

Creationism on the Defensive in Arkansas

A high-powered battery of lawyers and scientists challenges Arkansas' "creation science" law

"May God bless this court." With these solemn words the U.S. marshal of the western district of Arkansas opened proceedings at the modern-day Scopes trial on 7 December.

As with that famous legal tussle of 1925, the recent trial held in Little Rock, Arkansas, brought evolution and creationism into confrontation. And, again like its predecessor, the contemporary conflict involved the American Civil Liberties Union (ACLU) as counsel for one of the parties.

But there were many differences too, not least of which was the formal and low-key manner in which events proceeded. No Coke-sipping chimpanzees were to be espied near Judge William Overton's court, although one adventurous citizen came close to the spirit of Dayton, Tennessee. He appeared in simian costume on the second day in the media-besieged corridor just outside the court, only to be ejected by a not very amused marshal.

The upcoming trial had been on the minds of Arkansans ever since summer when the ACLU filed its suit. What right did anyone have to question the validity of Act 590? After all, had not opinion polls shown the citizenry to be overwhelmingly in favor of the teaching of creationism alongside evolution in public schools, which is precisely what the act provides? Worse, why should the ACLU be allowed to impose its secular humanism on a thoroughly religious people? Fair play is what is required, fair play for the evolution and creationism views, and the ACLU was about to try to block it. Or so it went.

The matter is, however, not so simple, as the list of plaintiffs in the case demonstrates. The great majority of them are bishops, preachers, and ministers—people who see Act 590 as threatening rather than enhancing religion. Many of the plaintiffs sat through the full 9 days of the trial, drawn up in a long line alongside their attorneys' table. The plaintiffs fear that Biblical literalism will become an established part of public education.

Dispersed in the back of the court in the public section were other men of the church too, many of them wearing the sleek-styled coiffure that apparently is

the badge of fundamentalism in these parts. The Reverend Roy McLaughlin, minister of the First Baptist Church of Vilonia, 30 miles north of Little Rock, and leader of Arkansas' Moral Majority, was there most days. His polished countenance, boyish blond hair, and pious demeanor seemed at odds with his constant gum-chewing. McLaughlin's strict Biblical literalism, which this reporter heard persuasively and eloquently expressed from the pulpit in the midtrial weekend, was to be a sharp focus in the case. Many of the defense's witnesses were to propound the Bible's inerrancy one after another, less melodiously than the leader of the Moral Majority, but no less emphatically.

Act 590 became a state law on 19 March last year in the most extraordinary fashion. With the legislative session in its dying hours, the bill passed through the Arkansas senate with no hearing and only perfunctory comments from the floor; it slid through the house with barely greater consideration; and the governor, Frank White, signed it without first troubling to read it.

Many legislators cast their votes in favor of the bill because "to have voted against it would have been a vote against God," as one of them put it. But, with the summer now past, many minds have changed; partly because the flap over the trial has exposed the real issues more sharply; and partly because the Chamber of Commerce has begun to experience uncomfortable reaction from businessmen who would rather take their technologically based industry to states that appreciate science more than Arkansas apparently does. Ben Allen, president pro tem of the senate, tried to get the act repealed in a special session of the legislature, but failed because James Holstead, its sponsor, refused the governor's invitation to have it reconsidered.

In representing the 23 plaintiffs in the case, the ACLU hoped to demonstrate on three grounds that Act 590 is unconstitutional. First, it violates separation of church and state because creationism is a religion, not a science; second, it abridges the academic freedom of teachers and students; and third, it is constitutionally vague. The attorney gener-

al, Steve Clark, defending the suit for the state, hoped to show that creationism, or creation science, as it is termed in the act, can be taught without reference to religious writings.

Clark had a tough match on his hands, whatever the merits of the case. How could he and his band of three attorneys hope to take on the ranks lined up on the other side? In addition to two local attorneys, two New York ACLU lawyers, and two more from one of New York's largest and most prestigious law firms, Scadden, Arps, Slate, Meagher, and Flom, whose principal business is in multibillion-dollar corporate takeovers, the plaintiffs' side fielded an army of backup lawyers and paralegals, mainly from Scadden Arps. If the plaintiffs prevail, the state of Arkansas might have to foot the bill for the massive legal effort, with costs currently estimated at \$2 million.

As the two legal teams sat elbow to elbow on that first morning it was easy to appreciate the local pretrial charges that Clark had not done all he could to defend the Arkansas law from this massive outside onslaught. Clark had turned down offers of help from creationist lawyers Wendell Bird and John Whitehead. Some say he declined their aid because he wanted to hold the inevitable media attention to himself, as he was contemplating a run for governor. Others considered Clark wise to avoid the offer, as Bird is general counsel to the Institute for Creation Research (ICR) in California, and such a direct link could damage the case.

As the trial wore on, with the weight and the character of the evidence steadily appearing to favor the plaintiffs, the anti-Clark criticism grew more strident.

On day 3 of the trial, the TV fundamentalist Pat Robertson accused Clark on the air of being in collusion with the ACLU. Then Jerry Falwell, the national leader of the Moral Majority, joined in the attack on the Monday of the second week. Finally, on the penultimate day of the trial, the Creation Science Legal Defense Fund (CSLDF), an Arkansas organization with ICR officials on its board, launched a blistering fusillade, claiming publicly that "the attorney general's

staff had failed to ask many obvious questions in cross-examination and obviously had not prepared adequately for the trial." Private commentary was considerably stronger.

In spite of the example of his national leader, McLaughlin refrained throughout from openly criticizing Clark, but a post-trial blast was constantly anticipated. But, so as not to be left out, he held a press conference on the same day as the CSLDF assault in which he questioned the judge's conduct and neutrality in the case. The ground was thus thoroughly prepared for rejecting an adverse decision as having nothing to do with the constitutional merits of the law.

The ACLU began its case by calling Ken Hicks to the stand. Hicks, who was one of the plaintiffs, is bishop of the United Methodist Church in the Arkansas area. He testified that "the definition of creation science given in Act 590 is a reflection of the literal account of Genesis." Hicks also said that the religious orientation of the people involved in promoting the legislation gave him a clue to its real intent.

Bruce Vawter, a theologian, and George Marsden, an expert on the history of American fundamentalism, made similar inferences.

In each case, the defense charged that the witnesses were familiar with the idea of creation only in the context of the Bible, not as the object of scientific study. "The issue here," stressed David Williams, deputy attorney general, "is creation science as a science. It can be totally divorced from religion."

Dorothy Nelkin, a social scientist who has studied the history of the creationism movement, and Langdon Gilkey, a Chicago theologian who must qualify for the trial's William Jennings Bryan award for eloquence, didn't agree. State's cross-examination of Gilkey invoked Copernicus, Galileo, and Newton as scientists who in their day were thought to be outside the mainstream of science and yet were eventually to revolutionize it. This was not to be the first and only time that such great names of the past were to be offered as a lens through which to bring into focus the true nature of the heterodoxy of the creationist scientists.

Science has to be testable, explanatory, and tentative, said Michael Ruse, a philosopher of science at the University of Guelph, Canada, and he made it plain that in his mind creation science was none of these. The attorney general's case danced something of a quadrille around these points because he and his colleagues were to argue that, yes, creation science is a science; but then again,

no it is not, but neither is evolutionary theory a true science. It was a difficult path to tread and the defense frequently found itself in the underbrush.

Unlike the Scopes trial, this latest run-in with creationism did bring expert witnesses into play. For the plaintiffs they were Francisco Ayala, a geneticist from the University of California, Davis; Brent Dalrymple, from the U.S. Geological Survey, Menlo Park; Harold Morowitz, a biophysicist from Yale; and Stephen Jay Gould, a paleontologist and modern-day T. H. Huxley, from Harvard. Each testified that yes, evolutionary theory was thoroughly scientific even though there were problems with it; and that no, creation science (Ayala could hardly bring himself to mouth the phrase) most definitely was not.

Callis Childs, an assistant attorney general, was running a good line of questioning during the cross-examination, describing the scientific community as a country club picking and choosing whom it would allow in. He rather spoiled it, though, by demanding to know why the flat earth theory was not taught at Ivy League universities, following a facetious comment to that effect by Morowitz.

Throughout the cross-examination of

without necessarily being religious. Judge Overton was clearly interested in this line of reasoning, until, under cross-examination, Geisler tarnished his credibility somewhat by declaring that UFO's were agents of Satan.

The attorney general presented six science witnesses, two more than had testified for the ACLU, presumably on the grounds that quantity made up for evident lack of quality. There would have been more had not a serious case of disappearing witnesses set in as the second week wore on. Dean Kenyon, a biologist from San Francisco State University, fled town after watching the demolition of four of the state's witnesses on day 1 of the second week. And Henry Voss, a computer scientist from California, was rapidly withdrawn by the defense at the last minute when, in pre-trial deposition, he too began to expound on things satanic and demonic.

The state's star witness was Chandra Wickramasinghe, a mathematician from the University of Wales and undoubtedly the most scientifically respectable of the whole lineup. He believes that a creator has sprinkled interstellar space with microbes and genes which both seeded life here on earth and from time to time provided a source of new genetic materi-

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the plaintiffs' science witnesses the attorney general's table received a flow of hurriedly scribbled notes from Duane Gish, associate director of ICR, from his habitual seat three rows back, right center aisle. This was the state's only source of expert advice during the trial.

The ACLU concluded its case by calling local science teachers and curriculum advisers, the main burden of whose testimony was that a recent attempt to draw up a school unit of creation science had failed. "We just couldn't find any science to put in it," said Bill Wood, of McClellan High School. "If Act 590 is upheld I would not know what to teach."

The week was drawing to an end and the defense had time to field one witness, Norman Geisler, from Dallas Theological Seminary. "It is possible to believe that God exists without necessarily believing in God," he argued. This was the defense's principal thrust for being able to teach about the product of a creator

al needed for a jump in evolutionary complexity.

Defense witness Robert Gentry, a physicist associated with the Oak Ridge National Laboratory, brought the trial to a close with 4 hours of excruciating detail about an anomalous result in the radiometric dating of the age of the earth that Dalrymple had described as "a tiny mystery."

Judge Overton left the bench at 10:46 on Thursday, still holding his head from Gentry's massive presentation. He retired to his chambers without fulfilling his pretrial promise to rule from the bench. "I have 300 pages of notes to review," he said by way of explanation. "I shall make my decision known in about a week." Whatever the practicalities of the matter, it had become apparent that a hasty decision would have been politically unwise.

The rest, as they say, is history.

—ROGER LEWIN

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