

The second possibility is that the superscientist predicts that the assembly of physical components in my brain reaches a bifurcation point between two configurations, one corresponding to "I will do A" and the other to "I will do B." A quantum-mechanical calculation gives a 50% probability of the assembly proceeding to the first configuration and 50% to the second.

How then do I make my decision? One possibility is that a small perturbation from outside the system considered by the scientist, or a quantum fluctuation, tips my brain in the direction of doing A or B. This again means that I can blame my choice on the way the universe is made. An alternative is that *my thoughts themselves* determine the outcome at this point. As we have seen, when I make a predictable decision, my thoughts follow a sequence that is determined equivalently by their content and the laws of physics. At a bifurcation point, however, the physics is undetermined. In this case, the outcome must be determined by the content of my thoughts alone.⁷ In other words, *I* make the decision, and am answerable to God for it.

If this is so, the evolution of the universe is determined, not only by physics, but also by the choices human beings make under these conditions. This does not mean that God ceases to control the universe, as I have shown elsewhere.⁸ But it does mean that human beings are responsible for many of their actions, and in measure determine the persons they are, as encoded on their brains.

This model applies to human beings when they have grown up sufficiently to be aware of having to make decisions. In the womb their constitution is monistic; as they grow up it becomes dualistic.

We are now in a position to consider the Incarnation. To become a human embryo, the Son had to empty himself of his personality,⁹ trusting that his Father would overrule in his growth and development as a human being so that

he would acquire the personality he had before he came. This overruling took place particularly in his home, the synagogue at Nazareth, and the temple in Jerusalem. Luke gives us a glimpse of the process when Jesus was twelve (Luke 2:41-52), and of its completion when he was about thirty (3:21-22). This makes the *kenosis* of the Son even more remarkable than in traditional theology.

Notes

¹David F. Siemens, Jr., "Neuroscience, Theology, and Unintended Consequences," *Perspectives on Science and Christian Faith* 57, no. 3 (2005): 187-90.

²John Polkinghorne, *Science and Providence: God's Interaction with the World* (London: SPCK, 1989), chap. 2, and other writings.

³P.G. Nelson, *God's Control over the Universe*, 2d ed. (Latheronwheel, Caithness, Scotland: Whittles, 2000), chap. 4. I can supply copies of this on request.

⁴Note that the behavior of any physical system that depends on the configuration of its components cannot be reduced to that of the components. A simple example is a Lissajous figure, the shape of which is determined not only by the oscillations of its components, but also by their phase.

⁵Cf. Nancey Murphy, "The Problem of Mental Causation: How Does Reason Get Its Grip on the Brain?" *Science & Christian Belief* 14 (2002): 143-57.

⁶Philosophers postulate a type of free will that is compatible with determinism ("compatibilist"), but this fails the test I have applied.

⁷In *God's Control*, I stated that a disturbance is required at a bifurcation (pp. 32-3). If my thoughts determine the outcome, however, this is not needed (cf. *Science and Providence*, p. 32).

⁸*God's Control*, Chap. 5.

⁹Phil. 2:6-7: "who, though being in the form of God, did not deem equality with God something to be clung on to, but emptied himself..." (my translation).

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