意。识新探 Consciousness

A Very Short Introduction

Susan Blackmore 著

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Contents

	List of illustrations VII		
1	Why the mystery? 1		
2	The human brain 17		
3	Time and space 33		
4	A grand illusion 50		
5	The self 66		
6	Conscious will 82		
7	Altered states of consciousness 99		
8	The evolution of consciousness	116	
	Further reading 135		
	Index 141		

目录

图目	IX	
第一章	为什么关心意识之谜?	147
第二章	人类的大脑 162	
第三章	时间与空间 177	
第四章	一个巨大的幻觉 192	
第五章	自我 207	
第六章	意识意志 222	
第七章	异常的意识状态 238	
第八章	意识的演变 254	

List of illustrations

1	The great chasm Jolyon Troscianko	2	9	The cutaneous rabbit Jolyon Troscianko	39
2	Descartes' theory of reflexes © Bettman/Corbis	5	10	Spotlight of attention Jolyon Troscianko	40
	© 2		11	Global workspace	
3	The philosopher's zombie Jolyon Troscianko	11		theory From B. Baars, 'In the theatre consciousness', Journal of Consciousness Studies, 4(4),	46 of
4	The Cartesian theatre Jolyon Troscianko	14		1997, 292–309, p. 300. Reproduced by permission	
5	Necker cube Jolyon Troscianko	22	12	Visual illusion Jolyon Troscianko	51
6	Hemifield neglect Courtesy of Peter Halligan	25	13	Finding the blind spot Jolyon Troscianko	56
	and John C. Marshall		14	Change blindness	58
7	Two visual streams	29		Sue Blackmore	
	Jolyon Troscianko		15	The Buddha © Jeremy Horner/Corbis	69
8	Blindsight	31		© Jeremy Horner/Colbis	
	Jolyon Troscianko		16	Split brain experiment Jolyon Troscianko	71

17	Teletransporter Jolyon Troscianko	74	21	The old hag Jolyon Troscianko	102
18	Brain areas involved in volition Spence, S. A. and Frith, C. D. (1999) Towards a functional	83	22	Mapping states of consciousness Jolyon Troscianko	109
	anatomy of volition. <i>Journal</i> of Consciousness Studies, 6(8-9), 11-29		23	What is it like to be a bat? Jolyon Troscianko	118
19	Libet's experiment Jolyon Troscianko	87	24	Chimp with a mirror Jolyon Troscianko	121
20	Wegner's theory of conscious will From D. Wegner, <i>The Illusion</i> of Conscious Will (MIT Press, 2002), p. 68		25	Looking in the fridge Jolyon Troscianko	130

图目

图 1. 巨大鸿沟	148	图 14. 变化盲	200
图 2. 笛卡尔的反射理论	151	图 15. 佛陀	210
图 3. 哲学家的无意识躯体		图 16. 裂脑病人的实验	212
图 4. 笛卡尔剧院	157 160	图 17. 远程运输机	214
图 5. 内克尔立方体	167	图 18. 参与意志的脑区	223
图 6. 半側忽视	169	图 19. 利贝特的实验	227
图 7. 双视觉通路	173	图 20. 魏格尔的意识意志玩	理论 236
图 8. 盲视	175	图 21. 老女巫	241
图 9. 皮肤兔子	182	图 22. 映射大脑的意识状态	<u>k</u>
图 10. 注意"探照灯"	184		248
图 11. 全局工作空间理论	189	图 23. 成为蝙蝠会有怎样体验?	羊的 256
图 12. 视幻觉	193	图 24. 照镜子的黑猩猩	259
图 13. 寻找盲点	197	图 25. 看冰箱里面	267

Chapter 1

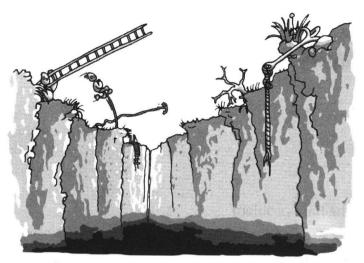
Why the mystery?

The hard problem

What is consciousness? This may sound like a simple question but it is not. Consciousness is at once the most obvious and the most difficult thing we can investigate. We seem either to have to use consciousness to investigate itself, which is a slightly weird idea, or to have to extricate ourselves from the very thing we want to study. No wonder that philosophers and scientists have struggled for millennia with the concept, and that scientists rejected the whole idea for long periods and refused even to study it. The good news is that, at the start of the 21st century, 'consciousness studies' is thriving. Psychology, biology, and neuroscience have reached the point when they are ready to confront some tricky questions: What does consciousness do? Could we have evolved without it? Could consciousness be an illusion? What is consciousness, anyway?

This does not mean that the mystery has gone away. Indeed, it is as deep as ever. The difference now is that we know enough about the brain to be ready to confront the problem head on. How on earth can the electrical firing of millions of tiny brain cells produce this – my private, subjective, conscious experience?

If we are going to get anywhere with understanding consciousness, we have to take this problem seriously. There are many people who



1. No one has yet succeeded in bridging the fathomless abyss, the great chasm or the explanatory gap between inner and outer, mind and brain, or subjective and objective.

claim to have solved the mystery of consciousness: they propose grand unifying theories, quantum mechanical theories, spiritual theories of the 'power of consciousness', and many more, but most of them simply ignore the yawning chasm, or 'fathomless abyss', between the physical and mental worlds. As long as they ignore this problem they are not really dealing with consciousness at all.

This problem is a modern incarnation of the famous mind-body problem with which philosophers have struggled for more than two thousand years. The trouble is that in ordinary human experience there seem to be two entirely different kinds of thing, with no obvious way to bring the two together.

On the one hand, there are our own experiences. Right now I can see the houses and trees on a distant hill, hear the cars down on the main road, enjoy the warmth and familiarity of my own room, and wonder whether that scratching noise is the cat wanting to be let in.

All of these are my own private experiences and they have a quality that I cannot convey to anyone else. I may wonder whether your experience of green is the same as mine or whether coffee has exactly the same smell for you as it does for me, but I can never find out. These ineffable (or indescribable) qualities are what philosophers call 'qualia' (although there is much dispute about whether qualia exist). The redness of that shiny red mug is a quale; the soft feel of my cat's fur is a quale; and so is that smell of coffee. These experiences seem to be real, vivid, and undeniable. They make up the world I live in. Indeed, they are all I have.

On the other hand, I really do believe that there exists a physical world out there that gives rise to these experiences. I may have doubts about what it is made of, or about its deeper nature, but I do not doubt that it exists. If I denied its existence I would not be able to explain why, if I go to the door, I shall probably see the cat rushing in – and if you came by you would agree that there was now a cat trailing muddy footprints across my desk.

The trouble is that these two kinds of thing seem to be utterly different. There are real physical things with size, shape, weight, and other attributes that everyone can measure and agree upon, and then there are private experiences – the feeling of pain, the colour of that apple as I see it now.

Throughout history most people have adopted some kind of dualism: that is the belief that there are indeed two different realms or worlds. This is true of most non-Western cultures today, and surveys suggest that it is true of most educated Westerners as well. The major religions are almost all dualist: Christians and Muslims believe in an eternal, non-physical soul, and Hindus believe in the Atman or divine self within. Among religions, Buddhism alone rejects the idea of a persisting inner self or soul. Even among non-religious people, dualism is prevalent in Western cultures. Popular New Age theories invoke the powers of mind, consciousness, or spirit, as though they were an independent force;

and alternative therapists champion the effect of mind on body, as though these were two separate things. Such dualism is so deeply embedded in our language that we may happily refer to 'my brain' or 'my body'; as though 'I' am something separate from 'them'.

In the 17th century the French philosopher René Descartes (1596–1650) formally proposed the best-known dualist theory. Known as Cartesian dualism, this is the idea that the mind and the brain consist of different substances. According to Descartes, the mind is non-physical and non-extended (i.e. it takes up no space or has no position), while the body and the rest of the physical world are made of physical, or extended, substance. The trouble with this is obvious. How do the two interact? Descartes proposed that they meet in the tiny pineal gland in the centre of the brain, but this only staves off the problem a little. The pineal gland is a physical structure and Cartesian dualism provides no explanation of why it, alone, can communicate with the mental realm.

This problem of interaction bedevils any attempt to build a dualist theory, which is probably why most philosophers and scientists completely reject all forms of dualism in favour of some kind of monism; but the options are few and also problematic. Idealists make mind fundamental but must then explain why and how there appears to be a consistent physical world. Neutral monists reject dualism but disagree about the fundamental nature of the world and how to unify it. A third option is materialism and this is by far the most popular among scientists today. Materialists take matter as fundamental, but they must then face the problem that this book is all about. How do you account for consciousness? How can a physical brain, made purely of material substances and nothing else, give rise to conscious experiences or ineffable qualia?

This problem is called the 'hard problem' of consciousness, a phrase coined in 1994 by the Australian philosopher David Chalmers. He wanted to distinguish this serious and overwhelming difficulty from what he called the 'easy problems'. The easy problems, according to



2. Descartes explained reflex responses to pain in terms of mechanical responses and the flow of 'animal spirits' in tiny tubes. But when it came to conscious experiences he proposed that they were part of a quite different mental world, connected to the physical body through the pineal gland in the centre of the brain.

Chalmers, are those that in principle we know how to solve, even if we have not yet done so. They include such problems as perception, learning, attention, or memory; how we discriminate objects or react to stimuli; how sleep differs from being awake. All these are easy, he says, compared with the really hard problem of experience itself.

Not everyone agrees with Chalmers. Some claim that the hard problem does not exist; that it depends on a false conception of consciousness, or on drastically underestimating the 'easy' problems. The American philosopher Patricia Churchland calls it a onsciousnes

'hornswoggle problem', arguing that we cannot, in advance, decide which problems will turn out to be the really hard ones. It arises, she claims, from the false intuition that if we explained perception, memory, attention, and all the other details, there would still be something left out – 'consciousness itself'.

These are important objections. So before we go any further we must be clearer about what, if anything, 'consciousness itself might mean.

Defining consciousness

What is it like to be a bat? This curious question looms large in the history of consciousness studies. First asked in the 1950s, it was made famous by the American philosopher Thomas Nagel in 1974. He used the question to challenge materialism, to explore what we mean by consciousness, and to see why it makes the mind-body problem so intractable. What we mean, he said, is *subjectivity*. If there is something it is like to be the bat – something *for the bat itself*, then the bat is conscious. If there is nothing it is like to be the bat, then it is not.

So think, for example, of the mug, or pot, or plastic ornament on your table. Now ask – what is it like to be the mug? You will probably answer that it is like nothing at all; that mugs cannot feel, that china is inert, and so on. You will probably have no trouble in opining that pots and mugs are not conscious. But move on to worms, flies, bacteria, or bats and you may have more trouble. You do not know – indeed, you cannot know – what it is like to be an earthworm. Even so, as Nagel points out, if you think that there is something it is like to be the worm then you believe that the worm is conscious.

Nagel chose the bat as his example because bats are so very different from us. They fly, live mostly in the dark, hang upside-down from trees or in damp caves, and use sonar, not vision, to see the world.

Defining consciousness

There is no generally agreed definition of consciousness, but the following gives some idea of what is meant by the word.

'What it's like to be ...': If there is something it is like to be an animal (or computer, or baby) then that thing is conscious. Otherwise it is not.

Subjectivity or **phenomenality**: Consciousness means subjective experience or phenomenal experience. This is the way things seem to me, as opposed to how they are objectively.

Qualia: The ineffable subjective qualities of experience, such as the redness of red or the indescribable smell of turpentine. Some philosophers claim they do not exist.

The hard problem: How do subjective experiences arise from objective brains?

That is, they emit rapid bursts of high-pitched squeaks while they fly and then, by analysing the echoes that come back to their sensitive ears, learn about the world around them.

What is it like to experience the world this way? It is no good imagining that you are a bat because an educated, speaking bat would not be a normal bat at all; conversely, if you became a normal bat and could not think or speak then you would not be able to answer your own question.

Nagel argued that we can never know and from this concluded that the problem is insoluble. For this reason he is dubbed a *mysterian*. Another mysterian is the American philosopher Colin McGinn, who argues that we humans are 'cognitively closed' with respect to

understanding consciousness. That is, we have no hope of understanding consciousness, just as a dog has no hope of being able to read the newspaper he so happily carries back from the shops. Psychologist Steven Pinker agrees: we may be able to understand most of the detail of how the mind works, yet consciousness itself may remain forever beyond our reach.

Not many people share Nagel's pessimism, but his question has proved helpful in reminding us what is at stake when we talk about consciousness. It is no good talking about perception, memory, intelligence, or problem-solving as purely physical processes and then claiming to have explained consciousness. If you are really talking about consciousness, then you must deal in some way or another with subjectivity. Either you must actually solve the hard problem and explain how subjectivity arises from the material world, or alternatively, if you claim that consciousness is identical to those physical processes, or is an illusion or even that it does not exist at all, you must explain why it *appears* so strongly to exist. Either way, you can only claim to be dealing with consciousness if you are talking about 'What it is like to be . . .'.

This essential meaning of the term consciousness is also called phenomenality, or phenomenal consciousness, terms coined by American philosopher Ned Block. Block compares *phenomenal consciousness*, which is what it is like to be in a certain state, with *access consciousness*, which refers to availability for use in thinking, or guiding action and speech. Phenomenal consciousness (or phenomenality, or subjectivity) is what Nagel was talking about and is the core of the problem of consciousness.

With these ideas in mind, we are ready for one of the central disputes in consciousness studies. This concerns the following question: Is consciousness an extra ingredient that we humans have in addition to our abilities of perceiving, thinking, and feeling, or is it an intrinsic and inseparable part of being a creature that can perceive and think and feel? This really is the key question on which

the rest depends, and you might like to decide now what you think about it, for the implications either way are quite striking.

On the one hand, if consciousness is an extra added ingredient then we naturally want to ask why we have it. We want to ask what consciousness is for, what it does, and how we got it. On this view, it is easy to imagine that we might have evolved without it, and so we want to know why consciousness evolved, what advantages it gave us, and whether it evolved in other creatures too. On this view, the hard problem is indeed hard; and the task ahead is to answer these difficult questions.

On the other hand, if consciousness is intrinsic to complex brain processes and inseparable from them, then it is nonsensical to ask most of these questions. On this view (which in some versions is called functionalism), there is no use in asking why consciousness evolved, because any creature that evolved to have intelligence, perception, memory, and emotions would necessarily be conscious as well. Also there would be no sense in talking about 'consciousness itself' or about 'ineffable qualia', for there is nothing extra that exists apart from the processes and abilities.

On this view, there really is no deep mystery, and no hard problem. So the task is quite different; it is to explain why there *seems* to be such a problem and why we *seem* to be having ineffable, non-physical, conscious experiences. It is here that the idea of consciousness as an illusion comes in, for neither consciousness nor the hard problem are what they seem, and so we must explain how the illusion comes about.

If the implications of this dichotomy seem hard to grasp, a thought experiment might help.