

How Do We Know Anything?

by Thomas Nagel (from *What Does It All Mean?*, 1987)

If you think about it, the inside of your own mind is the only thing you can be sure of.

Whatever you believe—whether it's about the sun, moon, and stars, the house and neighborhood in which you live, history, science, other people, even the existence of your own body—is based on your experiences and thoughts, feelings and sense impressions. That's all you have to go on directly, whether you see the book in your hands, or feel the floor under your feet, or remember that George Washington was the first president of the United States, or that water is H₂O. Everything else is farther away from you than your inner experiences and thoughts, and reaches you only through them.

Ordinarily you have no doubts about the existence of the floor under your feet, or the tree outside the window, or your own teeth. In fact most of the time you don't even think about the mental states that make you aware of those things: you seem to be aware of them directly. But how do you know they really exist?

If you try to argue that there must be an external physical world, because you wouldn't see buildings, people, or stars unless there were things out there that reflected or shed light into your eyes and caused your visual experiences, the reply is obvious: How do you know that? It's just another claim about the external world and your relation to it, and it has to be based on the evidence of your senses. *But you can rely on that specific evidence about how visual experiences are caused only if you can already rely in general on the contents of your mind to tell you about the external world. And that is exactly what has been called into question.* If you try to prove the reliability of your impressions by appealing to your impressions, you're arguing in a circle and won't get anywhere.

Would things seem any different to you if in fact all these things existed *only* in your mind—if everything you took to be the real world outside was just a giant dream or hallucination, from which you will never wake up? If it were like that, then of course you *couldn't* wake up, as you can from a dream, because it would mean there was no "real" world to wake up into. So it wouldn't be exactly like a normal dream or hallucination. As we usually think of dreams, they go on in the minds of people who are actually lying in a real bed in a real house, even if in the dream they are running away from a homicidal lawnmower through the streets of Kansas City. We also assume that normal dreams depend on what is happening in the dreamer's brain while he sleeps.

But couldn't all your experiences be like a giant dream with *no* external world outside it? How can you know that isn't what's going on? If all your experience were a dream with nothing outside, then any evidence you tried to use to prove to yourself that there was an outside world would just be part of the dream. If you knocked on the table or pinched yourself, you would hear the knock and feel the pinch, but that would be just one more thing going on inside your mind like everything else. It's no use: If you want to find out whether what's inside your mind is any guide to what's outside your mind, you can't depend on how things *seem*—from inside your mind—to give you the answer.

But what else is there to depend on? All your evidence about anything has to come through your mind—whether in the form of perception, the testimony of books and other people, or memory—and it is entirely consistent with everything you're aware of that *nothing at all* exists except the inside of your mind.

It's even possible that you don't have a body or a brain—since your beliefs about that come only through the evidence of your senses. You've never seen your brain—you just assume that everybody has one—but even if you had seen it, or thought you had, that would have been just another visual experience. Maybe *you*, the subject of experience, are the only thing that exists, and there is no physical world at all—no stars, no earth, no human bodies. Maybe there isn't even any space.

The most radical conclusion to draw from this would be that your mind *is* the only thing that exists. This view is called solipsism. It is a very lonely view, and not too many people have held it. As you can tell from that remark, I don't hold it myself. If I were a solipsist I probably wouldn't be writing this book, since I wouldn't believe there was anybody else to read it. On the other hand, perhaps I would write it to make my inner life more interesting, by including the impression of the appearance of the book in print, of other people reading it and telling me their reactions, and so forth. I might even get the impression of royalties, if I'm lucky.

Perhaps you are a solipsist: in that case you will regard this book as a product of your own mind, coming into existence in your experience as you read it. Obviously nothing I can say can prove to you that I really exist, or that the book as a physical object exists.

On the other hand, to conclude that you are the only thing that exists is more than the evidence warrants. You can't *know* on the basis of what's in your mind that there's no world outside it. Perhaps the right conclusion is the more modest one that you don't know anything beyond your impressions and experiences. There may or may not be an external world, and if there is it may or may not be completely different from how it seems to you—there's no way for you to tell. This view is called skepticism about the external world.

An even stronger form of skepticism is possible. Similar arguments seem to show that you don't know anything even about your own past existence and experiences, since all you have to go on are the present contents of your mind, including memory impressions. If you can't be sure that the world outside your mind exists *now*, how can you be sure that you yourself existed *before* now? How do you know you didn't just come into existence a few minutes ago, complete with all your present memories? The only evidence that you couldn't have come into existence a few minutes ago depends on beliefs about how people and their memories are produced, which rely in turn on beliefs about what has happened in the past. But to rely on those beliefs to prove that you existed in the past would again be to argue in a circle. You would be assuming the reality of the past to prove the reality of the past.

It seems that you are stuck with nothing you can be sure of except the contents of your own mind at the present moment. And it seems that anything you try to do to argue your way out of this predicament will fail, because the argument will have to assume what you are trying to prove—the existence of the external world beyond your mind.

Suppose, for instance, you argue that there must be an external world, because it is incredible that you should be having all these experiences without there being *some* explanation in terms of external causes. The skeptic can make two replies. First, even if there are external causes, how can you tell from the contents of your experience what those causes are like? You've never observed any of them directly. Second, what is the basis of your idea that everything has to have an explanation? It's true that in your normal, non-philosophical conception of the world, processes like those which go on in your mind are caused, at least in part, by other things outside them. But you can't assume that this is true if what you're trying to figure out is how you know *anything* about the world outside your mind. And there is no way to prove such a principle just by looking at what's *inside* your mind. However plausible the principle may seem to you, what reason do you have to believe that it applies to the world?

Science won't help us with this problem either, though it might seem to. In ordinary scientific thinking, we rely on general principles of explanation to pass from the way the world first seems to us to a different conception of what it is really like. We try to explain the appearances in terms of a theory that describes the reality behind them, a reality that we can't observe directly. That is how physics and chemistry conclude that all the things we see around us are composed of invisibly small atoms. Could we argue that the general belief in the external world has the same kind of scientific backing as the belief in atoms?

The skeptic's answer is that the process of scientific reasoning raises the same skeptical problem we have been considering all along: Science is just as vulnerable as perception. How can we know that the world outside our

minds corresponds to our ideas of what would be a good theoretical explanation of our observations? If we can't establish the reliability of our sense experiences in relation to the external world, there's no reason to think we can rely on our scientific theories either. ...

And yet, after all this has been said, I have to admit it is practically impossible to believe seriously that all the things in the world around you might not really exist. Our acceptance of the external world is instinctive and powerful: we cannot just get rid of it by philosophical arguments. Not only do we go on acting *as if* other people and things exist: we *believe* that they do, even after we've gone through the arguments which appear to show we have no grounds for this belief. (We may have grounds, within the overall system of our beliefs about the world, for more particular beliefs about the existence of particular things: like a mouse in the breadbox, for example. But that is different. It assumes the existence of the external world.) If a belief in the world outside our minds comes so naturally to us, perhaps we don't need grounds for it. We can just let it be and hope that we're right. And that in fact is what most people do after giving up the attempt to prove it: even if they can't give reasons against skepticism, they can't live with it either.

But this means that we hold on to most of our ordinary beliefs about the world in face of the fact that (a) they might be completely false, and (b) we have no basis for ruling out that possibility. We are left then with three questions:

1. Is it a meaningful possibility that the inside of your mind is the only thing that exists—or that even if there is a world outside your mind, it is totally unlike what you believe it to be?
2. If these things are possible, do you have any way of proving to yourself that they are not actually true?
3. If you can't prove that anything exists outside your own mind, is it all right to go on believing in the external world anyway?

Other Minds

by Thomas Nagel (from *What Does It All Mean?*, 1987)

There is one special kind of skepticism which continues to be a problem even if you assume that your mind is not the only thing there is—that the physical world you seem to see and feel around you, including your own body, really exists. That is skepticism about the nature or even existence of minds or experiences other than your own.

How much do you really know about what goes on in anyone else's mind? Clearly you observe only the bodies of other creatures, including people. You watch what they do, listen to what they say and to the other sounds they make, and see how they respond to their environment—what things attract them and what things repel them, what they eat, and so forth. You can also cut open other creatures and look at their physical insides, and perhaps compare their anatomy with yours.

But none of this will give you direct access to their experiences, thoughts, and feelings. The only experiences you can actually have are your own: if you believe anything about the mental lives of others, it is on the basis of observing their physical construction and behavior.

To take a simple example, how do you know, when you and a friend are eating chocolate ice cream, whether it tastes the same to him as it tastes to you? You can try a taste of his ice cream, but if it tastes the same as yours, that only means it tastes the same *to you*: you haven't experienced the way it tastes *to him*. There seems to be no way to compare the two flavor experiences directly.

Well, you might say that since you're both human beings, and you can both distinguish among flavors of ice cream—for example you can both tell the difference between chocolate and vanilla with your eyes closed—it's likely that your flavor experiences are similar. But how do you know *that*? The only connection you've ever observed between a type of ice cream and a flavor is in your own case; so what reason do you have to think that similar correlations hold for other human beings? Why isn't it just as consistent with all the evidence that chocolate tastes to him the way vanilla tastes to you, and vice versa?

The same question could be asked about other kinds of experience. How do you know that red things don't look to your friend the way yellow things look to you? Of course if you ask him how a fire engine looks, he'll say it looks red, like blood, and not yellow, like a dandelion; but that's because he, like you, uses the word "red" for the color that blood and fire engines look to him, *whatever* it is. Maybe it's what you call yellow, or what you call blue, or maybe it's a color experience you've never had, and can't even imagine.

To deny this, you have to appeal to an assumption that flavor and color experiences are uniformly correlated with certain physical stimulations of the sense organs, whoever undergoes them. But the skeptic would say you have no evidence for that assumption, and because of the kind of assumption it is, you *couldn't* have any evidence for it. All you can observe is the correlation in your own case.

Faced with this argument, you might first concede that there is some uncertainty here. The correlation between stimulus and experience may not be exactly the same from one person to another: there may be slight shades of difference between two people's color or flavor experience of the same type of ice cream. In fact, since people are physically different from one another, this wouldn't be surprising. But, you might say, the difference in experience can't be too radical, or else we'd be able to tell. For instance, chocolate ice cream couldn't taste to your friend the way a lemon tastes to you, otherwise his mouth would pucker up when he ate it.

But notice that this claim assumes another correlation from one person to another: a correlation between inner experience and certain kinds of observable reaction. And the same question arises about that. You've observed the connection between puckering of the mouth and the taste you call sour only in your own case: how do you know it exists in other people? Maybe what makes your friend's mouth pucker up is an experience like the one you get from eating oatmeal.

If we go on pressing these kinds of questions relentlessly enough, we will move from a mild and harmless skepticism about whether chocolate ice cream tastes exactly the same to you and to your friend, to a much more radical skepticism about whether there is *any* similarity between your experiences and his. How do you know that when he puts something in his mouth he even has an experience of the kind that you would call a *flavor*? For all you know, it could be something you would call a sound—or maybe it's unlike anything you've ever experienced, or could imagine.

If we continue on this path, it leads finally to the most radical skepticism of all about other minds. How do you even know that your friend is conscious? How do you know that there are *any minds at all* besides your own?

The only example you've ever directly observed of a correlation between mind, behavior, anatomy, and physical circumstances is yourself. Even if other people and animals had no experiences whatever, no mental inner life of any kind, but were just elaborate biological machines, they would look just the same to you. So how do you know that's not what they are? How do you know that the beings around you aren't all mindless robots? You've never seen into their minds—you couldn't—and their physical behavior could all be produced by purely physical causes. Maybe your relatives, your neighbors, your cat and your dog have *no inner experiences whatever*. If they don't, there is no way you could ever find it out.

You can't even appeal to the evidence of their behavior, including what they say—because that assumes that in them outer behavior is connected with inner experience as it is in you; and that's just what you don't know.

To consider the possibility that none of the people around you may be conscious produces an uncanny feeling. On the one hand it seems conceivable, and no evidence you could possibly have can rule it out decisively. On the other hand it is something you can't *really* believe is possible: your conviction that there are minds in those bodies, sight behind those eyes, hearing in those ears, etc., is instinctive. But if its power comes from instinct, is it really knowledge? Once you admit the *possibility* that the belief in other minds is mistaken, don't you need something more reliable to justify holding on to it?

There is another side to this question, which goes completely in the opposite direction.

Ordinarily we believe that other human beings are conscious, and almost everyone believes that other mammals and birds are conscious too. But people differ over whether fish are conscious, or insects, worms, and jellyfish. They are still more doubtful about whether one-celled animals like amoebae and paramecia have conscious experiences, even though such creatures react conspicuously to stimuli of various kinds. Most people believe that plants aren't conscious; and almost no one believes that rocks are conscious, or kleenex, or automobiles, or mountain lakes, or cigarettes. And to take another biological example, most of us would say, if we thought about it, that the individual cells of which our bodies are composed do not have any conscious experiences.

How do we know all these things? How do you know that when you cut a branch off a tree it doesn't hurt the tree—only it can't express its pain because it can't move? (Or maybe it *loves* having its branches pruned.) How do you know that the muscle cells in your heart don't feel pain or excitement when you run up a flight of stairs? How do you know that a kleenex doesn't feel anything when you blow your nose into it?

And what about computers? Suppose computers are developed to the point where they can be used to control robots that look on the outside like dogs, respond in complicated ways to the environment, and behave in many ways just like dogs, though they are just a mass of circuitry and silicon chips on the inside? Would we have any way of knowing whether such machines were conscious?

These cases are different from one another, of course. If a thing is incapable of movement, it can't give any behavioral evidence of feeling or perception. And if it isn't a natural organism, it is radically different from us in internal constitution. But what grounds do we have for thinking that only things that behave like us to some degree and that have an observable physical

structure roughly like ours are capable of having experiences of *any* kind? Perhaps trees feel things in a way totally different from us, but we have no way of finding out about it, because we have no way of discovering the correlations between experience and observable manifestations or physical conditions in their case. We could discover such correlations only if we could observe both the experiences and the external manifestations together: but there is no way we can observe the experiences directly, except in our own case. And for the same reason there is no way we could observe the *absence* of any experiences, and consequently the absence of any such correlations, in any other case. You can't tell that a tree has no experience, by looking inside it, any more than you can tell that a worm *has* experience, by looking inside it.

So the question is: what can you really know about the conscious life in this world beyond the fact that you yourself have a conscious mind? Is it possible that there might be much less conscious life than you assume (none except yours), or much more (even in things you assume to be unconscious)?