

Radio National

## ockham's razor

## with Robyn Williams on Sunday 21/06/1998

## Scientists and the Soul

Summary:

This is part one of a two-part talk by one of Australia's most distinguished intellectuals. Some of the issues he tackles are the nature of mind and the conscious brain.

Transcript:

Robyn Williams: There are three great questions in modern science, according to book sales anyway. The first is where did the universe come from, and where is it going? The second is how did we come to be this way, evolve, in other words? Thirdly, what is consciousness?

The nature of mind and the conscious brain has occupied more books and science programs than almost any other single subject. Why? Because we want to know about ourselves, why we're special. It is also the most pertinent question if we want to know how we're different from other animals and whether machines will one day take over the world.

Today and next week, Ockham's Razor tackles some of these issues. Our guide will be the philosopher Max Charlesworth, one of Australia's most distinguished intellectuals.

Today, Part One.

Max Charlesworth: The ancient idea of the soul is under vigorous attack at the present time by an aggressive group of mainly American scientists and their philosophical fellow travellers. The idea of the soul has, of course, played an important part in most religions, but it is not specifically a religious idea. For the ancient Greek thinkers like



Aristotle, the soul, or psyche, was simply the 'life principle'.

The term 'soul' is in fact useful shorthand for a cluster of distinct but related concepts: the conscious subject or self, or that which answers to the pronoun, 'I', the autonomous or self-determining human agent who initiates actions, the creator of meaning in language and other sign systems, the foundation of moral values (it is because human beings are conscious, self aware and self determining subjects that they are valuable in a quite special way). But almost all these aspects of the soul, so it is argued by the new materialists, can be explained in scientific terms, by neurophysiology, evolutionary biology and psychology, genetics, cognitive science, and what is called the strong artificial intelligence project, dedicated to the idea that an appropriately programmed computer could possibly have a 'conscious' mind.

This group view talk about 'the soul' as the last bastion of mystification and obscurantism and they claim that human consciousness can be wholly explained in biological or physical or material terms, or at least in terms compatible with the natural sciences. In other words, we can explain human thinking and consciousness in general and by implication, the soul, in very much the same scientific way as we explain bodily processes like human digestion or, for that matter, any natural phenomenon. Some see consciousness as a function of the physical brain, and as explicable on the model of a computer. Others see human consciousness on the model of animal consciousness and as being an evolutionary adaptation which has helped homo sapiens to survive. The new geneticists see all human behaviour, including consciousness, as being genetically programmed. After the so-called discovery of the so-called 'God gene', which is supposed to be the biological basis of religious belief, one waits expectantly for someone to announce the discovery of the 'science gene', which would be the biological basis of our interest in scientific inquiry!

Most of the new materialists speak in a supremely confident, even hubristic, style. For example, a recent book by the British evolutionary psychologist and archaeologist, Steven Mithen, promises an explanation of the origins of the most complex and sophisticated forms of human consciousness. Mithen's book is called 'The Prehistory of the Mind: The Cognitive Origins of Art, Religion and Science', and in the space of a mere 280 pages, the author claims to have shown that consciousness or the mind is simply 'a product of evolution. I have laid bare the evidence', Mithen says, 'I have explained how the potential arose in the mind to undertake science, create art and believe in religious ideologies.' No problems, as they say in the classics!

It is true that the new materialists differ a good deal among themselves. There are, for example, the hard-nosed materialists like Gerald Edelman, Francis Crick, Daniel Dennett, Paul Churchland and Patricia Churchland; there are more moderate and agnostic materialists like John Searle, 'pop' materialists like Richard Dawkins and at the other end of the spectrum, the maverick Australian-American philosopher, David Chalmers who describes himself as 'a dualistic naturalist'. Chalmers holds that there are aspects of human experience which simply cannot be explained in natural science terms and that we have therefore to accept a kind of dualism. But he also argues that we must maintain our faith in some form of 'naturalism' which is compatible with the findings of the natural sciences. At all events, there is at present a great deal of passionate debate about what used to be called the mind-body problem, and new theories abound. The English neuroscientist, Richard Gregory, has claimed in fact that a new theory about human consciousness is proposed every 14-and-a-half days!

For most of the new materialists it is an act of faith that there must be a scientific explanation of the mind or consciousness or the soul. otherwise the mind or consciousness would be an exception to the laws of science and nature, an absurd and unthinkable notion for anyone committed to the primacy of the scientific world view or ideology. Not so long ago it was thought that the phenomenon of life was also such an exception but after Crick and Watson and the discovery of DNA, we now know there is no sweet mystery of life, and that life is simply a physico-chemical process. The same process of demystification, so the new materialists say, will inevitably take place with human consciousness and the soul. It may be that at the moment we can't actually give any kind of plausible scientific account of consciousness and the other functions of the soul, but we must have faith that such an account will eventually emerge. The only alternative to the materialist program is, so it's said, some form of dualism and that, the materialists argue, is tantamount to taking refuge in mystery and giving up any attempt at explanation. As Daniel Dennett puts it in his book called 'Consciousness Explained', 'Given the way that dualism wallows in mystery, accepting dualism is giving up.' This a priori assumption that consciousness must be explicable in materialist terms (one might almost call this belief 'credal materialism') plays a powerful part in the present debate about consciousness.

A good deal of the materialist argument in fact relies on threats and philosophical bullying: 'Accept materialism, or else': either accept the materialist view or you'll land in dualism, and that involves postulating some kind of supernatural cause of consciousness. But we don't really, as I hope to show, have to choose between materialism and an irrational dualism involving the supernatural cause.

Again, many of the materialists have a very doctrinaire view of Darwinian evolution where everything of importance is seen as being the product of natural selection. In 'The Origin of Species' Darwin had said quite clearly that while natural selection was the main

mechanism of biological development, it was certainly not the only one. But as Stephen Jay Gould has complained, Dennett and many of the new materialists adopt a 'fundamentalist' view of natural selection and the evolutionary process. In other words, evolution becomes an ideology which can't be falsified by any kind of contrary evidence.

I believe that there are powerful objections to the new materialism. The crucial objection, it seems to me, is that it is self-defeating in that the materialists can't give an explanation of their own position on the basis of their theory. If consciousness is an ordinary biological phenomenon and acts of consciousness are identical, let's say, with physical processes in the brain, how can I stand apart from my consciousness and reflect upon, and speak about consciousness and, for example, claim that my conscious thoughts are true, that is, correspond to some reality external to my consciousness? What kind of biological processes or physical events can reflect on other biological processes or physical events and make true judgements about them?

Again, if science itself and its method of inquiry are also products, as presumably they must be, of the processes of evolutionary biology, it is difficult to see why the findings of science, including the findings of evolutionary biologists, should be accorded any special or privileged status and how, in any plausible sense, they can claim to be true. For the materialist, the best we can say is that the human invention of science has helped homo sapiens to successfully adapt to his or her general environment, but we can't assume that there is anything special or valuable about this. Put in more general terms, there is no way of showing from within the domain of scientific inquiry that scientific knowledge is the only valid form of knowledge, or is a superior form of knowledge. As the English philosopher Susan Haack has put it: 'By our standards of empirical evidence, science has been, on the whole, a pretty successful cognitive endeavour. But it is fallible, revisable, incomplete, imperfect; and in judging where it has succeeded and where failed, in what areas and at what times it is epistemically better and in what worse, we appeal to standards which are not internal to, nor simply set by, science.' (Evidence and Inquiry, pp.135-6)

When we look at human beings and what they do and experience we see that many things about them are able to be explained in the same way as we explain the processes of the human body, such as the beating of the heart, the circulation of the blood, the digestion of food, the secretion of bile and so on. But there are many other things about humans which, prima facie at least, can't be explained in this way: thinking, which involves making judgments which are true or false, remembering and imagining and other forms of consciousness, including being aware or conscious of ourselves, reflecting, choosing and deliberating and making decisions about how to live, (which involves judging that certain things are good and bad), feeling emotions like anger and joy, relating altruistically to other people and

being concerned about their good. Again, it involves apprehending meanings and using words and physical gestures and marks on paper to mean things, as in language. I endow these sounds reverberating in the air with meaning, and you understand my meaning. Further, consciousness presupposes that there is a conscious subject which unifies and co-ordinates all our conscious experience. As Aristotle said a long while ago, 'If I drop a stone on my toe, it is not my toe that feels the pain, it is I who feel the pain in my toe.'

Being a conscious subject and agent also presupposes the idea of autonomy or my ability to decide for myself about how I am going to act, so that I can say 'This is my act. I am the author of it and I'm responsible for it, and I can be praised or blamed for it.' Without autonomy I would not be able to act in what we call an ethical or moral way.

The mind or consciousness is then a very pluralistic thing. Though the various forms of consciousness all use the brain, consciousness is not a unitary thing but a loose collection of very different capacities and powers. The American psychologist Howard Gardner claims that we have in fact to postulate eight discrete 'intelligences' in human beings. For example, the intelligence needed by our ancestors for tool-making, or for hunting; a 'natural history intelligence' for coping with our natural environment; a social intelligence for relating with others in our group; an intelligence for language and verbal communication; an intelligence for making logical connections, and so on. According to Gardner there is no 'general intelligence' and we still don't know how the different forms of consciousness communicate with each other.

When then one looks at the vast and pluralistic array of the modes of consciousness it is difficult to see how any materialist account could plausibly explain them all. For example, it is worth remarking that we don't have any remotely plausible materialist account of basic concepts such as truth, nor of the meaningful use of language, nor of self-awareness, nor of ethical values, nor of the fundamental methodological processes such as induction, on which science itself depends. As David Chalmers says, 'Present day scientific theories hardly touch the really difficult questions about consciousness. We don't just lack a detailed theory, we are entirely in the dark about how consciousness fits into the natural order.' (p.xi).

In my next talk, I hope to sketch out, rather heroically, an alternative approach to the problem of the conscious mind, an approach which goes beyond both materialism and dualism.

Robyn Williams: That was Professor Max Charlesworth, Emeritus Professor of Philosophy at Deakin University in Victoria.

Guests on this program: