

# Consciousness: why bother?

Chris Frith

It allows us to share our experiences with others, giving us a better understanding of ourselves and the world *Chris Frith will take part in at the Royal Institution on Wednesday 7 March*



Some philosophers argue that being conscious is irrelevant to our behaviour and gives us no advantage over a 'zombie'. Photograph: Ronald Grant Archive

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**T**he collection of abilities and experiences that we call the mind emerges from the brain, so the study of the brain can provide important information about the mind. For most of the 20th century, mind-brain relationships could only be explored in people with damaged brains, typically caused by strokes or head injuries. Such damage can result in loss of consciousness, and in extreme cases coma, but more interestingly it can also result in changes in the content of consciousness.

There can be loss of some aspects of sensory experience despite the sense organs remaining

intact, and there can be novel and unusual sensory experiences such as hallucinations. For example, damage to the colour area in the visual part of the brain can result in loss of colour experience, even though the colour receptors in the eye are working normally. Furthermore, abnormal activity in this area can lead to hallucinations of colour.

Studies of patients with brain damage reveal how much can be achieved without awareness. Patients with damage to the right side of the brain ("spatial neglect") can successfully pick out the better of two objects (eg. an intact rather than a damaged house) while reporting that they cannot see any difference between them. Patients with damage to visual areas of the brain ("visual agnosia") can't recognise objects from their shape, but will adjust their hand to the shape of the object when picking it up. In these cases, information of which the patient is unaware is nevertheless sufficient to achieve a successful action.

These unconscious processes are not unique to patients with damaged brains. They can also be observed in people with intact brains. But here more subtle experiments are needed to reveal how much is going on without awareness. With the development of brain scanners in the 1990s, it became possible to observe brain activity in experiments where stimuli are presented very briefly, and where people report that they "cannot see anything".

For example, when two similar pictures are presented in rapid succession, people typically fail to detect the differences between them ("change blindness"). Nevertheless, these undetected changes elicit distinct activity in the brain.

In some situations our conscious experience is not simply absent - it is misleading. In "choice blindness" people are asked to choose which they prefer of two kinds of jam. They are then given the jam again and asked to explain why they preferred it. By trickery, on some occasions they are actually presented with the jam they had just rejected. In most cases people are unaware of the switch and then proceed to justify the "conscious" choice that they actually never made.

As in this example, we often think we are aware of what we are doing, but our introspection can be false. People can learn to solve complex problems without having any insight into how they are reaching the solution. Nevertheless, they are happy to make up some explanation for their skill.

Given that we can do so much without consciousness and given that what consciousness we have need not relate to reality, what is its value? According to some philosophers it has no value. They suggest that being conscious of what we are doing is irrelevant to our behaviour and gives us no advantage over a "zombie".

I believe that consciousness does have value. This value arises because we are able to share our conscious experiences with others. I believe that, by talking to others about our actions, we can get a better understanding of how and why we do things.

My research group has demonstrated such a value for conscious experience for people performing simple signal-detection tasks in the lab. Two people, through talking to each other about their conscious experience, can achieve better performance than either of them working on

their own.

In one such task a display of coloured dots is presented very briefly and two people are each asked to decide whether there were more red or green dots. If they disagree, they then have to come up with a joint answer. Remarkably, this joint answer is more accurate even than the single answer of the better observer of the pair.

We have showed that this advantage only appears when the partners freely discussed what they had seen and came up with a scheme for sharing their confidence in their sensory experience. Furthermore, the advantage still holds when the partners are not told whether their answers were right or wrong.

So, simply by sharing their conscious experiences, people can arrive at a more accurate view of the world.

Our consciousness is not a prison cell where we live, isolated from other minds, but a doorway into a social world where we can work together to achieve a better understanding of ourselves and the world around us.

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## **Further reading**

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