Science v. Religion: The history and significance of the 1925 Scopes trial

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Book Review:
Summer for the Gods:
The Scopes Trial and America's Continuing Debate over Science and Religion
by Edward J. Larson.

Seventy-three years ago, in the summer of 1925, a landmark case took place in the town of Dayton, Tennessee. Known as the Scopes 'Monkey Trial,' it was broadcast over the newly developed radio networks and dominated the headlines of the newspapers of the day, promoted as the 'trial of the century.'

The Scopes trial highlighted the conflicts and dilemmas over religion and science that have plagued American culture throughout the twentieth century. Author Edward J. Larson, a professor of history and law at the University of Georgia, was recently awarded the 1998 Pulitzer Prize for History for his book: Summer for the Gods. He had previously written on the subject in his 1985 book Trial and Error: The American Controversy over Creation and Evolution, where he focused on the ways the law has attempted to mediate the creation/evolution controversy in America.

Larson does a good job of summarizing the developments in natural science that led to Darwin's theory of evolution. With the publication of Origin of Species in 1859, the simmering conflict between theologians and scientists over the development of living organisms and, consequently, of human beings, was brought to a head. Darwin's theory was based on evidence that had been accumulating for more than a century. It was in this period that the developments in capitalist production were accompanied by scientific discoveries revealing geological evidence that the earth, contrary to Biblical accounts, had a long history. The development of industry, particularly mining, led to the uncovering of the fossil remains of extinct organisms, showing that life had taken on different forms over long periods of time.

Darwin was able to develop the theory of the 'survival of the fittest' as the basis of the natural selection of species. No longer was the 'hand of God' or 'vital force' seen as the motivator of evolutionary change, but a selection by nature over long periods of time for those species capable of adapting to changing environments.

However, while Larson's account of this history is interesting he makes clear early on that he will shed little light on the central issue of his book: the debate between religion and science, of which Darwin's theory is only a part. Larson views the conflict that led to the Scopes trial as very much an 'American debate.' The limitations of Larson's presentation of the conflict stems primarily from his failure to consider the religion/science 'debate' in the context of the Enlightenment, which began nearly two centuries before Darwin's discovery. With the Enlightenment, all things considered to be true were placed under the magnifying glass of scientific examination. The theoretical and technological breakthroughs it produced would later serve the needs of the emerging capitalist class, who would employ these advances in the quest for markets and profit.

This raging conflict between religion and science, that so much characterized the Enlightenment, was part of the culture of the United States from its founding. The leaders of the American revolution incorporated the ideas of the Enlightenment, including a strict separation of church and state, into the Constitution of the United States. The various Protestant denominations, which had been set up by immigrants from Europe, brought the experiences of the Reformation and its turmoil with them. From the Salem witch trials of colonial America--to the 'Manifest Destiny' and notion that the genocide of Native Americans was divinely sanctioned--the contradiction between the periodic religious revivalism and the American republic are important in understanding the characteristics of the Protestant fundamentalism that emerged in the United States in the twentieth century.

Larson provides an important description of how, during the nineteenth century, American Protestant denominations became divided into orthodox and 'modern' factions. This schism began early in the nineteenth century as a reaction to literary higher criticism. This movement, led mainly by German philosophers, placed the Bible under scientific scrutiny. In response, while modernist Protestants interpreted their theology in light of insights being uncovered by science, orthodox Protestantism replaced the intellectual traditions of Judaism and European Christianity with a faith based on pure emotion. The concept of a believer having personal access to God, known as being 'born again,' was adopted, requiring an unquestioning, literal acceptance of the Bible.

The development of Protestant fundamentalism was, according to Larson, the direct result of the fight by orthodox Protestants against Darwin's theory of evolution. The author dates its origin to the founding of the World's Christian Fundamentals Association in 1919, by a number of leading Bible schools and what was called the prophetic conference movement, 60 years after the publication of Darwin's Origin of Species. The growth of public high schools--expanding from 200,000 in 1890 to 2 million in 1920--intensified the controversy over Darwin's theory. The theory of evolution, which had been debated for over a century in universities and seminaries, suddenly became an issue in the high school curriculum.

One of the leading opponents of Darwinism was the leader of the Populist Movement and the Democratic Party, William Jennings Bryan. A three-time presidential candidate, dubbed the 'Great Commoner,' Bryan had been instrumental in the transformation of the image of the Democratic Party from the defender of slavery and states' rights to the advocate of the 'common man.' Alongside his promotion of petty-bourgeois populism, Bryan was an outspoken opponent of the theory of evolution.

While not a member of fundamentalist organizations, Bryan, a Presbyterian, argued that the acceptance of evolution undermined civilization. During his lengthy political career, and for 10 years after he
had left political life, Bryan delivered hundreds of speeches and wrote dozens of books denouncing the theory of evolution as ‘guesses strung together.’ Fundamentalists rallied to his cause despite his previous liberalism, a development which prompted his previous liberal democratic supporters such as Clarence Darrow and the ACLU to break with him. Bryan particularly fought against teaching evolution in the schools, contending that ‘parents who pay [the teacher’s] salary have the right to decide what will be taught. A scientific soviet is attempting to dictate what is being taught in our schools.’ Larson, however, fails to understand Bryan's political role. In an interview on Amazon.com, he commented: ‘One political commentator of the day said that Bryan was the closest thing to a socialist that the American mind could tolerate. You could argue that he was the most radical presidential candidate ever nominated by a major party.’

In the 1920s newly formed fundamentalist organizations began to agitate for state laws making it illegal to teach evolution in the schools. Over several years, dozens of bills were introduced, mainly in Southern and Border States, to criminalize the teaching of evolution. Finally, in the spring of 1925, the Tennessee legislature passed a law making the teaching of evolution a misdemeanor. Under the law, a public school teacher could be fined a maximum of $500 for teaching ‘any theory that denies the story of Divine Creation of man taught in the Bible, and to teach instead that man had descended from a lower order of animals.’ This legislation was a byproduct of a wave of repression launched by the US government to quell labor unrest following World War I, and to discourage the powerful impact of the Russian Revolution on the American working class. Thousands were arrested, deported and detained during the 'Red Scare.' The American Civil Liberties Union, which had been founded during the war to defend opponents of US involvement, became a leading defender of those arrested.

As part of its campaign to defend academic freedom, the ACLU advertised in Tennessee newspapers that it would represent any teacher who challenged the newly enacted anti-evolution law. John Scopes was a 24-year old general science teacher and part-time football coach. The son of an immigrant railroad mechanic and labor organizer, and an avowed socialist and agnostic, Scopes opposed the new law. When told that his use of the standard high school science textbook was in violation of the law because it included Darwin's theory, he agreed to participate in a test case. While Larson points out that all the members of the Scopes defense team were either members of or influenced by the socialist and labor movements, he doesn't deal with the long association between Darwinian evolution and its defense by socialists.

Leading Scopes's ACLU defense team was the most famous trial lawyer of his day, Clarence Darrow. A militant agnostic, Darrow saw the trial as a chance to ‘focus the attention of the country on the program of Mr. Bryan and the other fundamentalists in America.’

As soon as charges were filed against Scopes, the trial began attracting banner headlines across the country. Larson gives an interesting account of the events leading up to the trial, the trial itself and the personalities involved. After the indictment of Scopes, both sides began a fiery debate in the media about evolution versus creationism, and academic freedom. While the fundamentalists held religious crusades around the country in support of the Tennessee law, defenders of the teacher held fund raising events with Scopes as the featured guest.

The trial proceedings...

From the opening day of the trial on July 1, the event dominated the newspapers. Phone lines carried daily reports to the newly formed radio networks. Hundreds of miles of telegraph wire were hung for reporters to communicate with their newspapers. Newsreel crews filmed reports which were flown out each day to be shown on movie screens throughout the country the next day. Amid sweltering heat and humidity, the trial raged until July 25.

The surrounding community and audience at the trial were hostile to the defense, wildly applauding Bryan's sermonizing during the trial. The trial was presided over by Judge Raulston, who came each day carrying his Bible and a statute book. A fundamentalist minister started each session with a long prayer, directed at the defense, and punctuated with frequent ‘amens’ from the audience. The jury was made up of middle-aged farmers, with little or no education, from rural Tennessee. Larson skilfully presents how constitutional law was interpreted in 1925 to explain the arguments of the trial. He quotes directly from court transcripts and uses later memoirs of the protagonists to recreate the events of the trial.

Over several days, each side presented documents and witnesses, including high school students, to prove that Scopes violated the law by teaching 'a theory which denies the story of divine creation of man as taught in the Bible' in his science class. When put on the defensive by scientific witnesses called by the defense, the prosecution succeeded, after heated debate, in persuading Judge Raulston to rule to limit the trial to a discussion as to whether Scopes had broken the law, and to not allow any further debate on the subject of creationism versus evolution. Testimony of scientists was admitted in written form to be admitted only for a possible appeal after the trial.

The trial reached its high point when the defense called Bryan as a surprise witness. Since the trial had by this time been moved to the courthouse lawn, an audience of over 3,000 witnessed the historic debate between Darrow and Bryan. With Darrow questioning Bryan as a hostile witness, over the vehement objections of his co-council, Larson details their sparring on Biblical history, agnosticism and belief in revealed religion. Newspapers throughout the country reprinted the entire transcript of the debate, most of them proclaiming that Darrow had shown that 'Bryan knows little about the science of the world.' However, Judge Raulston barred further examination of Bryan and ordered his prior testimony expunged from the record, stating that it was unrelated to the issue of whether Scopes taught that man was descended from lower animals. With this rulling, Darrow ended the defense arguments by sarcastically stating that the judge should instruct the jury to find the defendant guilty. The jury had heard only two hours of testimony since it was excluded during debates, over technical issues of admissibility of evidence, when most of the memorable speeches were given.

In his closing argument, Darrow told the jury that in light of their being unable to hear most of the testimony, 'We cannot even explain to you that we think you should return a verdict of not guilty.... We do not ask it.' The jury huddled in the hallway and a few minutes later returned a guilty verdict. Scopes, who did not testify during the trial, spoke only briefly at his sentencing, calling the anti-evolution statute unjust and pledging to continue the fight for academic freedom.

Hours after the trial, Bryan launched an offensive against the defense's arguments. He prepared a 15,000-word speech that he planned to use in speeches around the country charging evolution 'not only fails to supply the spiritual element needed, but some of its unproved hypotheses rob [society of its moral] compass.' This never happened, however, since Bryan died in his sleep five days after the trial ended.

A debate continued for years as to who 'won' the trial. The supporters of creationism claimed victory because of the verdict, while the supporters of the defense claimed a moral victory because the defense was able to use science to refute creationist positions. Eighteen months after the trial the Tennessee Supreme Court upheld the law, stating the statute only applied to 'public employees acting in an official capacity.' The law was not overturned until 1967. At the same time, the court overturned the Scopes verdict because the judge, rather than the jury, had fixed the amount of Scopes's fine at the minimum of $100, leaving the defense with no case to appeal to the US Supreme Court.
The aftermath of the trial brought no resolution to the conflict. During the 30s, many states and school districts limited instruction in evolution, and school textbook companies were reluctant to include content that could be deemed controversial. Many sought to appease the fundamentalists by referring to evolution as a 'theory' (using the commonplace, rather than scientific definition of the word) not a dogma. Fundamentalism went on to establish its own colleges and seminaries, radio ministries, and a press that promoted the fundamentalist worldview.

Larson briefly summarizes the organizations and events that have caused fundamentalism to become an increasingly right-wing political movement. This movement is at the heart of the attack on public education and other reactionary movements in American culture today. Since its inception, the American capitalist class has been confronted with a dilemma: How can it promote the most advanced science to its advantage while at the same time preventing the establishment of an independent working class movement capable of using the development of man's understanding of nature to transform society on a socialist basis? Religious superstition is one of the ideological tools employed to prevent the development of such a movement.

For the reader looking for an understanding of the events leading up to and including the Scopes trial, and its pivotal role in American culture and politics, Larson's book provides an engaging and useful read. If, however, the reader is looking for insight into the source of 'America's continuing debate over science and religion,' he or she will not find it in this book.

See also:
Book review: T. H. Huxley and the rise of modern science
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