

Millisecond thoughts: Neuroscience and free will

by [Martin E. Marty](#) in the [March 8, 2005](#) issue

Two portraits graced my study walls for many years: Holbein's *Erasmus* and Cranach's *Luther*. Already in high school I was enjoying Erasmus's *Julius Exclusus* and other satires critical of the pope; even earlier I was reading Luther's catechisms.

The two titans became the yin and yang of my Christian humanist/ Christian reformer inquiries, and they remain so. The two came to theological blows in their great controversy on the freedom of the will versus the bondage of the will. I wanted both to win—and maybe both did, on their terms. And then again, maybe they both lost, on other terms.

How does one settle the matter? When I finished my recent biography of Luther (Penguin Books), I thought I'd left their controversy behind. Suddenly, however, a scientific discovery impels a revisiting of their conflict. Erasmus defended the freedom of the will in terms that Luther thought implied human perfectibility. Luther, of course, denied any possibility of that, believing it denied a role for God's grace.

In Tim Crane's review of Benjamin Libet's *Mind Time: The Temporal Factor in Consciousness* (*Times Literary Supplement*, January 14) I learned that in 1993 in Gothenburg, neuroscientist Libet discovered that in humans "the neural precursors of some voluntary actions occur before the conscious awareness of the decision to act." (Headline: "Now it has been proven: we are all somewhat behind.") Ask a subject to perform a simple voluntary action—which would mean by "free will"—such as lifting a finger, and the research suggests that "the act was preceded by a rise in electrical activity" in the area of the brain that causes action (the "readiness potential" or RP).

"The striking discovery is that while the RP is activated 550 milliseconds before the action, the subject's awareness of his decision to act occurs only 150-200 milliseconds before the action. The conclusion is that the causes of brain actions occur fractionally earlier than our conscious awareness of deciding to do them."

Says Crane: "Some claim that Libet's results have implications for the debate about the freedom of the will." Psychologist Daniel Wegner argues that these results "explode the commonsense idea that we have free and rational control of our actions." Thus "conscious will" is an illusion, a "loose end," but a valuable one, since "without it, it would be hard to make sense of the phenomenon of moral responsibility." So score one for Luther?

Libet, however, thinks "a person has the freedom to 'veto' [any] apparently free act." So while "conscious free will does not initiate our freely voluntary acts, it can control the outcome or actual performance of the act." With veto power and control in mind, score one for Erasmus. Libet says he knows of no "testable" experiment that "demonstrates the validity of natural law determinism." So "the phenomenon of free will" is not illusory.

Deciding between Libet and Wegner and their partisans is still a matter of interpretation. In any case, it's a photo finish, because—and this is the scientific-theological point—everything we are talking about occurs during an interval of 550 milliseconds minus 150-200 milliseconds. Set your timers, and let the debate continue. But to set the timer is a conscious decision that will come so quickly that I will not have time to take down the picture of either Luther or Erasmus. Let them continue their creative argument, even if our decision to say so is 400 or 350 milliseconds late, our unconscious deterministic brain function having already decided on the winner. Whichever that is.