

# Evidence for Scientific Creationism?

In his *Tenets of Creationism (1)* Henry Morris, director of the Institute for Creation Research, states that scientific creationism is distinguished from biblical creationism in having "no reliance upon biblical revelation, utilizing only scientific data to support and expound the creation model." Indeed, anyone who has even a brushing acquaintance with creationist literature will be familiar with the frequent reference to abundant scientific evidence that, it is claimed, supports the creation model as against evolution. These same readers will have noted, however, that although reference is frequent, specific citation is rare. Eugenie Scott and Henry Cole therefore decided to search the scientific literature—published and unpublished—for evidence of the putative pillars of so-called creation science.

In 1982 Scott, who is now at the University of Colorado, and Cole, of the University of Kentucky, used SCISEARCH to do a 3-year scan of 1000 scientific and technical journals (2). The search focused on the names of editorial board members of the Creation Research Society and research associates and technical advisers of the Institute for Creation Research and included keywords such as "creationism," "special creation," "scientific creationism," and so on. The tally was small: of 18 items that came forth, four were critical of scientific creationism as pseudoscience, five editorials discussed the controversy over creationism, and nine letters to editors expressed a mixture of opinions on the merits of creationism versus evolution. "Nothing resembling empirical or experimental evidence for scientific creationism was discovered," concluded Scott and Cole. Six of 28 prominent creationists had been published in refereed scientific and technical journals during the study period, but on diverse topics outside scientific creationism, including the chemistry and physics of food processing, vibrations and stresses in aircraft wing structures, and the effect of pollutants on aquatic microorganisms.

Giving creationism the benefit of the doubt, and reasoning that perhaps many manuscripts on the scientific underpinning of creationism never reach the printed page—for whatever reason—Scott and Cole turned their attention to submissions to journals. In a survey of 68 scientific, technical, and educational journals, which received a total of 135,000 submitted manuscripts over a 3-year period, only 18 addressed scientific creationism (3). Of these 12 went to one journal on science education; a second science education publication received one more. Three submissions went to one anthropology journal, and two further manuscripts were sent to an anthropology journal and a biology journal. At the time of writing, all manuscripts had been rejected by journal editors, with the exception of three that were still under review at one of the education journals. The *American Zoologist*, which has a very open policy on submission of abstracts, received not a single presentation on empirical evidence for scientific creationism during the 3-year study period.

Part of the survey included reasons for rejection of papers. According to reviewers' comments, papers on scientific creationism suffered from several faults, including the following: poor presentation ("ramblings . . .";

"no coherent arguments . . ."; "high-school theme quality . . ."; "tendentious essay not suitable for publication anywhere"; "more like a long letter than a referenced article") and failure to follow accepted scientific canons ("no systematic treatment . . ."; "does not define terms . . ."; "flawed arguments . . ."; "failure to acknowledge and use extensive literature on particular questions . . ."). Scott and Cole note that "From the reviewers' comments, it appears as if laymen rather than professional scientists are submitting the few articles that have surfaced during the last three years."

Scott and Cole ask: "why don't the professional scientists among the creationists publish empirical, experimental, or theoretical evidence for scientific creationism?" The answer, they suggest, is to be found in a comparison of the scholarship evident in creation science sources with that in orthodox scientific journals. There is, they say, a difference in the application of logic. For instance, creationists view the issue as having only two alternatives: evolution or the biblical literalist view of creation. Given this dichotomy, "arguments against evolution are arguments for creation." Another example is in the use of extrapolation, often done selectively: "All scientists extrapolate to some degree from observations to conclusions, but creationist extrapolations regularly border on the extreme." One claim in this respect is that the earth must be young because, if erosion of landmasses observed today had operated for billions of years, then all the continents would long ago have been washed away, a suggestion that simultaneously ignores a large segment of continental geology and the simplest implications of plate tectonics.

Creationists often complain that the scientific establishment conspires to prevent the publication of evidence for creationism, a posture that does not impress Scott and Cole: ". . . when only 18 articles are submitted to 68 journals in three years, and those articles are submitted apparently by persons not skilled in established scientific methodology and theory, it is inappropriate to invoke censorship. To be published, one must first submit, and scientific creationists are apparently not submitting manuscripts."

Although the Arkansas creationism law was declared unconstitutional in January 1982 (4) and Louisiana seems poised finally to go the same way (5), creationists' efforts have not been dented, just redirected to the local level. Scott and Cole note that ". . . science teachers are faced with community campaigns . . . by influential persons, some with scientific credentials, who repeatedly claim there is as much, and equally as good, scientific evidence for scientific creationist concepts as there is for evolution." Scott and Cole's survey of the scientific literature and the manuscripts submitted to scientific journals fails to support this claim. "We hope the results of our study will be useful for those who directly confront the creationists."—ROGER LEWIN

## References

1. H. M. Morris, *Acts and Facts Series* (No. 85) (July 1980).
2. H. P. Cole and E. C. Scott, *Phi Delta Kappan* (April 1982), p. 557.
3. E. C. Scott and H. P. Cole, *Quant. Rev. Biol.* 60, 21 (1985).
4. W. R. Overton, *Science* 215, 934 (1982).
5. R. Lewin, *ibid.* 227, 395 (1985).