Section 7.2

Facing Reality

Perception and the External World

Scientists and laypersons alike assume that sense experience gives us knowledge of the external world. Descartes called this assumption into question by showing that we couldn't always trust our senses. But contrary to what Descartes would have us believe, knowledge doesn't require certainty. So from the fact that our senses might not be trustworthy, it doesn't follow that they aren't trustworthy. Nevertheless, we are justified in believing what our senses tell us about the external world only if we have a good reason for believing that they put us in touch with it.

Direct Realism

Common sense tells us that our senses put us in direct contact with reality. When we see a book, for example, it seems that we are directly aware of the book itself. This view is known as **direct realism:** "direct" because it assumes that nothing comes between our perception of the world and the world itself, "realism" because it assumes that there is an external world that is not affected by what we think about it. Philosophers have challenged both of these assumptions.

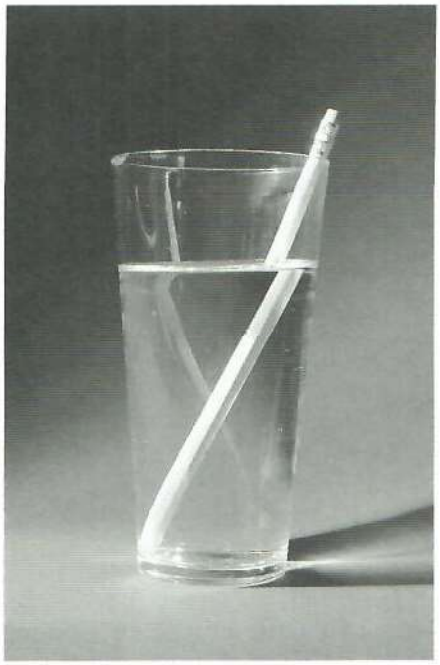
We need realism to deal with reality.

—Slick Rick

The most telling argument against direct realism is the argument from illusion. If we are directly aware of physical objects in perception, then they should appear to us as they really are. But the way things seem is often very different from the way they are. This has led many to conclude that we're not directly aware of the external world. British philosopher A. J. Ayer explains,

> Why may we not say that we are directly aware of material things? The answer is provided by what is known as the argument from illusion. This argument, as it is ordinarily stated, is based on the fact that material things may present different appearances to different observers, or to the same observer in different

direct realism The doctrine that perception puts us in direct contact with reality.



THE BENT PENCIL. Illusions like the bent pencil suggest that we don't perceive the world directly.

> conditions, and that the character of these appearances is to some extent causally determined by the state of the conditions and the observer. For instance, it is remarked that a coin which looks circular from one point of view may look elliptical from another; or that a stick which normally appears straight looks bent when it is seen in water; or that to people who take drugs such as Mescal, things appear to change their colors.[49]

Physical objects cannot possess incompatible properties. Nothing can be both circular and elliptical, bent and straight, or red and green at the same time. But one and the same object can appear to have such incompatible properties. So what appears to us—what we're directly aware of in perception—must not be physical objects themselves.

Consider Ayer's example of the stick placed in a glass of water. The problem that it poses for direct realism can be put in the form of an argument.

1. What we see is bent.
2. The stick is not bent.
3. So what we see is not the stick.

But if we don't see the stick, what do we see? Empiricists have traditionally claimed that what we see is a representation or an appearance or an idea of a stick. The technical term that is often used to refer to what we're directly aware of in perception is **sense data.** Bertrand Russell introduces that term this way:

> Let us give the name of "sense data" to the things that are immediately known in sensation; such things as colours, sounds, smells, hardnesses, roughnesses, and so on.

> We shall give the name "sensation" to the experience of being immediately aware of these things. Thus whenever we see a colour, we have a sensation of the colour, but the colour itself is a sense datum, not a sensation. The colour is that of which we are immediately aware and the awareness itself is the sensation.[50]

Sense data, then, are the content of our sensations. They are what is given to us in sense experience. We take sensory experience to be about physical objects, but that is not what is given to us. What is given is sense data.

According to those who believe in sense data, then, the process of perception has two parts. The first part—sensation—involves receiving data from the senses. The second part—perception—involves interpreting those data and bringing them under a concept. Some believe that these two parts are temporally distinct—that one actually happens before the other—whereas others believe that they are only logically distinct—that although the process happens all at once, these are two discriminable aspects of the process. In either case, however, we're not directly aware of physical objects.

Perception supposedly gives us knowledge of the external world. But if all we are directly aware of in perception is sense data, there's a problem: How do we know whether our sense data accurately represent the external world? We can't get outside of our sense data and compare them with the external world. All we can do is get more sense data. So how can we know what the external world is like in itself? Locke put the problem this way:

> 'Tis evident that the mind knows not things immediately, but only by the intervention of the ideas [sense data] it has of them. Our knowledge, therefore, is real only so far as there is conformity between our ideas and the reality of things. But what shall be here the criterion? How shall the mind when it perceives but its own ideas, know that they agree with things themselves?[51]

On the sense data theory, it seems that we're trapped behind a "veil of ideas." How, Locke asks, can we lift the veil and come to know things as they are in themselves? This is the problem of the external world.

Representative Realism

Locke believes that we can lift the veil of ideas by recognizing (1) that our sensations are caused by external objects and (2) that at least some of our ideas (sense data) resemble the qualities of those objects. This view is often referred to as **representative realism.** Like direct realism, it maintains that there is a world that exists independently of our minds, but unlike direct realism, it maintains that our knowledge of that world is indirect; it is mediated by our sense data.

sense data The objects that are immediately known in sensation.

representative realism The doctrine that sensations are caused by external objects and that our sensations represent those objects.

In support of the first claim, Locke offers a number of considerations:

- "Those that want the organs of any sense never can have the ideas belonging to that sense."[52] For example, those who are blind from birth can never acquire the idea of color. Similarly, those who have never had certain sensations can never have the sense data associated with them.

For example, those who have never tasted a pineapple can never know what a pineapple tastes like.

- "Sometimes I find that I cannot avoid having those ideas produced in my mind."[53] The sense data that we receive does not seem to be up to us. If we look at the sun, for example, we cannot help but see bright light.
- "Many of those ideas are produced in us with pain, which afterwards we remember without the least offense."[54] There seems to be a real difference between the ideas that come from outside and those that come from inside. The ones that seem to be generated by external objects have much more force and vivacity than those generated by internal objects such as memories.
- "Our senses in many cases bear witness to the truth of each other's report concerning the existence of sensible things without us."[55] The information that we receive from various senses is usually complementary. The thing that looks like a fire feels hot, for example.

The best explanation of these facts, says Locke, is that our sensations are produced by external objects. "Thus the certainty of things existing *in rerum natura*, when we have the testimony of our senses for it, is not only as great as our frame can attain to, but as our condition needs."[56] It's not absolutely certain that sense data are caused by external objects because it's logically possible that we're dreaming. But even if it's not true beyond a shadow of a doubt, it's true beyond a reasonable doubt because the hypothesis that sense data are caused by external objects provides a better explanation of the data than the hypothesis that we're dreaming.

Thought Probe

Hypothesizing the External World

Do you agree with Locke that the hypothesis of an external world provides the best explanation of our sense data? Compare that hypothesis and the dream hypothesis in terms of the criteria of adequacy. Which does better with regard to simplicity, scope, conservatism, and fruitfulness?

If successful, however, all Locke's argument shows is that our sensations are caused by external objects. By itself, it tells us nothing about the nature of those objects. Locke maintains, however, that further reflection on the nature of our sense data reveals that some actually resemble the qualities of external objects. Thus we can have knowledge of the external world because some of our sense data conform to the qualities of external objects.

External objects have the power of producing sense data. They have this power in virtue of possessing certain qualities. But not every sense datum resembles a quality in an external object. For example, if we dip one of our hands in a cold bucket of water and the other in a warm bucket of water, and

then dip both of them into a lukewarm bucket of water, the lukewarm bucket of water will feel cold to one hand (the one that had been dipped in the warm water) and warm to the other (the one that had been dipped in the cold water). But the water in the bucket cannot be both warm and cold. So the sense data of warmth and coldness cannot resemble qualities possessed by the water. These sense data exist only in the mind, not in the water itself. Locke calls these qualities **secondary qualities.**

Even though the water does not possess the qualities of being warm or cold, it must possess qualities with the power to produce the sense data of warmth and coldness. Locke calls these qualities **primary qualities.** For Locke, they are the essential qualities of material objects, the qualities that material objects could not possibly do without. As he puts it, "Qualities thus considered in bodies are, first such as are utterly inseparable from the Body, in what estate whatsoever it be; and such as Sense constantly finds in every particle of Matter."[57] They include solidity, extension, figure, and mobility. Locke thought that these qualities really exist in objects because they can be sensed by more than one sense, and, unlike secondary qualities, they do not vary as the conditions of perception are varied.

Knowledge is what we get when an observer, preferably a scientifically trained observer, provides us with a copy of reality that we can all recognize.

—CHRISTOPHER LASCH

To get a better idea of what Locke is getting at with this distinction, consider the qualities that physicists attribute to the basic building blocks of matter: subatomic particles. They are solid (insofar as they do not contain gaps like a sponge), they have extension (insofar as they occupy space), they have figure (insofar as they have a shape), and they have mobility (insofar as they are in motion). Modern physics also attributes a number of other qualities to them, such as mass, charge, and spin. But notice that nowhere in this list are qualities such as color, taste, and sound. Modern physicists agree with Locke that these qualities are not possessed by the subatomic particles themselves. Individual electrons, for example, do not have a particular color, taste, or sound. These secondary qualities come into existence only when groups of particles interact with our sense organs.

Locke's representative realism solves the problem of the external world by claiming that some of our sense data—namely, those corresponding to primary qualities—actually resemble qualities of material objects. So at least part of our sense experience gives us an accurate picture of how material objects are in themselves.

Phenomenalism

Bishop George Berkeley (1685–1753) agrees with Locke that we directly perceive sense data. But he disagrees that the best explanation of our sense data is that they are caused by material objects. In his view, sense data are caused by God! To see how Berkeley arrived at this view, we can begin with his criticism of Locke.

secondary qualities Qualities that exist in the mind but not in material objects themselves.

primary qualities Qualities possessed by material objects.

Berkeley rejected Locke's distinction between primary and secondary qualities because he believed that primary qualities are just as variable as secondary qualities.

> . . . [A]fter the same manner as modern philosophers prove certain sensible qualities to have no existence in matter, or without the mind, the same thing may be likewise proved of all other sensible qualities whatsoever. Thus, for instance, it is said that heat and cold are affectations only of the mind, and not at all patterns of real beings existing in the corporeal substances which excite them, for that the same body which appears cold to one hand seems warm to another. Now, why may we not as well argue that figure and extension are not patterns or resemblances of qualities existing in matter, because to the same eye at different stations, or eyes of a different texture at the same station, they appear various and cannot, therefore, be the images of anything settled and determinate without the mind?[58]

The idealist deals with facts as much as with reality. He merely sees them differently.
—MARGARET HALSEY

Just as what feels warm to one hand can feel cold to another, Berkeley claims that what looks round from one angle can look elliptical from another. Primary qualities can differ depending on the conditions of perception just as much as secondary qualities do. So there is no reason to think that they are not in the mind, too.

But more important than his rejection of the distinction between primary and secondary qualities is Berkeley's rejection of the existence of material objects. Berkeley thought that our sensations could not be caused by material objects because material objects could not exist. The notion of a material object, he thought, was a contradiction in terms. We know that there are no married bachelors or round squares because such notions are self-contradictory—they violate the law of noncontradiction and thus cannot possibly exist. Berkeley thought that the notion of a material object was similarly self-contradictory. Here's the thought experiment that he used to prove his point.

Thought Experiment

The Inconceivability of the Unconceived

> But, say you, surely there is nothing easier than for me to imagine trees, for instance, in a park, or books existing in a closet, and nobody by to perceive them. I answer, you may so, there is no difficulty in it; but what is all this, I beseech you, more than framing in your mind certain ideas which you call books and trees, and at the same time omitting to frame the idea of any one that may perceive them? But do not you yourselves perceive or think of them all the while? This therefore is nothing to the purpose: it only shows you have the power of imagining or forming ideas in your mind; but it does not show that you can conceive it possible the objects of your thought may exist without the mind. To make out this, it is necessary that you conceive them existing unconceived or unthought of, which is a manifest repugnancy. When we do our utmost to conceive the existence of external bodies, we are all the while only contemplating our own ideas. But the mind taking no notice of itself, is deluded to think it can and does conceive bodies existing unthought of or without the mind, though at the same time they are apprehended by or exist in itself. A little attention will discover to any one the truth and evidence of what is here said, and make it unnecessary to insist on any other proof against the existence of material substance.[59]

We ordinarily suppose not only that material objects cause our sensations but also that they continue to exist when no one is thinking about them. But Berkeley claims that this cannot be the case because it's impossible to conceive of something's existing unconceived.

Try it yourself. Try thinking about an object that is not being thought about. Berkeley says you can't do it because the minute you think about it, it's no longer not being thought about. But material objects are supposed to be able to exist without anyone's thinking about them. So if we cannot conceive an object's existing unconceived, Berkeley claims, material objects cannot exist.

Even though Berkeley doesn't believe that there are any material objects, he doesn't recommend that we stop talking about them. Instead, he proposes that we understand our talk about them in a new way. When we claim that a material object is present, what we mean is that we have experienced a certain pattern of sensations. For Berkeley, then, material objects are nothing but recurring patterns of sensations.

Berkeley uses the example of a cherry to make his point:

> I see this cherry, I feel it, I taste it, and I am sure *nothing* cannot be seen or felt or tasted; it is therefore *real*. Take away the sensation of softness, moisture, redness, tartness, and you take away the cherry. Since it is not a being distinct from sensations, a cherry, I say, is nothing but a congeries of sensible impressions, or ideas perceived by the various senses, which ideas are united into one thing (or have one name given them) by the mind because they are observed to attend each other. Thus, when the palate is affected with such a particular taste, the sight is affected with a red color, the touch with roundness, softness, etc. Hence, when I see and feel and taste in sundry certain manners, I am sure the cherry exists or is real, its reality being in my opinion nothing abstracted from those sensations. But if by the word "cherry" you mean an unknown nature distinct from all those sensible qualities, and by its "existence" something distinct from its being perceived, then, indeed, I own neither you nor I, nor anyone else, can be sure it exists.[60]

Whenever we have certain sensations, we believe that a cherry is present. We can be mistaken, however. If we have the sensation of reaching for the cherry and our hand passes right through it, we know it's not a real cherry. What determines whether a perceived object is real, then, is not whether it corresponds to a material object but whether the sensations associated with it fit a particular pattern.

The view that statements about physical objects are reducible to statements about sensations is known as **phenomenalism.** In this view, to say "There is a tree in front of me" is equivalent to saying "If I were to have reaching-out sensations, I would have hardness sensations; if I were to have kicking sensations, I would have pain-in-the-toe sensations; . . ." and so on for every possible action. Phenomenalism, then, is the reverse of behaviorism. Whereas behaviorism tries to reduce talk about mental states to talk about material objects, phenomenalism tries to reduce talk about material objects to talk about mental states. Twentieth-century empiricists, particularly logical positivists, found this view appealing because it provided an elegant solution to the

phenomenalism
The view that all talk of things is reducible to talk of sensations.

George Berkeley: The Ultimate Empiricist

Some philosophers produce interesting theories but they themselves are fairly dull. George Berkeley (1685–1753) was not one of those. He produced an entirely original and exasperating (to some) view of the world known as "idealism"—but he also was a fascinating character in his own right.

He was born in Kilkenny, Ireland, and educated at Trinity College in Dublin. He graduated at age nineteen, was given a fellowship there in 1707, and proceeded to produce his greatest works—all during his twenties. He wrote *A Treatise Concerning the Principles of Human Knowledge* in 1710 and *Three Dialogues between Hylas and Philonous* in 1713. In 1709 he published a work, not of philosophy, but of psychology—"An Essay Towards a New Theory of Vision." His theory of vision became the definitive view of the subject and remained so for almost two hundred years.

His passion was the promotion of education in the New World. He wanted to establish a college in Bermuda for the Christian education of the people of America, and the Crown had promised him the funds to do just that. But the money never came, and he spent three years in Rhode Island waiting for it. He bequeathed his library and estate in Rhode Island to Yale University, where one of the colleges is named after him. Berkeley, California, also got its name from this Irish philosopher who lived most of his life half a world away.

Berkeley returned to London in 1732, and in 1734 he was made Bishop of Cloyne. For most of the rest of his life he tended to his duties as a cleric, publishing mostly works benefiting his flock.

Berkeley's reputation as a philosophical idealist followed him through the years and caused controversy and consternation everywhere. Samuel Johnson, the most famous man of letters in the eighteenth century, ridiculed his theory. The story is told of a philosopher who argued so strenuously with Berkeley that he suffered a fit of apoplexy and died. The tale is probably false, but it is easy to imagine some learned folks becoming incensed with Berkeley's counterintuitive idealism—especially since he claimed that his view was just common sense.

BISHOP BERKELEY
(1685–1753)

problem of the external world. If material objects were nothing but patterns of sensations, then the problem of how we can know whether our sensations accurately represent the world could no longer arise. Phenomenalism closes the gap between appearance and reality by denying that the gap exists.

Sensations cannot exist without a mind to have them. Because Berkeley's objects are patterns of sensations, it follows that they cease to exist when no one is thinking about them. This view strikes many people as extremely odd because they believe that objects continue to exist whether or not they are in anyone's thoughts.

Suppose you leave a fire in a fireplace and come back a few hours later to find a heap of smoldering embers. Doesn't that prove that objects can exist without being observed? Not according to Berkeley. What you've experienced is just a typical pattern of fire sensations. There is no reason to suppose that in addition to the fire sensations there is also a material fire.

The classic philosophical conundrum—If a tree falls in the forest and no one is around to hear it, does it make a sound?—is often associated with Berkeley. It is commonly believed that Berkeley would answer no to this question. But Berkeley would not respond to this question because it is based on an assumption that he rejects—namely, that objects can exist unperceived. If there were no one around to hear a tree fall, there would be no tree in the first place. So the question makes no sense.

Reality is that which refuses to go away when I stop believing in it.
—PHILLIP K. DICK

Legend has it that when Samuel Johnson first heard Berkeley's theory he exclaimed, "I refute it thus!" and kicked a rock. But of course this doesn't refute Berkeley at all. Berkeley doesn't deny that usually when we have the sensation of kicking something that looks like a rock, we have the sensation of stubbing our toe. What he denies is that this recurrent pattern of sensation is best explained on the hypothesis that material objects exist. In his view, it is best explained on the assumption that God creates these sensations.

We do not produce our own sensations. What we sense is not up to us. So our sensations must be caused by something outside of us. According to Berkeley, that something is God. In his view, we are all telepathically linked to God, and God puts all of our sensations directly into our minds. Berkeley's God, then, functions just like Descartes' evil genius. But Berkeley does not consider his God to be evil, for he is not deluding us about the nature of reality; he is creating it.

Berkeley's view that God is the source of all of our sensations inspired Monsignor Ronald Knox to pen the following limerick:

There was a young man who said "God
Must think it exceedingly odd
If he finds that this tree
Continues to be
When there's no one about in the quad."

Reply:
Dear Sir: Your astonishment's odd
I am always about in the quad
And that's why the tree
Will continue to be
Since observed by
Yours faithfully,
God.[61]

According to Berkeley, things exist only as long as they are being thought about. That would seem to imply that things cease to exist when we stop thinking about them. But we are not the only beings that think about things. God does too. So things may continue to exist when we're not thinking about them as long as God is thinking about them.

Berkeley thought that his view refuted skepticism and proved the existence of God. It refuted skepticism by closing the gap between appearance and reality. In Berkeley's system, the question of whether our sensations accurately represent external objects does not arise because there are no external objects—objects are just collections of ideas. It proves the existence of God by showing that God is the best explanation of our sense experience.

Although Berkeley thought that his system proved the existence of the Christian God, it does no such thing. In the first place, it gives us no reason for believing that the cause of our sensations is all-powerful, all-knowing, or all-good. Second, it gives us no reason for believing that our sensations are caused by one being. Maybe different kinds of sensations are caused by

different kinds of spirits. So even if we accept a supernatural cause of our sensations, there is no need to identify it with the Christian God.

But must our sensations have a supernatural cause? If they can't be caused by material objects (because material objects cannot exist), it might seem that there is no other alternative. But Berkeley's rejection of material objects is questionable.

Berkeley claims that it's impossible for something to exist unconceived. This could mean one of two things: (a) that it's not possible to conceive *of* something that is unconceived or (b) that it's not possible to conceive *that* something exists unconceived. In the first case, our thought is directed on an object; in the second, on a proposition. (a) is undoubtedly true. If something is being conceived (thought about) by someone, it cannot also be unconceived (not thought about). But (b) is false. You can believe the proposition that something exists unconceived without thereby thinking about any particular object. When you believe that something exists unconceived, the object of your belief—what your belief is about—is the *proposition* that something exists unconceived, not some individual thing. So believing that something exists unconceived is logically possible because it doesn't involve attributing both a property and its negation to anything. Consequently, the notion of a material object is not self-contradictory.

The question now becomes, Which is the better explanation of our sensations? That they are produced by God or by material objects? We have seen that, in general, natural explanations are preferable to supernatural ones because supernatural explanations usually raise more questions than they answer. Berkeley's theory raises a number of them. How is the mind link established? What sort of energy carries thoughts from God's mind to ours? Why does God choose the particular sensations he does? Why do some people get good sensations and others get bad ones? A theory that raises more questions than it answers, however, does not increase our understanding. Alan Goldman puts the point this way:

> . . . [S]everal other standard criteria for evaluating explanations disqualify appeals to the supernatural despite their seeming theoretical depth.
>
> First, such appeal does not really deepen our understanding . . . since we have no conception of the mechanism or the precise link between the supposed divine intentions and their effects. This, coupled with the lack of predictive power, renders the appeal epistemically sterile. Not only would our understanding not be deepened by such an explanation, not only would no natural questions be answered, but many more would arise without possibility of answer.[62]

Berkeley's appeal to God as the cause of our sensations would be justified if it provided the best explanation of our sense experience. But it doesn't. It is inconsistent with established views about the cause of our sensations, and it is more complex than the materialist hypothesis in that it postulates supernatural beings. So Berkeley's theory lacks the virtues of conservatism and simplicity. It also lacks the virtue of fruitfulness. It has not successfully predicted any new phenomena or solved any problems it was not intended to solve. The materialist theory, on the other hand, has innumerable successful predictions

to its credit. Because Berkeley's theory does not provide the best explanation of perception, we're not justified in believing it.

But what if we remove God from Berkeley's theory? What if we simply say that objects are patterns of sensation and leave it at that? Explanation has to stop somewhere. If we took patterns of sensations as a brute facts without trying to explain where they come from, we could at least defeat the skeptic and simplify our theory of what exists. Unfortunately, phenomenalism can't even claim these benefits, because material objects can't be reduced to patterns of sensations.

Consider the phenomenalist claim that to say that there is a tree in front of you is to say that "if you were to have reaching-out sensations, you would have hardness sensations; if you were to have kicking sensations, you would have pain-in-the-toe sensations; . . ." and so on for every possible action. From the fact that there is a tree in front of you, does it follow that if you had reaching-out sensations, you would have hardness sensations? No, because you might be on drugs, your nervous system might be wired wrong, you might be having a seizure, or the like. What you sense is determined by the state of your body at the time. If your body is in an abnormal state, your sensory patterns may also be abnormal. In order to make the sentence about sensations equivalent to the sentence about mental states, we would have to preface it with the statement "If your body were in a normal state. . . ." But now we no longer have a reduction because the statement about sensations contains a reference to bodies. Statements about material objects are not reducible to statements about sensations, because we cannot translate all statements that refer to material objects into statements that refer only to sensations. So even a godless phenomenalism won't do.

It looks like the best explanation of perception is the one provided by science. There are material objects in the world. These material objects have certain intrinsic qualities identified by the physical sciences. When these objects interact with our sense organs, they produce certain sensations. To have knowledge of the external world, our sensations don't have to resemble the qualities of the objects that produce them. All we need to know is what properties produce what sensations in what circumstances. And science gives us that knowledge.

Summary

Direct realism claims that we perceive objects directly, without the intermediary of any ideas. The argument from illusion, however, suggests that we're not directly aware of the external world. Our perception of the external world seems to be mediated by our sensations.

Representative realism holds that our sensations are caused by material objects and that some of our sensations resemble the qualities of those material objects. The sensations that resemble the qualities of objects are known as primary qualities, whereas those that exist only in the mind are known as

secondary qualities. All of our sensations can vary depending on the conditions under which they're produced, so it doesn't seem that the distinction between primary and secondary qualities is a viable one.

Berkeley not only rejects the distinction between primary and secondary qualities, he also rejects the notion that our sensations are caused by material objects. According to him, minds and their contents are all that really exist. Objects are just patterns of sensations. For them to exist, they must be perceived. To be is to be perceived. Berkeley tries to show that the whole idea of our sensations representing material objects is incoherent. The notion that material objects continue to exist when we're not thinking of them is incoherent, Berkeley says, because it's impossible to conceive of something's existing unconceived. He says that the best explanation of our recurrent patterns of sensations is not that material objects exist, but that God puts those sensations in our minds.

But there is nothing incoherent about the proposition that something exists unconceived. It is logically possible for matter to exist. Furthermore, the better (simpler, more conservative, more fruitful) explanation of our sensations is not that God produced them, but that material objects produced them.

Study Questions

1. What is direct realism?
2. What is the argument from illusion?
3. What is representative realism?
4. What is the distinction between primary and secondary qualities?
5. What is phenomenalism?
6. Why does Berkeley believe that sensations can't represent material objects?
7. Why does Berkeley believe that it's impossible for material objects to exist?

Discussion Questions

1. Do you think that the argument from illusion requires the postulation of sense data? Are there other ways of accounting for illusions?
2. Is there any difference between a perfect illusion and the real thing? If so, what is that difference?
3. Must a representative realist believe that some sense data actually resemble the qualities of material objects? Is it enough if the sense data just represent the qualities of material objects? Why or why not?
4. Can Berkeley's phenomenalism account for hallucinations? If ideas are all that exists, how could a hallucination be distinguished from an ordinary perception?

Internet Inquiries

1. Solipsism is the view that one's own mind is all that can be known to exist. Can you know otherwise? To explore the issue, go to **http://www.iep.utm.edu/s/solipsis.htm.**
2. Are we justified in believing that there is such a thing as extrasensory perception (ESP)? To explore this issue, enter "esp," "evidence," and "knowledge" into an Internet search engine.
3. Some who deny that there is a world existing independently of our minds are scientists who work in the branch of physics known as quantum mechanics, which studies subatomic particles. On the subatomic level (the quantum realm), particles behave strangely. For example, they don't acquire some of their characteristics until they are observed. Such odd facts have prompted some quantum physicists to reject the notion that the world is made up of objects that exist independently of human consciousness. These antirealists ask, in effect, "Does the moon exist when someone isn't looking at it?" Other scientists and philosophers, the realists, think this antirealist view is profoundly mistaken. For a brief review of the controversy and of some of the arguments on both sides, see **http://www.sfu.ca/content/dam/sfu/philosophy/docs/bradley/moon.pdf** Which arguments do you find most plausible? Are you a realist or an antirealist? Why?

Section 7.3

What Do You Know?

Knowing What Knowledge Is

Ignorance is the curse of God; knowledge is the wing wherewith we fly to heaven.

—WILLIAM SHAKESPEARE

So, it seems, we can acquire knowledge of the external world by means of the senses. But what is knowledge? As we saw at the beginning of the chapter, knowledge has traditionally been taken to be true belief that is based on reason. True belief, by itself, doesn't count as knowledge because a true belief could be a lucky guess. What grounds our beliefs in reality and promotes them to the status of knowledge is the reasons we have for them. If the reasons are good ones, the beliefs they support are justified. Thus knowledge has traditionally been defined as justified true belief.

This account of knowledge was accepted for millennia. But in 1963, a surprising thing happened. Edmund Gettier, an unpublished philosophy professor, developed some thought experiments that seemed to undermine the traditional account. Gettier's thought experiments suggest that although justified true belief is necessary for knowledge, it's not sufficient; you can have justified true belief without having knowledge. This was a startling discovery, and epistemologists have spent the last forty-five years trying to come up with a theory of knowledge that captures its essence without falling prey to Gettier-type thought experiments.

Here's Gettier's most famous thought experiment. It's a little contrived, but just as a technically sophisticated physical experiment can reveal flaws in a well-established scientific theory, Gettier's thought experiment reveals flaws in the traditional theory of knowledge.

Thought Experiment

Gettier's Guy in Barcelona

Let us suppose that Smith has strong evidence for the following proposition:

(f) Jones owns a Ford.