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Agnostic Machinery

Bill Maher hoped to use science to paint religion as a neurological disorder, but the researchers he interviewed in his film *Religulous* hold a much more complex picture of why we have faith.

by [NATHAN SCHNEIDER](#) • Posted October 29, 2008 04:22 PM

Robert Burton's 17th-century treatise, *The Anatomy of Melancholy*, treats psychological disorders as a religious problem. Depression, Burton believed, is an expression of original sin. Three centuries later, Freud reversed the diagnosis entirely by calling religion a symptom of mental dysfunction.



Bill Maher. Credit: Lionsgate

Now, a growing number of scientists are studying why we are religious with modern research methods from a range of disciplines. For some interpreters, such as philosopher Daniel Dennett and evolutionary biologist Richard Dawkins, science reveals religious beliefs to be malignant memes gnawing their way through believers' brains, diseases needing to be cured. Yet for many of the researchers closest to this work, the recognition that religion has biological roots only makes it harder to talk about severing it from ourselves.

This must have come as a disappointment to comedian and *Real Time* host Bill Maher, who traveled the world making fun of religious people for his documentary *Religulous*. Standing at the prophesied site of Armageddon — Meggido, Israel — Maher indicts religion as a "neurological disorder" that causes the afflicted to wish for apocalyptic death.

Maher interviewed Dean Hamer and Andrew Newberg, two scientists who study the biology of religion, to back up his anti-religious polemic; neither says much of substance in the film. Hamer, a geneticist at the National Institutes of Health, is the author of *The God Gene*, which posits that human beings are genetically predisposed for "self-transcendence," the feeling that there is something beyond ordinary experience. In other words, we're hard-wired to believe in a higher power. In his research, Hamer noticed a correlation between personality survey data and different alleles of the gene VMAT2, which codes for an emotion-regulating brain chemical. In the course of human evolution, he suspects, this gene helped foster "an innate sense of optimism" that had adaptive benefits.

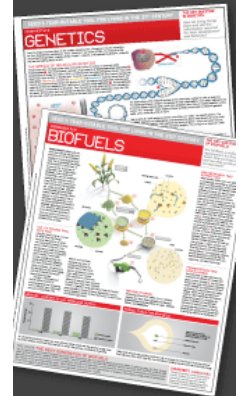
Since the NIH doesn't sanction Hamer's

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wrong, Hamer recalls.

"And I kept on trying to push back and say, 'Science proves that people have an innate desire for religion.'" The interview lasted about an hour and a half, Hamer tells us, yet only a two-second clip from their conversation made the final cut. The scene is sandwiched in the middle of an awkward chat between Maher and an "ex-gay" Christian pastor who denies that homosexuality is innate. Then, the camera cuts to Maher asking Hamer if he's the guy who discovered the "gay gene." Hamer says yes. (Before *The God Gene*, Hamer wrote about the "gay gene" in another book, *The Science of Desire*.)

Still, Hamer has no regrets about his moment on the big screen. "Overall I was happy because I was one of the few people in the entire film that [Maher] did not make fun of."

Religulous was slightly more attentive to Andrew Newberg, the University of Pennsylvania neurologist known for his research on religious experience. In the film he and Maher walk and talk at New York City's Grand Central Station. Most of their conversation is muted to make way for Maher's voiceovers, but we do hear Newberg trying to tone Maher down a bit. "How we define what is crazy or not crazy about religions is ultimately up to how we define 'crazy,'" Newberg explains. When he mentions his studies on people speaking in tongues, the conversation is cut short to make way for shots of Pentecostals looking crazed.

Using single emission computed tomography (SPECT), Newberg and his colleagues have studied the differences between the normal brain states and peak experiences of meditating Buddhist monks and praying Christian nuns. Among both, they observed an increase in blood flow to regions responsible for thinking and planning. Meanwhile, activity decreased in the posterior superior parietal lobe, an area that affects how we orient ourselves in the world. In a sense, this research shows that what goes on in the brain mirrors how believers describe their own religious experiences: a heightened awareness of a different way of being in the world.

Although Newberg does not regret being in the film, he admits he's disappointed that Maher didn't take his findings more to heart. "I think it's a little difficult to write off everybody who has ever been religious as being delusional or psychotic," he says. "I don't think the data really supports that."

Bill Maher may have hoped that science — religion's age-old enemy, as the common story goes — would vindicate his ruthless agnosticism. But as more researchers explore religiosity, the variety of perspectives and interpretations on human faith is growing more complex, not more black and white. Cognitive scientist and Evangelical Christian Justin Barrett, for instance, sees no contradiction between studying religion and being religious. His widely cited research examines common patterns of supernatural beliefs across cultures in order to describe the innate mental processes that give rise to them. And neuroscientist Rhawn Joseph, who has self-published several philosophical books alongside a long list of scientific publications, goes even further to claim that "each and every human being is born with a brain and mind that serves as

a transmitter to god." But in order to keep the battle lines between believers and nonbelievers clear, Bill Maher's *Religulous* chose to ignore, as Hamer puts it, "the basic human biology of why religion is important."

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