

nonfunctional and will ultimately disappear. If my conscious being is grounded in my brain activity, won't death be the end? A dualist could reply that the separate Cartesian soul will live on, but I reject that kind of soul. An analogy may help. A computer programme depends totally on the computer in which it is installed. Destroy the computer and you destroy the programme. Except that the programme could be installed on a different computer. I believe that the essence of who I am, and indeed my very consciousness, is contained in the information structure of my brain. At the resurrection of the dead, God will reinstall the information structure of the essential me in my new spiritual body.

To conclude, neuroscience raises huge questions about human nature. I have here singled out just three: man as a machine, the soul, and life after death. Brain research has changed the way we think of ourselves, but the modern, mechanistic understanding seems to me compatible with my biblically grounded Christian beliefs. My brain works mechanistically but I am not just a machine. Neuroscience challenges Cartesian dualism, but so does the Bible. Neuroscience leaves open the question of life after death.



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Dieu, l'homme et le cerveau (Croire Pocket, 2012).

Further information

www.cis.org.uk – Christians in Science

Suggested reading

Seybold, K.S. *Explorations in Neuroscience, Psychology and Religion*, Ashgate, 2007.

Jeeves, M. and Brown, W.S. *Neuroscience, Psychology and Religion: Illusions, Delusions, and Realities about Human Nature*, Templeton, 2009.



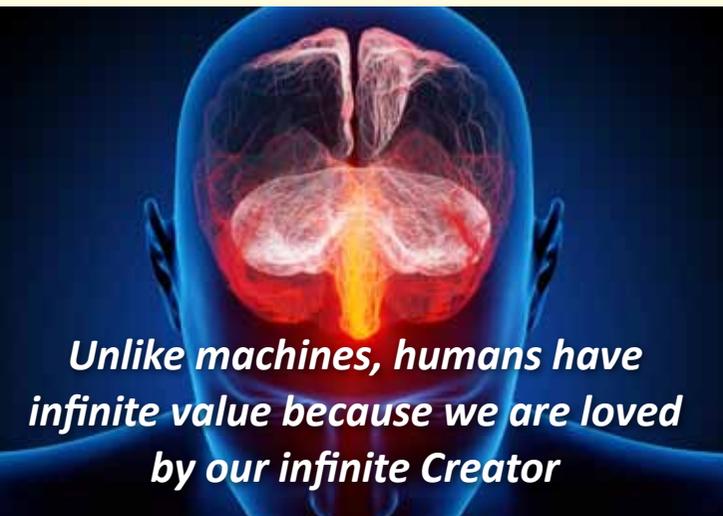
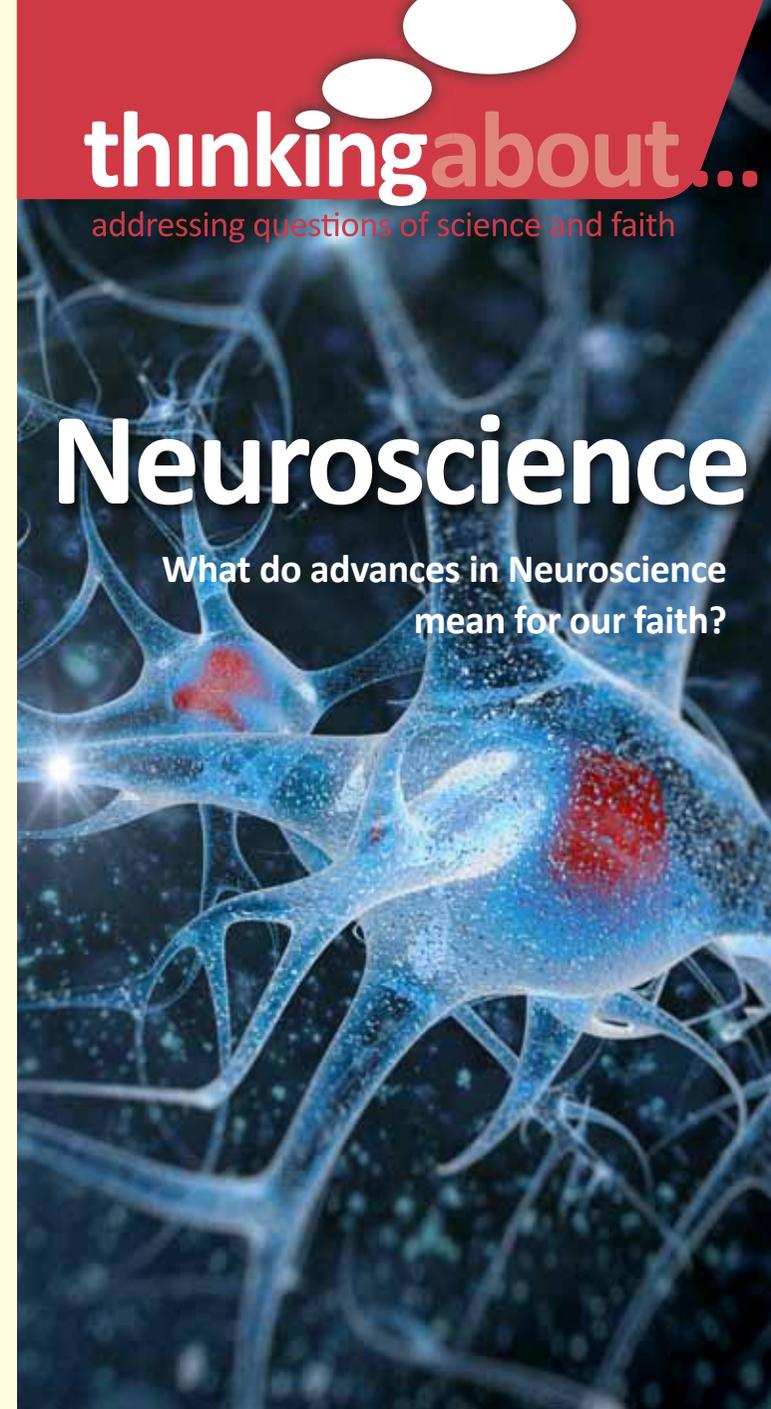
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thinking about...
addressing questions of science and faith

Neuroscience

What do advances in Neuroscience mean for our faith?



Unlike machines, humans have infinite value because we are loved by our infinite Creator

Thinking about... Neuroscience

Dr Peter Clarke

Neuroscience raises deep questions for Christians, and indeed for everybody, because the very essence of our humanity is somehow embodied in the functioning of our brains. I here draw attention to just three of the many important questions that brain research raises.

Am I just a machine?

Neuroscientists see the brain as a vastly complicated mechanism made of separate interacting parts – rather like a machine. We know that the separate parts are neurons and other cells, and we know quite a lot about how they interact. So how are we different from machines? An important difference is that we are conscious. That's crucial, but many people think machines could in principle be conscious. For example, if a gigantic computer were programmed to simulate your brain almost perfectly, down to the finest detail, would it be conscious? If questioned, it would give the same answers that you give, so if asked if it were conscious it would presumably say it was. Nobody knows

Am I just a machine?

if it would really be conscious, but this does seem possible. So are we just conscious machines? A key to dealing with this question is to beware of the word “just”, which here means “nothing but”. If we define the word machine to mean a physical structure made from interacting parts to serve a particular purpose, then I'm happy to say that, in a sense, I am a machine – but not just a machine. The purposeful aspect of the machine image fits in well with what St. Paul writes about our being “God's workmanship, created ... to do good works” (Eph. 2:10)

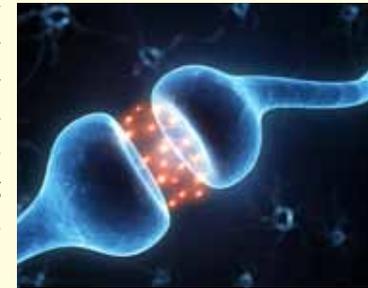
Do we have souls?

and about our being “predestined to be conformed to the likeness of [God's] son” (Rom 8:29). Furthermore, a machine can break down and can be repaired. A break-down is when the machine fails to fulfil the role it was made for. As a Christian I therefore have to recognize that this word applies to me in view of all the ways in which I fail to fulfil my intended role of doing good works and being like Jesus. And the costly Calvary-forged repair process is called the new birth. So the machine image may be alright so far as it goes, but the word has many unhelpful associations that make it dangerous. In normal language, machines are man-made unconscious contraptions made by us for our own practical purposes. Unlike machines, humans have infinite value because we

are loved by our infinite Creator, and we are called to reflect that love in the way Jesus did, which is the loftiest purpose imaginable. The word ‘machine’ fails to get that across.

Do we have souls?

When people hear that I'm a Christian, they usually jump to the conclusion that I must hold Descartes' view of a separate, nonphysical soul that somehow interacts with the brain. Along with most neuroscientists (including Christians), I reject that view for



at least two reasons. First, there is no evidence for a mysterious, nonphysical influence acting on the brain. Second, most theologians think the biblical view of man is body-soul unity, not Descartes' dualism. Many Christian neuroscientists and philosophers of mind, therefore, adopt a dual-aspect position according to which our subjective, first-personal, account of our inner life, and neuroscience's objective, third-personal account of our brain's activity, are considered complementary. A

What about life after death?

description of a painting in terms of chemistry would be complementary to an artistic description. They would not contradict each other, because they speak at different levels. There is still debate among Christians, however, and a Descartes-style dualism is supported by a minority of philosophers including Richard Swinburne.

What about life after death?

How does this fit in with Christian belief about eternal life? When I die, my brain cells will become

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