we arrive at reliable beliefs about our surroundings without viewing the processes involved as inferential and without assuming that they are available to consciousness.

Let me make three initial observations about this position. It seems plausible that if sceptical arguments rest upon scientific premises, then we can use science to respond to them. But let us trace how this works. We begin, for the Quinean epistemologist, confident in our everyday and scientific beliefs. Trying to extend our knowledge, we raise some respectable scientific questions: what is the sensory basis of our scientific knowledge? How does this sensory basis enable us to acquire knowledge of our surroundings and of science? These are straightforwardly scientific questions. Sceptical problems arise if, and only if, this scientific search for explanation fails, concluding that using science is no more reliable than relying upon clairvoyance. What we have to ask is: what happens then?

One response is: we despair and decide that we must suspend our confidence in science and look elsewhere for help in grounding our confidence in our scientific beliefs. If we do this, then we cannot trust science to help us to recover. But this is not
the only response. So long as our confidence in science survives, it is reasonable to hope that we got it wrong, that science can do better than it has so far. And the Quinean epistemology hopes to show that this hope can be sustained; if we improve our psychology, we learn that science does not, after all, undermine its own claims to reliability, as at first appeared. We just advance from a flawed scientific explanation that had sceptical implications to a better scientific explanation that does not. When Quine speaks of the fear of circularity as ‘a case of needless logical timidity’, he is making the point that we shouldn’t allow ourselves to be forced to close confidence in science by the fact that our first attempt at a scientific explanation of knowledge failed. We should be brave enough to try again.

The second observation is that Quine’s story has implications for where the burden of proof lies. For Quine, science is innocent until proved guilty. The fact that our best scientific theory so far does not vindicate this presumption of innocence; it does not mean that the burden of proof is decisively shifted. If, subsequently, a better scientific theory comes along that can vindicate this presumption, then, once again, the burden of proof lies with the sceptic once again; it has to show that this new theory is inadequate or that it, too, when properly understood, undermines the claims of science.

Thirdly, it is important to remember how the style of explanation to be employed in carrying out this epistemological task has changed. Quine promises a causal psychological explanation that shows how the forms of cognitive processes we employ are sensitive to the impacts upon our sensory surfaces in ways that ensure that we are successful informing beliefs about our surroundings. Although he does not use the word, we might describe this as a reliabilist account of justification. The ‘traditional story’ tries to explain our epistemic success through a kind of rational reconstruction. This displays our beliefs about the external world as the conclusions of (possibly very complex) inferences, the premises of which are descriptions of immediate experience. This, of course, depends upon a claim that Quine rejects: the claim that beliefs about the content of experience have a sort of epistemic primacy. Beliefs about sense data were traditionally non-inferential; beliefs about the stimulations of our sensory surfaces are inferential and highly theory-laden. The difference between causal explanation and rational reconstruction seems to be a substantial one. The latter provides explanations that, ideally, can be checked against introspective experience; the former is compatible with the externalist view that the considerations responsible for our epistemic success may not be introspectively available to knowers at all. Quine appears to be committed to saying that this is simply a difference between styles of explanation; it does not reflect a change in the epistemic project. In each case, we seek an explanation: a Cartesian conception of mind, which identifies mental states with conscious states, requires us to look for psychological explanation which appeal to what is (at least potentially) available to the agent; the abandonment of Cartesian ideas about the mind means that we can look for explanations that have an externalist character. Once we have taken that step, we can resist the idea that explanations are concerned with reconstructing inferences.

This perspective on things may help us to understand a puzzling claim in ‘Epistemology naturalized’. Having pointed out that ‘in earlier times’, using psychology to solve epistemic problems was ‘disallowed … as circular reasoning’, he continues:

If the epistemologist’s goal is validation of the grounds of empirical science, he defeats his purpose by using psychology or other empirical science in the validation.
However, such scruples against circularity have little point once we have stopped dreaming of deducing science from observations. If we are out simply to understand the link between observation and science, we are well advised to use any available information, including that provided by the very science whose link with observation we are seeking to understand. (OR: 76)

This passage is curious. Is he saying that the earlier epistemologists had a different goal (validation)? Or is he saying that, at that time, the explanatory goal was best achieved by providing a validation? Or is he saying that earlier epistemologists were deceived in thinking (‘dreaming’) that they had a different goal? Is the dream simply one of showing how inference can take us from premises about experience to scientific conclusions? Or is it essential to the dream that these inferences should be deductive ones? However these unclarities are resolved, the interpretation we are offering emphasises that the crucial feature of the traditional view is the inferential model of explanation.

Anyway, we now see how Quine would like us to look at the matter. He hasn’t changed the subject by treating epistemology as a branch of psychology. The task was always an explanatory one, and he has just substituted one style of explanation for another. Recall that it is a ‘liberated epistemologist’ who turns into an empirical psychologist; he persists in his engagement with the original problem, but is liberated by freeing himself of errors.

All this said, there is another theme in Quine’s response to scepticism, one that surfaces in the first chapter of *Theories and Things*:

What if … we have achieved a theory that is conformable to every possible observation, past and future? In what sense could the world then be said to deviate from what the theory claims? Clearly in none, even if we can somehow make sense of the phrase ‘every possible observation’. Our overall scientific theory demands of the world only that it be so structured as to assure the sequences of stimulation that our theory gives us to expect. More concrete demands are empty, what with the freedom of proxy functions. (TT: 22)

This passage goes beyond those we have previously noted, introducing the empiricism dimension that would not be accepted by all who are sympathetic to his naturalised epistemology. The reference to ‘proxy functions’ reminds us that his hopes of reconciling this sort of empiricism with realism depend upon his acceptance of what he calls ‘global structuralism’ and related, controversial theses such as *ontological relativity* (OR: 47). And this theme is secondary: presumably it is a move within scientific naturalized epistemology. The previous considerations urge that it is appropriate to draw on science in order to meet sceptical challenges; this passage reports one strategy he employs in doing just that.

3. ANCIENT SCEPTICISM

Where scepticism rests upon an account of the content of experience, then we may follow Quine in doubting that this account is evidently true, or obvious to introspection. Instead, it depends upon our scientific beliefs about cognition and the nature of the eye. As we have seen, Quine has similar views of ancient scepticism, and here he
is on less good ground. He takes the challenges to take the form: sometimes we get it wrong, therefore we always need to have a response to the question whether this is another of those cases where we are getting it wrong. And then he holds that we are relying on our scientific beliefs when we identify cases as ones where we get it wrong. And, I suppose, those scientific beliefs which tell us that sometimes we get it wrong will also, on other occasions, be able to tell us that we have got it right. Thus the fact that we sometimes get things wrong does not generalize; it does not provide us with reasons to raise doubts where science endorses our views.

When we look at the writings of ancient sceptics, however, they do not use examples of illusions in this way. Sextus, for example, does not point to the fact that sometimes we suffer illusions. All he relies upon is the fact that sometimes, things appear one way to me, and differently to someone else: the coin looks elliptical to someone standing in one position, round to someone standing somewhere else. The scientific world view appears compelling to me; it seems inadequate to someone attached to a different romanticist or new age outlook. Any criterion I offer for preferring how things appear to me to how they appear to someone else, will invite the response: that criterion may appear to you to be a good one; but there are other people (or could be) who would favour a different criterion.

This sceptical strategy seems to rest, not on a search for explanation, but on views about how reflection upon our beliefs and deliberation work. When I accept a proposition I can be challenged (or challenge myself) to explain what reason I have for believing it. If I cannot offer a reason, my acceptance of the belief appears dogmatic. If I can offer a reason, then I can be challenged to explain why I should accept that reason, and why I should accept that it is a reason. Responsible deliberation and reflection inquire into the credentials of beliefs and arguments and, it seems, I would be irresponsible to rely upon these beliefs and arguments if I cannot explain with what right I do so. In the work of Sextus Empiricus, this promises a way of getting people to see that the proper cognitive attitude is that of suspending judgment about all propositions. Such suspension of judgment is probably psychologically impossible. But that does not help: if I cannot take seriously the reflective challenges that I ought to be able to address, so much the worse for my epistemic position. What is important here is that, rather than being based in a search for explanation, the sceptical arguments grow out of the demands of responsible reflection. Of course, reflection itself can appeal to explanations: when asked why I accept some proposition, I may offer an explanation of how I came to acquire it. But the claims about responsible reflection push us into asking about this explanation: why do I accept it? What makes me think that it is any good?

Does Quine have anything to say about sceptical arguments of this kind? We can draw on two sets of passages, some concerned with induction and the Humean predicament, others concerned with the nature of reflection.

4. REFLECTION

As we shall see, Quine thinks that reflection is generally shallow. Much of the information and processing that contributes to our search for reliable beliefs and theories is not available to reflection. Indeed, psychology – and common experience – confirms that this is an unavoidable feature of our experience. In that case, we cannot
expect to be able to discharge the burdens of reflection that were described in the last section. Does that show that we are forced to acknowledge that sceptical challenges cannot be answered? Before addressing this question, let us consider some of the passages in which Quine’s views about reflection emerge.

One point has already emerged. We often can reflect upon the observations that we appeal to in justifying our beliefs. In doing so, we come as close as we can to registering the role of the stimulations of our sensory surfaces in explaining our beliefs and our acceptance of theories. But our reports of our observations, using observation sentences (SS: 44f) involve interpretation of our sensory inputs. When I observe that my computer is turned on I make a claim about the external world, and one that I can understand only because I have a large amount of background knowledge. Maybe I can step back and describe my observation in more neutral terms, but it is not obvious that I shall always be able to do so. The processes that lead from sensory stimulation to observation sentence are unconscious and impenetrable to reflection. If I ask myself ‘Why do I think the computer is turned on?’ I may point to the red light that is illuminated or to the fact that there is a display on the screen, but I cannot appeal to sensory stimuli.

In *Word and Object*, discussing how we evaluate inductive inferences, Quine writes:

The sifting of evidence would seem … to be a strangely passive affair, apart from the effort to intercept helpful stimuli: we just try to be as sensitively responsive as possible to the ensuing interplay of chain stimulations. What conscious policy does one follow, then, when not simply passive toward this interanimation of sentences? Consciously the quest seems to be for the simplest story. Yet this supposed quality of simplicity is more easily sensed than described. Perhaps our vaunted sense of simplicity, or likeliest explanation, is in many cases just a feeling of conviction attaching to the blind resultant of the interplay of chain stimulations in their various strengths. (WO: 19)

In this case, the suggestion seems to be that we rely on complex unconscious (‘blind’) processing. All that is available to reflection is the output of this process, a sense that some theory yields the simplest story. If we question our reflections, asking why we should think it the simplest, we will very quickly run out of answers. If we try to meet the stated requirements on responsible reflection, we shall soon have to admit to failure.

This reflects one part of what Quine calls the ‘Humean predicament’ (OR: 72). Neither introspective reflection nor philosophical theory can show us how the results of induction can be certain or infallible. We can treat this as an indication that the account of how we ought to reflect upon our beliefs, described in the last section, conflicts with how our reflections can proceed. And Quine’s insouciance about this suggests that he does not see the force of those claims about how far responsible reflection should go. At this stage we move beyond what Quine actually says, but speculation on his response is not too difficult.

If we accept Quine’s claims about what we can call the limits of reflection, recognizing the role of unconscious or inaccessible cognition in our practice of confirming theories and forming beliefs, then we must also recognize that if we test our beliefs by asking what reasons we have for holding them, we shall fail to take account of lots of valuable cognitive processing. Our cognitive mastery is not exhausted by what is available to introspection or reflection. If Quine is right about how cognitive processing works, then we encounter yet another explanation of how
reflection can destroy knowledge. If we are confident that our unconscious processing is generally reliable, we do best not to ask too many questions. The psychological studies may persuade us that it is simply wrong to reflect as deeply as the traditional sceptical arguments require.

If asked why we should be confident in our cognitive capacities without using reflection to penetrate how they work, different kinds of defence are available. One strategy is to point to how successful we have been in our reasoning; we don’t often go wrong, especially over familiar and everyday matters. This strategy can be supplemented by others: if our inductive habits have grown from innate capacities which originally developed through natural selection, it is to be expected that they will be reliable, at least in providing everyday information about our surroundings. We have no reason to doubt that we are reliable, we have a reasonable explanation of why we are likely to be reliable, and we have reason to think that too much epistemic reflection may undermine our reliability. This seems to provide us with good reason not to go down the sceptic’s road. It leaves questions about when (and how far) we ought to reflect, how we should monitor our reasoning so that we guard against error without risking the loss of much valuable knowledge. And it is a reasonable complaint that Quine’s epistemology says little about how we are to answer these questions. But, I have suggested, he can argue that it is rational to ignore sceptical challenges.

5. BURDENS OF PROOF

We begin to do epistemology in possession of extensive confident beliefs about the world. These include common-sense certainties, less confidently held scientific conjectures, and a host of other opinions. Sceptical challenges endeavour to make us suspicious of these beliefs, putting us in a position where we judge that we should only hold on to them if we can provide them with a substantial defence. As Quine and Ullian point out, scepticism can be healthy, as, for example when it concerns ‘reports purporting to establish seemingly unlikely events and discoveries.’ (WB: 122) And this kind of healthy scepticism can be reinforced by ‘firm regard for the Virtues that make for plausibility of hypotheses.’ The philosophical sceptic urges a stronger scepticism, one that abandons our normal confidence in our sense of plausibility.

As even Descartes recognized, we do not start to take scepticism seriously unless given some reason to question our established certainties; in his case, this came from noticing how many of the beliefs he had acquired from his teachers had subsequently been discredited. For Pyrrhonists, we begin by noticing how often other people disagree with what seems obvious to us. Other philosophers in the seventeenth century were struck by extensive disputes about the criterion of truth: catholics and their protestant critics disagreed about the appropriate criterion to use in determining the truth about religious matters; and in science, Descartes was distinguished from various sceptical realists or empiricists by a different understanding of what the criterion of scientific truth is.

What held in the seventeenth century did not obviously obtain in the twentieth. For Quine, our scientific beliefs – and our common-sense beliefs – stand firm; we experience no inclination to doubt them and it is easy to dismiss anyone who does as a crank. If there are no controversies about how we ought to conduct our inquiries, the only tasks we face are explanatory ones. And, in that case, ‘scruples about circularity’
need have no significance for us and there is no reason to pursue the kinds of reflections that allow sceptical challenges to shake our confidence. All the time our confidence in our scientific beliefs is firm, the burden lies with the sceptic to persuade us to take their challenges seriously. But once that confidence is shaken, this imposes constraints on the information we can make use of in trying to restore it.

REFERENCES

References to Quine’s writings employ the abbreviations given below.