



## Perceptual Knowledge and the Primacy of Judgment

*ABSTRACT: Rather than asking how what we are aware of in perceptual experience can give us knowledge of the independent world, this paper asks what conditions we as knowers must fulfill, what capacities we must have, and what the ‘objects of perception’ must be in the competent exercise those capacities, if we are to have any such knowledge. It is argued that we must be capable of perceiving that such-and-such is so and thereby knowing by perception alone what is so in the world as it is independently of us.*

**KEYWORDS:** judgment, belief, reasons, perception, knowledge

Perception is our primary way of finding out about the world around us. We live as we do only because we can perceive and thereby come to know what is so in the world we live in and act accordingly. Any adequate account of human perception should therefore explain, at least in general, how our perceiving what we do can give us the kind of knowledge we all know we have of the world around us. But since at least the time of Descartes, if not earlier, knowledge of the world by means of the senses has seemed to present a formidable philosophical problem.

I don’t think there is any distinctive feature or requirement of knowledge itself that can make knowledge of the world in general seem unattainable or even difficult. What I think has seemed to lead to difficulties are certain apparently very natural ways of thinking about sense perception. If there *is* a problem about perceptual knowledge of the world—and in philosophy there certainly has seemed to be—I think that is where the difficulty lies.

Perception has been thought of in philosophy as a matter of having perceptual experiences. I don’t think there is anything problematic in that in itself either. Perceiving is a matter of having perceptual experiences, just as walking is a matter of having walking experiences or climbing mountains is having mountain climbing experiences. But in philosophy perceptual experiences have been understood in a certain distinctive way. Locke, Berkeley, and Hume, for instance, all spoke of perception as a matter of having something ‘present to the mind’: what they called ‘ideas’, or for Hume ‘impressions’. To have one of those things ‘present to the mind’ was to be sensorily aware of what the idea or impression is an idea or impression of. And we were said to have ideas or impressions of perceptible qualities or properties such as redness or roundness or warmth or smoothness.

I am grateful to Christoph Pfisterer for valuable criticisms of several earlier versions of this paper.



Those philosophers also thought we have ideas or impressions of an object such as a horse or a cherry or a billiard ball, but on this view of what is perceived there is a certain difficulty in that. Berkeley, for instance, spoke of an idea of a cherry as a ‘congeries of sensible impressions’ all present together. But surely it is possible to be aware of several different properties all together without having an idea of their being properties of one and the same object. I think those philosophers did not really account for the possibility of perceptions like that, for reasons I will touch on later.

In any case, the view is that perception is awareness of something—awareness of an *object* in the sense in which even qualities or properties are ‘objects’ or items rather than states of affairs. To put it linguistically, specification of what this view says a perceiver perceives takes the grammatical form of a psychological verb of perception followed by a noun or name or singular term: ‘*a* sees *x*’, ‘*a* hears *x*’, ‘*a* feels or is aware of *x*’, where what goes in for the ‘*x*’ is a noun or a name of some object or quality. This means that to perceive or be aware of something that is in fact an apple, or is in fact a property of an apple, is not necessarily to be aware that what you perceive *is* an apple or *is* a quality of an apple, or even *is* a quality of anything. It is simply to be aware of something that is an ‘object’ in the grammatical sense in which the accusative of the perceptual verb is a name or a term rather than a sentence. Any coextensive term could be substituted for that term without changing the truth-value of the sentence specifying the object of perception.

If we take seriously this idea of what we strictly speaking perceive, I think we cannot explain how perceiving what we do gives us any knowledge of what is so. If we are to know things by perception, we must be able think of and understand what we perceive in some way. We must be able to *make sense* of our perceiving what we do. For that we need some terms in which to express and think about what we perceive. Many philosophers have thought we could get the general terms we need by ‘abstracting’ properties or general kinds of things from what is present in the individual perceptions we receive. But even if that process of ‘abstraction’ as those philosophers understood it were successful (a big ‘if’), it would leave us at best only with a collection of names or labels or general terms of certain qualities or properties or kinds of things, not an account of how those terms can be combined to say or think anything that is true or false. A series of names of things or properties does not make a sentence and so does not say anything, even if those names are the names of things we are aware of. A list or collection of objects is not a thought that something or other is so.

What is needed in explaining knowledge is some account of how propositional thought is possible. Awareness of things, even repeated awareness of things of the same kind, does not on its own give you the resources for having beliefs about them that are either true or false. I don’t think Locke or Berkeley or Hume ever succeeded in explaining how belief or judgment is possible. Hume saw the importance of the problem; he even thought he was the first person to notice it. But he could not really account for the distinctive character of belief or judgment with nothing more to work with than what he thought of as ideas. And I think he saw that he had not really explained it.

Many twentieth-century philosophers of perception shared with their eighteenth-century predecessors the assumption that perception is awareness of or acquaintance with *objects*. They described what we are given in perception as 'sense data': purely 'sensory objects' that we are directly aware of. There was a real question what those purely 'sensory objects' were supposed to be. Are they simply the very qualities we are aware of in perception: redness, roundness, warmth, and so on? Or are they objects that have such qualities, so what we are aware of are sense data that are red, or round, or warm, and so on? If so, do those objects also have qualities that we are not aware of, or is their *esse percipi*? I think sense datum philosophers did not really explain the nature of those objects, but they nonetheless simply helped themselves to propositional thoughts about them. Even then, I think, they did not succeed in explaining how acquaintance with or even propositional knowledge about such purely 'sensory objects' could give anyone any reason to believe the kinds of things we all know about the public world around us.

Philosophers have continued to look carefully into what they think we are most directly aware of in perception. But in recent years not all philosophers interested in perception have been especially interested in knowledge. The nature or character of what they call 'the very perceptual experience itself' is what those philosophers tend to concentrate on. But most philosophers who *are* interested in perceptual knowledge still start with what we can be sure perception alone gives us and then try to account for the possibility of knowledge of the world on that basis. That is to proceed, so to speak, from the bottom up. But how is it to be determined what exactly that 'bottom' actually is: what does sense perception all on its own give us? And can we be sure that if we settled that question first, we would then be able to reassure ourselves about how, on that basis alone, we can know the sorts of things we know about the world?

At this point in the historical and philosophical development of this subject I would propose that we take a different direction and proceed not from the bottom up, as it were, but from the top down. I suggest that we start with the conditions that must be fulfilled if we have any knowledge of the world and ask how what we perceive must be understood if it is to fulfill the conditions of our knowing what we know about the world by perception. To know something is to know that such-and-such is so. That involves a propositional thought that has a truth-value. So we must start in particular with the conditions of propositional thought. What does it take—what kinds of capacities or competences are needed—for thinkers to form and grasp thoughts that they understand to express something true or false? We could not have knowledge of anything at all without that. With some understanding of what is involved in that fundamental capacity, we could then go on to ask how *perceiving* what we do must be understood if what we perceive is to be accessible to the propositional capacities we exercise in believing and perhaps knowing the things we do.

This was, in effect, the overall strategy of Kant, as against Descartes, Locke, Berkeley, Hume, and many others. The idea is to start not with what seems to come to us in experience and ask how we know things about the world on that basis, but with the conditions of our even *thinking* about a world that perception

could perhaps reveal to us. This is what puts judgment at the center of the picture. To think at all—and so to be capable of knowing anything—is to be capable of asserting or endorsing or putting forward something as true. So to understand how perception can provide us with knowledge we must understand the connection between what we perceive and the possibility of thought and belief about what we perceive. How can what we perceive bear on the truth or acceptability of something we believe to be so? This is to acknowledge certain requirements on what we can be understood to perceive—what might be called the ‘proper objects of perception’—for perceptual knowledge of the world to be possible. Not just *anything* we perceive would be enough to explain how our perceiving what we do enables us to know the kinds of things we do know about the world.

If a capacity for judgment is a condition of having any thoughts at all, thinkers must be capable of thoughts with a certain distinctive structure. A thought cannot be simply a list or collection of separate items or objects, even things we are aware of. It must have a predicational structure in which part of the thought expresses something that is thought to be true of some object or item picked out by another part of that same thought. Two different ingredients or aspects of the thought must be put together in a way that yields something that is either true or false. We apply a concept to something we think of and thereby think of that thing as falling under or being characterized by that concept. That is what it is to have concepts. As Kant put it: ‘concepts are predicates of possible judgments’. Only someone with a capacity for judgment can think of things as being one way rather than another and so can be said to possess concepts.

Being capable of judgment is a condition of *believing* that something or other is so. It is therefore also a condition of *knowing* that something is so and so of knowing something about the world. Being capable of judgment is therefore a condition of knowing something about the world *by perception*. To understand perceptual knowledge we must understand the conditions of judgment or belief.

Belief is a much richer and more complex psychological state than many philosophers appear to have supposed. I think it is the key to understanding the possibility of knowledge and so to understanding the possibility of *perceptual* knowledge. Here I agree with Fred Dretske’s observation that ‘believing something requires precisely the skills involved in knowing; anyone who believes something *thereby* exhibits the cognitive resources for knowing’ (Dretske 2000: 65).

A thinker cannot believe something he does not understand. So a thinker who believes or knows something understands the thoughts he believes to be true, and he understands them to have a distinctively predicational structure. To have mastered that kind of structure one must understand many different sentences or thoughts with predicational structure. One must have a *general* competence in the application of different predicates to the same object and the same predicate to different objects. It is not possible for a thinker to be capable of only one or two, or half a dozen, thoughts. One must be master of many different sentences or thoughts to have the competence involved in understanding any one predicational sentence or thought.

But to understand one’s thoughts it is not enough simply to understand their structure. One must also understand the terms used in those sentences or thoughts:

the predicates and names and other ways of referring to the objects thought about. One must understand what those particular thoughts actually say: the conditions under which they would be true or false, and the conditions under which they would be appropriately asserted or denied. How the thinker understands those conditions determines what the thinker believes. Thinking or believing something is an intentional state: what the person believes is only what would be so as the person thinks of it or acknowledges it. Someone who believes that the man she sees is wearing a red shirt does not necessarily believe that the tallest man in town is wearing a red shirt even if the man she sees is the tallest man in town.

Competent thinkers who understand what they believe will be able to judge, in circumstances they find appropriate, that certain thoughts they understand are either true or false and so to judge accordingly. What Kant saw as essential to thought is not just a *capacity* for judgment but actually judging in the appropriate circumstances that such-and-such is so-and-so. That involves positive endorsement or acceptance or putting forward as true something one understands. So correct or appropriate judgment is essential for possession of the competence or capacity. A putative thinker's consistently making inappropriate or inexplicable so-called judgments would cast doubt either on the thinker's competence in judgment in general or on his understanding of the particular thoughts he so inappropriately appears to accept.

There is even more than this involved in judgment or belief as it bears on the explanation of knowledge and so of perceptual knowledge. It is crucial to belief that beliefs are held for reasons. We can come to believe one thing because we believe something else. If someone accepts the belief that *p*, his believing that *q* can sometimes be explained by his believing that *p*. To see the person's holding the second belief as explained by his holding the first is to see the thinker as taking what he believes in the first belief as *reason* to accept the belief that *q*. His reasons for endorsing the first belief are extended to his acceptance of the second belief.

To understand ourselves as believers we must have a correct understanding of this capacity to recognize and be responsive to reasons. One way *not* to understand that responsiveness is brilliantly illustrated by Lewis Carroll's story of Achilles and the Tortoise (Carroll 1895). The Tortoise says he accepts two statements, let's call them *A* and *B*, which *we* can see quite obviously imply a third statement, call it *Z*. But the Tortoise says he does not yet accept that third statement, and he challenges Achilles to 'force' him to accept it. Achilles says, 'But you must accept *Z* if you accept *A* and *B*, since if *A* and *B* are true then *Z* is true'. 'I am willing to accept that conditional statement "If *A* and *B* then *Z*", and add it to those statements I already accept', replies the Tortoise, 'but now, again, please force me to accept *Z*'. Achilles points out that if everything you have now accepted is true, then *Z* is true. And the Tortoise replies, predictably, 'I am willing to accept that longer conditional statement, and add it to what I have already accepted. And I ask again, please force me to accept *Z*'. And so on. And on.

What I think this brilliant story illustrates is that the Tortoise has no sense of, or shows no recognition of, one thing he believes being *reason* for him to believe something else. He appears to think that the only way believing one thing can bear

on a person's believing something else is by the believer's accepting some *third* proposition that states a relation between the two. But if that were the *only* way a believer could come to believe something on the basis of something else, another proposition would *always* have to be added to what the person believed at every point. That is the regress that goes on forever.

I think we can learn something about *belief* from Lewis Carroll's story. The Tortoise says he *accepts* *A* and *B*. But if he accepts them he must understand them, and so he must understand their structure. So he must see that if *A* and *B* are true, then *Z* must be true. And how could he understand and accept that conditional proposition without seeing that with *A* and *B* alone he already has reason to accept *Z*? Can we really make sense of the Tortoise as a believer at all, despite his apparent willingness, as he puts it, to 'accept' certain things? I think the story shows that believing something for a reason cannot be understood simply as believing something as well as accepting some other proposition that states a relation between the proposition said to be the reason and the proposition said to be believed on the basis of that reason.

Someone who believes that *p* and comes to believe that *q* for that reason takes *p* as a reason to believe that *q*. If that is what *explains* her coming to believe that *q*, her 'taking something as a reason' must be something more than her simply adding a certain proposition to all the propositions that she already accepts. In saying it must be 'something more' I mean that taking something as a reason to believe something must be a matter of one's being ready or inclined or disposed to accept the second proposition in the light of one's acceptance of the first. That readiness is expressed or exhibited in one's accepting the second belief on the basis of the first. So regarding or taking one thing as reason to believe something else is an 'active' or 'productive' attitude. One is *responsive* to what one takes to be a reason, and one accepts the second belief in accord with that responsiveness. Simply 'accepting' a proposition in the way the Tortoise says he 'accepts' something is not enough, even if what he 'accepts' is a truth about a relation between what is said by one proposition he 'accepts' and what is said by another.

Someone who sees that a billiard ball is moving rapidly toward a stationary ball can come to believe that the second ball will move when hit. Her taking what she sees to be true of the first ball as reason to believe what she does about the second ball explains her coming to have that second belief. That happens because she takes something she already accepts as reason to believe that the second ball will move. That is what Lewis Carroll's Tortoise apparently never does. He always demands that one more proposition must be added to those he has accepted so far. We could perhaps say that, as a believer, the Tortoise appears to be 'reason deaf', or 'reason insensitive', and so difficult to understand as a believer at all.

The person who sees that the first ball is moving and for that reason believes that the second ball will move could be said to *believe* that what she sees to be so is reason to believe that the second ball will move. But in ascribing to her that belief about one thing's being a reason to believe something else, we ascribe to her a certain attitude—a *responsiveness* or *readiness* to respond in a certain way to something she believes. She sees that the first ball is moving, and in coming to believe on that basis that the second ball will move she exhibits or expresses an

‘active’ attitude of responsiveness that is present in her very acceptance of the fact that the first ball is moving as it is.

I think arriving or being prepared to arrive at some beliefs on the basis of other beliefs we regard as reasons for them is essential to being a believer at all. I take this to show that a person’s believing something cannot be fully captured simply by listing the propositions the person believes. To believe something is sometimes described (in philosophy) as standing in what is called ‘the believing relation’ to a set of propositions. But that could be at best only a purely formal characterization. It could perhaps identify *what* the person believes, but it would not fully characterize the psychological state the believer of those propositions is in. A list of propositions alone would be insufficient even if it contained propositions about the relations among the various propositions the believer already believes. Even if some of those propositions are statements to the effect that one thing on the list is reason to believe another, they would still not fully capture the attitude of a believer who believes something for what the believer takes to be reason to believe it.

I think what I am calling the attitude of responsiveness to reasons that is involved in a believer’s believing that  $q$  for the reason that  $p$  is best regarded as an evaluative judgment, and that such judgments are not equivalent or reducible to any non-evaluative and in that sense ‘purely factual’ propositions about what states of affairs actually hold in the independent world.<sup>1</sup> Regarding one thing as reason to believe another is not simply acknowledgment of a relation holding between what is said to be so by the propositions in question. That was the trouble with Lewis Carroll’s Tortoise. Believing something for a reason involves the believer’s recognition of something as a reason to believe it and perhaps also some assessment of the strength of that reason. It is an evaluative or ‘active’ attitude in the sense that it is because of its presence that the believer is ‘moved’ or ‘led’ to believe something that is in accord with his evaluation of the reason. The believer comes to be in an intentional state of believing a certain thing because of his evaluation or assessment of the reasons other things he believes give him to believe it.

We take most things we believe to be supported by other things we believe in this way. If we try to trace the chains of beliefs and reasons back to their epistemic origins, we find that the chains do not go back forever. Sometimes the chain (pursuing it back) stops at something we perceive to be so. Sometimes the chain stops with something we recognize to be so not by sense perception but in some other way. To say that the backward chain of supporting beliefs and reasons stops at a certain point is to say that at that point we simply recognize something or other to be so, and not on the basis of anything else we recognize to be so.

This is what happens in sense perception. So we come, at last, to the question of perceptual knowledge. I think we can know things about the world around us by directly perceiving that such-and-such is so. In saying we perceive and know such things directly I mean we perceive and know them not on the basis of perceiving or knowing anything else to be so. This kind of perceptual knowledge, for all its directness or immediacy, is of course something we can achieve only if all the

<sup>1</sup> This view is clearly explained and convincingly defended in Scanlon (2014).

necessary conditions of our perceiving and knowing such things are fulfilled. The elaborate set of necessary conditions we must fulfill to know things in this way is a matter of considerable complexity. I have been describing here only its general outlines. Knowing things in this way is no simple matter.

To know something about the independent world we must be capable of thoughts that are understood to be true or false whether anyone judges them to be so or not or even whether anyone entertains them. They are in that sense thoughts of something objective. Take the simple thought of there being a red apple on a brown table. That is something that could be true or false, whether anyone thinks it is so or not. And what we think in entertaining that thought is something I think we can sometimes *see* to be so right before our eyes. We see a red apple, and we see that it is on a brown table that we see right here and now. And we do not see that that is so on the basis of anything else we see to be so.

Of course, there simply being a red apple on a brown table right before your eyes is not enough for you to see or to know that there is, even if your eyes are open and the light is good. Even if you actually see a red apple and you see a brown table, and the apple you see is on the table you see, that is still not enough. To see and to know that there is a red apple on a brown table requires more than seeing those objects. It requires competence in and competent exercise of the perceptual and conceptual capacities required for propositional thought about what you perceive. But those who possess that rich set of capacities, as we all do, and exercise them competently in the right circumstances, can sometimes find themselves perceptually aware of a fact of the objective world that they thereby know to be so. This is what I call 'seeing what is so' (Stroud 2011: 92–102) and so *knowing* what is so by perception alone.

Among the perceptual conditions of this kind of perceptual knowledge, I believe, is a capacity we all have to perceive particular objects, to be aware of an object and single it out perceptually, to discriminate it from its background or surroundings, to have our attention drawn to it, perhaps to track it if it is moving. It is not altogether easy to say exactly what is involved in seeing an object in this way, but it is a capacity we share with other animals, many of whom are probably better at it than we are. It is a matter of seeing an object in what could be called the purely 'objectual' sense I mentioned earlier. What is seen in this way is specified by reference to an object rather than a state of affairs, with a noun or name or term as the accusative of the perceptual verb, not a sentence or sentential clause.

Seeing an object in this way is what Fred Dretske called 'non-epistemic' or 'simple' seeing (1969: ch. 2). It is a *de re* relation we can stand in to objects that show up in our perceptual awareness. To say it is *de re* is to say that we do not have to think something about an object we see in order to stand in that relation to it, and if we do think of the object in some way, what we think of it does not have to be true of it for us to see the object. In the statement that a person sees *x*, any expression that in fact refers to the object that is seen can be put in for the '*x*' without changing the truth-value of the statement about what the person sees. As a matter of fact, of course, most of us do believe something or other about most of the objects we see or pay attention to, but we do not *have to* believe such things about them in order to see the objects in this sense.



I think our standing in this relation to objects in the world is important, perhaps essential, to the possibility of propositional attitudes about them, and so to the possibility of objective thought. It is a way in which our words or thoughts are connected with things in the world that we perceive and think about.<sup>2</sup> The possibility of this kind of perception is obviously crucial for language-learning: the beginner does not need any words in order to single out an object and attend to it in the course of eventually learning some words to apply to it or to things of that kind.

Even those of us who already have a great many words and are thereby equipped with the resources for making sense of our experience are in a similar position with respect to seeing objects in this 'direct' or *de re* sense. We do not need those words or all those resources in order simply to see the objects we see. But within those linguistic resources we possess a highly developed repertoire of predicates that we understand and are ready to find instantiated when the right circumstances present themselves. Our rich predicational competence could be thought of as our carrying around with us an enormous body of open sentences that we understand. When an object comes into our experience, when we 'simply' see it, we can often see that certain open sentences we understand are true of that object. In seeing what we see, we see that certain concepts we are masters of are true of the object we see. We see that the object we see is a red apple, for instance, and perhaps that it sits on a brown table. What we see to be so in such a case is something we can also think or believe to be so when our eyes are closed or when we leave the room. What we see and thereby know to be so is something that is so whether anyone sees or otherwise perceives it to be so or not. We see and thereby know that such-and-such is so in the world, and we know it not on the basis of seeing or knowing something else.

When I say it is not on the basis of knowing anything else, I do not of course mean that someone could see and know in that way that there is a red apple on a brown table even if he did not know anything else about the world at all. I have been trying to explain why no one could know any such thing without having the elaborate conceptual and perceptual capacities I have been sketching. And anyone who possesses those capacities will come to know a great deal about the world in the competent exercise of them. So knowing anything at all about the world involves knowing quite a lot about the world. But that does not mean that in seeing and knowing that there is a red apple on a brown table one knows it *on the basis of* something else one knows: in some indirect way or by inference or transition from something else one perceives or knows to be so.

When we trace a chain of supporting reasons for beliefs back to something we perceive to be so in this way, I think the chain stops with something that we perceive and thereby know to be so. What we know can then serve as reason to believe other things we come to believe. But when we see and thereby know that there is a red apple on a brown table, I do not think that what we then perceive to be so is *our reason to believe* that there is a red apple on a brown table. What we perceive to be so is not a reason *on the basis of* which we make a reliable inference

<sup>2</sup> This is brought out clearly in John Campbell's purely 'relational' view of the perception of an object. He explains how our attending to things we perceive in that sense, 'by bringing the object itself into the subjective life of the thinker, makes it possible to think about that object' (Campbell 2006: 6).

to the conclusion that there is a red apple on a brown table. What we perceive in those circumstances is the very fact that we thereby come to know: the very state of affairs we entertain in the thought of there being a red apple on a brown table. In that situation, there is no need for something to serve as our reason for believing that there is a red apple on a brown table. There is not even any room for such reason. That there is a red apple on a brown table is something that we see and know to be so right before our eyes.

That does not mean that we cannot say that we *believe* that there is a red apple on a brown table. I can say, of any of the things I know, that I believe them. But to say in a case like this only that you believe that there is a red apple on a brown table, or that you have reason to believe it, even good reason, is too weak. You know it; you see and know how things are in the world. No circumstances could be more favorable for discovering how things are than seeing or otherwise perceiving that such-and-such (which you fully understand) is so right before your eyes. That is the point at which tracing back the chain of reasons to believe something comes to an end: in perceiving and in that way knowing by perception alone that such-and-such is so.

For these reasons I think proceeding in this 'top-down' direction, from the conditions necessary for competent thinkers and perceivers to perceive that certain objective thoughts are true, offers us greater hopes of finally understanding how perceptual knowledge of the world is possible than we can expect from the 'bottom up' projects we are so familiar with but which continue to leave us dissatisfied.

I do not much care for labels in philosophy. Those who like labels will probably call the possibility I have been trying to describe here 'Realism'. It says we can perceive and know things about the world directly, not on the basis of anything else, and that what we can know in that way holds independently of its being perceived or believed by anyone. Maybe that does make it Realism, twice over. But because of the elaborate set of conditions I have tried to show we must fulfill even to be capable of that kind of knowledge, it certainly cannot be called 'Naïve Realism' (whatever that might be).

The view I have been describing is that with properly functioning perceptual mechanisms, human beings who fulfill all the conditions of competent thought are capable of knowing by perception alone how things are in the independent world around them. That is what Kant called 'the objective reality of outer intuition'. He took himself to have proved that doctrine, and so to have established something he too called 'realism'. But for him it was only 'empirical realism'. And Kant held that what he called empirical realism could be established through an investigation of the necessary conditions of human thought and experience only if something called 'transcendental idealism' - not a form of 'realism' - is true. Whether that applies as well to the conclusions I have tried to draw from the conditions of thought and experience is a question I leave for another occasion. It is not simply a matter of labeling.

BARRY STROUD

UNIVERSITY OF CALIFORNIA, BERKELEY  
[barrys@berkeley.edu](mailto:barrys@berkeley.edu)

## References

- Campbell, John. (2006) *Reference and Consciousness*. Oxford: Oxford University Press.
- Carroll, Lewis. (1895) 'What the Tortoise Said to Achilles'. *Mind*, 4, 278–80.
- Dretske, Fred. (1969) *Seeing and Knowing*. London: Routledge
- Dretske, Fred. (2000) 'The Epistemology of Belief'. In Fred Dretske (ed.), *Perception, Knowledge and Belief* (Cambridge: Cambridge University Press), 64–79.
- Scanlon, Thomas. (2014) *Being Realistic About Reasons*. Oxford: Oxford University Press.
- Stroud, Barry. (2011) 'Seeing What is So'. In J. Roessler, H. Lerman, and N. Eilan (eds.), *Perception, Causation, and Objectivity* (Oxford: Oxford University Press), 92–102.