



▣ Questions

1. We all use our personality as an excuse sometimes: "I can't help losing my temper, it's just the way I am". Is that really any different from somebody saying in court "I couldn't help myself - it was my brain that told me to act in that way"? Is that ever a valid defence?
2. Should we be concerned that brain imaging is being used in non - medical ways? Would you be concerned if airport scanners could see what you were thinking about as you boarded the plane, for example? Who should have access to your thoughts?
3. What about "cognitive enhancement" - using drugs to improve our concentration, for example? Methylphenidate is a drug which was developed for use in ADHD (attention deficit hyperactivity disorder). This drug enhances concentration, and is now widely used by students to aid studying. Should it be given to people like surgeons and airline pilots, whose lapses of concentration may be fatal?
4. If in future a drug was developed which made people Christians, would we want to distribute that widely?

▣ Further reading:

Neurobiology, free will and moral responsibility: Full Report to the General Assembly, May 2012 is available on the SRT website: www.srtp.org.uk

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SRT Project, Church and Society Council
121 George Street, Edinburgh EH2 4YN
Tel: 0131 240 2267
Email: srtp@cofscotland.org.uk
Website: www.srtp.org.uk

Scottish Charity Number SC011353

www.churchofscotland.org.uk

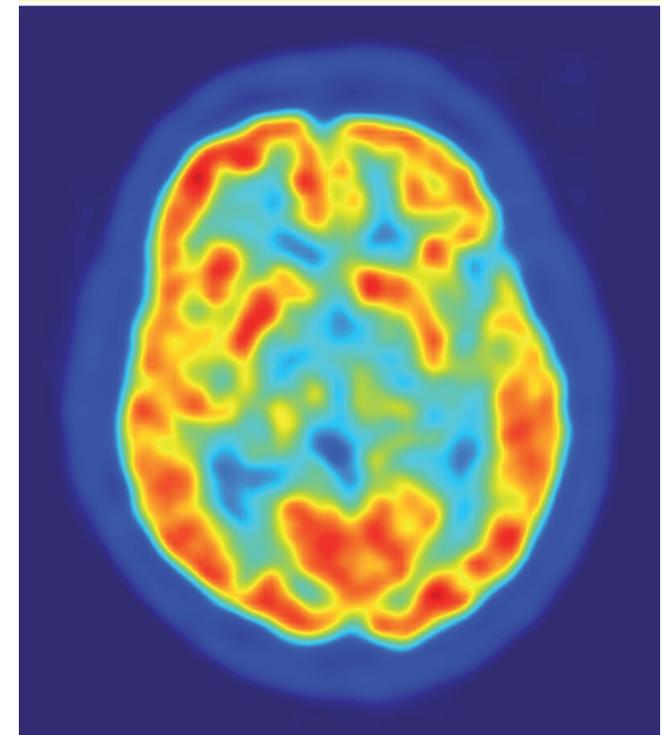


The Church of Scotland
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Neurobiology

free will and moral responsibility



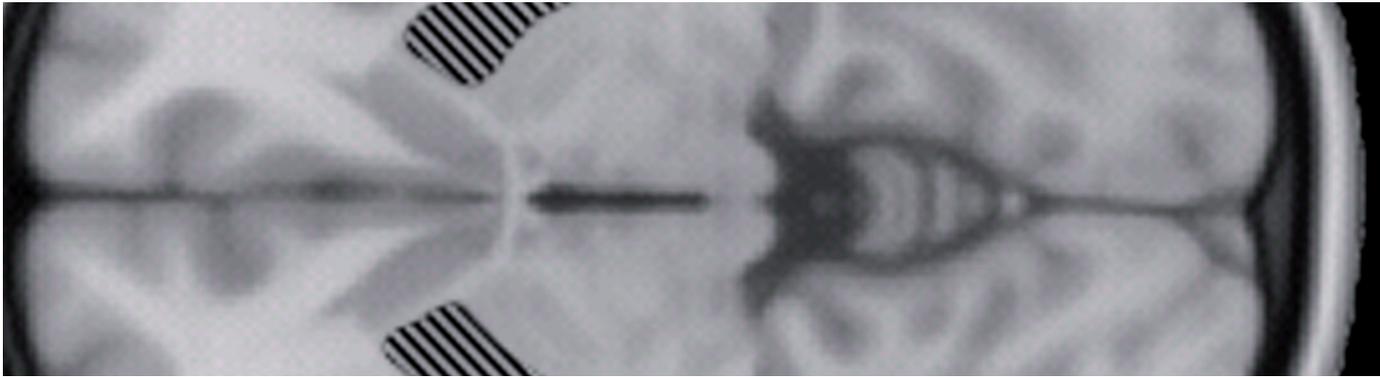
Discussion Points



'For the word of God is living and active. Sharper than any double-edged sword...; it judges the thoughts and attitudes of the heart.' Hebrews 4:12



Neurobiology, free will and moral responsibility



Do we have free will, or are we just puppets, controlled by our brains? Some recent advances in neuroscience, while giving unprecedented access to our brains, are being used to support the idea that our behaviour is determined by our unconscious and that ultimately we don't make the decisions that we think we do - it's all down to our brain telling us what to do.

Additionally, brain scans are being used in areas other than the medical purposes for which they were developed, for example in lie detection in court. There is also evidence that the images themselves impress people - simply referring to brain images in the summing up of a trial can influence a jury's decision.

These advances in neurobiology seem to raise a number of questions for the Christian faith. Would the experience of grace and sacrificial, undeserved love be challenged if neurobiology were to demonstrate that free will does not exist? What about responsibility for our actions? This report seeks to address these questions, in relation to Christian theology.

Some scientific experiments show that consciousness is often not in control of our actions, and that the brain begins to prepare for movement some seconds

before we are aware of the intention to move. However, concerns have been expressed about some of the extrapolations from the relatively simple scenarios played out in these experiments (usually involving the moving of a finger or pressing a button) to more complex behaviours.

In the 2002 movie *Minority Report*, scientists could predict people's actions, and the police prevented crimes before they were committed. People were convicted for thought crimes: they did nothing wrong, prevented from acting by their timely arrest. Might scientists in the future be able to predict what we are going to do, before we know it ourselves, robbing us of our responsibility for our actions? If we have no control over our actions, could somebody claim in defence of their actions: "it wasn't me; it was my neurons"? If recent advances in neurobiology mean that individuals could never be held responsible for their actions before society or before God, there would be huge legal, philosophical and theological ramifications. In the Christian understanding, agape-love, an unselfish and sacrificial giving of oneself to another, is a love originating in free will. Without free will, the essential concepts of agape-love could not be expressed. Likewise, without free will, other concepts such as grace and responsibility are also challenged.

Conclusions

Neuroscience allows access to that most complex and fascinating of organs, the human brain. But what we are seeing using brain scans are not the thoughts themselves, but the brain activity associated with the thoughts. Although there is much that neuroscience can teach us about physical aspects of ourselves, theology and philosophy are also essential to understand what human persons really are.

A Christian understanding of free will can be informed by the scientific advances in neurobiology. These advances may also be helpful in clarifying the philosophical and ethical debates regarding freedom, autonomy, sin and moral responsibility. But the Christian characterisation of human persons and their responsibility confers on them a value and dignity which cannot just be reduced to the material - to what we can observe or measure. Humans transcend the created universe and are able to communicate with the uncreated God, the source of all love and free will.