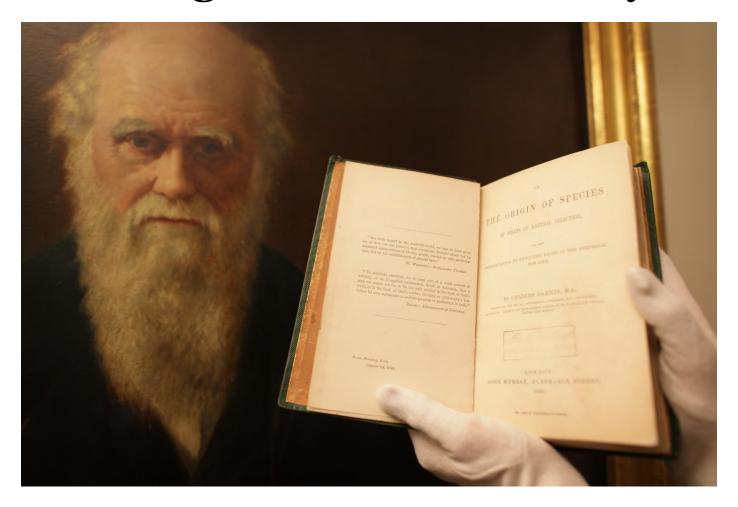
Did Darwin's theory of evolution encourage abolition of slavery?



Jerry A. Coyne is professor emeritus in the Department of Ecology and Evolution at the University of Chicago. He is the author of "Why Evolution Is True" and "Faith vs. Fact: Why Science and Religion Are Incompatible."

On New Year's Day, 1860, four men sat around a dinner table in Concord, Mass., contemplating a hefty green book that had just arrived in America. Published in England barely a month before, Charles Darwin's "On the Origin of Species" was sent by the author himself to Asa Gray, a Harvard botanist who would become one of Darwin's staunchest defenders. Gray gave his heavily annotated copy to his wife's cousin, child-welfare activist Charles Loring Brace, who, lecturing in Concord, brought it to the home of politician Franklin Sanborn. Besides Sanborn and Brace, the distinguished company

included the philosopher Bronson Alcott and the author/naturalist Henry David Thoreau.

According to Randall Fuller, this meeting changed America by catalyzing the movement to rid the nation of slavery. Although Gray and the Concord Four were ardent abolitionists, only Gray was interested in the recondite biological details of Darwin's theory. The rest of them focused on the book's implicit message about human races.

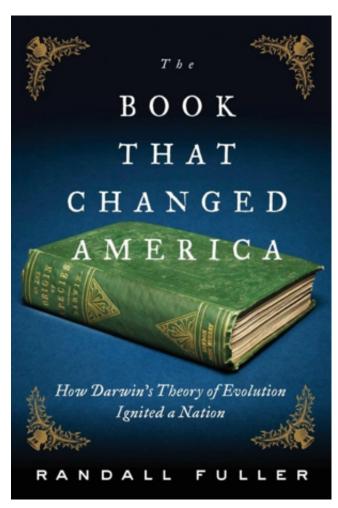
['The Metaphysical Club,' the Boston philosophers who changed the way American thought]

This is curious, because "On the Origin of Species" carefully sidesteps the topic of human evolution and says nothing at all on the subject of race. Darwin was so concerned about the heretical nature of his message that he decided to avoid mentioning the most incendiary of all his conclusions: that humans, supposedly created in the image of God, were in fact nothing more than modified great apes. He therefore devoted just 12 timid words to human evolution in the entire 500-page work: "Light will be thrown on the origin of man and his history."

But that was enough. Reading between the lines, everyone, including the Concord Four, saw what Darwin had kept to himself: that humans had, like all other species, evolved via natural selection from ancient ancestors.

[Darwin the liberator: how evolutionary thought undermined the rationale for slavery]

What is the relevance of all this to abolitionism? At the time, it was debated whether humans had a single origin or several, with each race being separately created. The multiple-creation school, polygenism, was popular with apologists for slavery. If, as they supposed, the Adam-and-Eve creation produced whites, but other races derived from earlier and inferior acts of creation, then whites were justified in applying a different moral standard to



"The Book That Changed America: How Darwin's Theory of Evolution Ignited a Nation," by Randall Fuller (Viking)

people of nonwhite race, who were not created in God's image. Polygenists sometimes saw blacks as subhuman intermediates or even as members of a different species, justifying their subjugation and enslavement.

But if humans had a single origin (monogenism), as Darwin proposed for other species, then all human races were genealogically connected: Blacks were every bit as human as whites — equivalent to distant cousins — and slavery became morally untenable. This is perhaps one of the very few times in the history of evolutionary biology that Darwin's ideas aligned with a literal interpretation of the Bible. Like Darwin, the Genesis account suggests a single origin for all humans — courtesy

of Adam and Eve — with no mention of multiple creations. This detail was overlooked by advocates of slavery, who proved to be creative and slippery theologians. According to Fuller, the excitement Darwin brought to Gray and the Concord Four came from providing a scientific justification for overturning the multiple-origins argument.

"The Book That Changed America" gives a vivid picture of the intellectual life of Concord, infused not just with abolitionism but with the Transcendentalist philosophy that saw a divine spark within each human, prizing subjective experience over hard facts. Fuller's story ranges widely and sometimes discursively, including colorful characters such as Louisa May Alcott (daughter of Bronson), who, before gaining fame with "Little Women," wrote unpublishable books about interracial love; Louis Agassiz, another Harvard

professor, a racist and polygenist implacably opposed to Darwin's theories; John Brown, whose disastrous attempt to start a slave rebellion at Harper's Ferry was secretly financed by Sanborn; Frederick Douglass, the former slave turned orator and writer; and even P.T. Barnum, whose interest in science was driven by his desire to turn everything into a pay-per-view spectacle.

Unfortunately, Fuller's engrossing account of the literary and intellectual hub of New England does little to support his thesis that Darwin's book gave powerful ammunition to abolitionists, ultimately contributing to the Civil War. That is dubious for two reasons.

First, although the Concord abolitionists found a modicum of support in Darwin's ideas, they already had strong moral arguments against slavery, and at any rate had almost no influence on the conflagration that began in 1861 but had been smoldering for decades. Second, Darwin's ideas gave ammunition to the pro-slavery movement as well, for "social Darwinists" simply co-opted Darwin's idea of competition among groups in nature to argue that whites had outstripped blacks in the struggle for existence. Like the Bible itself, "Origin" has been cited in support of diverse and often conflicting ideologies.

It's worth noting that the real revolution wrought by "Origin" — the replacement of a divine creationism with a purely naturalistic explanation of life's history — had nothing to do with slavery. Within a decade of the book's publication, virtually all American scientists and intellectuals were on board with Darwin's ideas, which changed not only the whole of biology but also our self-image. Gone was the idea of humans as God's special creation, replaced by the view that we are a product of a shuffling by natural selection of randomly arising variation — a process involving huge amounts of suffering and death. In a letter to Gray, Darwin admitted that the facts of evolution didn't comport with the Abrahamic God: "But I own that I cannot see, as plainly as others do, & as I should wish to do, evidence of design & beneficence on all sides of us. There seems to me too much misery in the

world. I cannot persuade myself that a beneficent & omnipotent God would have designedly created the Ichneumonidæ [parasitic wasps] with the express intention of their feeding within the living bodies of caterpillars, or that a cat should play with mice."

It was this issue of God and spirituality that led four of the five main characters in Fuller's book to ultimately reject Darwin's scientific message. The exception was Thoreau, who spent his last years obsessively cataloguing data on the Concord woodlands in a nebulous project cut short by his death from tuberculosis. But even Thoreau couldn't fully embrace Darwin's message of naturalism, seeing science as powerless to explain things like emotions and behavior. Transcendentalists such as Alcott and Ralph Waldo Emerson, with their emphasis on the spiritual over the material, read into Darwin a misguided teleology of increasing perfection of the human soul. Brace became a theistic evolutionist, seeing God as masterminding the whole process. In the end, even the stalwart Gray was driven by his faith to see evolution as partly divine, proposing that God himself created the variation — now known to be mutations in the DNA — that fueled evolution.

Things haven't changed much since 1860. A 2014 Gallup poll showed that 42 percent of Americans are young-Earth creationists, while another 31 percent are theistic evolutionists like Gray, accepting some form of human evolution but insisting it was directed by God. And only 19 percent of us -1 in 5 — adhere to Darwin's view that humans evolved in a purely naturalistic way with no supernatural help. Slavery, thankfully, is no longer with us, but, like the Transcendentalists, most of us still insist that a divine hand guided the origin of our species.

The Book That Changed America

How Darwin's Theory of Evolution Ignited a Nation

By Randall Fuller.

Viking. 304 pp. \$27.