

# How do I know I exist?

IN A nutshell, you don't.

Philosopher René Descartes hit the nail on the head when he wrote "cogito ergo sum". The only evidence you have that you exist as a self-aware being is your conscious experience of thinking about your existence. Beyond that you're on your own. You cannot access anyone else's conscious thoughts, so you will never know if they are self-aware.

That was in 1644 and little progress has been made since. If anything, we are even less sure about the reality of our own existence.

It is not so long ago that computers became powerful enough to let us create alternative worlds. We have countless games and simulations that are, effectively, worlds within our world. As technology improves, these simulated worlds will become ever more sophisticated. The "original" universe will eventually be populated by a near-infinite number of advanced, virtual civilisations. It is hard to imagine that they will not contain autonomous, conscious beings. Beings like you and me.

According to Nick Bostrom, a philosopher at the University of Oxford who first made this argument, this simple fact makes it entirely plausible that our reality is in fact a simulation run by entities from a more advanced civilisation.

How would we know? Bostrom points out that the only way we could be sure is if a message popped up in front of our eyes saying: "You are living in a computer simulation." Or, he says, if the operators transported you to their reality (which, of course, may itself be a simulation).

Although we are unlikely to get proof, we might find some hints about our reality. "I think it might be feasible to get evidence that would at least give weak clues," says Bostrom.

Economist Robin Hanson of George Mason University in Fairfax, Virginia, is not so sure. If we did find anything out, the operators could just rewind

everything back to a point where the clue could be erased. "We won't ever notice if they don't want us to," Hanson says. Anyway, seeking the truth might even be asking for trouble. We could be accused of ruining our creators' fun and cause them to pull the plug.

## Zombie invasion

Hanson has a slightly different take on the argument. "Small simulations should be far more numerous than large ones," he says. That's why he thinks it is far more likely that he lives in a simulation where he is the only conscious, interesting being. In other words, everyone else is an extra: a zombie, if you will. However, he would have no way of knowing, which brings us back to Descartes.

Of course, we do have access to a technology that would have looked like sorcery in Descartes's day: the ability to peer inside someone's head and read their thoughts. Unfortunately, that doesn't take us any nearer to knowing whether they are sentient. "Even if you measure brainwaves, you can never know exactly what experience they represent," says psychologist Bruce Hood at the University of Bristol, UK.

If anything, brain scanning has undermined Descartes's maxim. You, too, might be a zombie. "I happen to be one myself," says Stanford University philosopher Paul Skokowski. "And so, even if you don't realise it, are you."

Skokowski's assertion is based on the belief, particularly common among neuroscientists who study brain scans, that we do not have free will. There is no ghost in the machine; our actions are driven by brain states that lie entirely beyond our control. "I think, therefore I am" might be an illusion.

So, it may well be that you live in a computer simulation in which you are the only self-aware creature. I could well be a zombie and so could you. Have an interesting day.

**Michael Brooks** ■

**"I happen to be a zombie myself and even if you don't realise it, so are you"**

