

The book is nonetheless a compulsive read, a case study of something that should never have happened, and which speaks silent volumes about the nature of the scientific endeavor and the complex social, economic, and political context in which contemporary biology is inextricably embedded. Could a similar episode have occurred outside the United States? Despite some recent well-publicized cases of fraud and duplicity in Europe (most recently the Seeburg affair), I tend to doubt it. We do things differently on my side of the Atlantic, and our scandals have a different flavor to them. But on both sides of the pond, the relationships between post-docs, lab chiefs, and research directors will always have something of that tension in them.

Steven P. R. Rose

Paul K. Conkin, *When All The Gods Trembled: Darwinism, Scopes, and American Intellectuals*, American Intellectual Culture (Lanham, Md.: Rowman & Littlefield, 1998), xi + 185 pp., \$24.95.

Stephen Jay Gould, *Rocks of Ages: Science and Religion in the Fullness of Life*, Library of Contemporary Thought (New York: Ballantine, 1999), viii + 241 pp., \$18.95.

Most of us are familiar with the icons of warfare between science and religion, and have grown up hearing the stories of Giordano Bruno, Galilei Galileo, and John T. Scopes. The two works under review offer differing viewpoints on the relationships between science and religion, and are aimed at differing audiences. Conkin's volume is part of an academic series examining the place of intellectuals in American life, while Gould's work is in a popular series in which "America's most original voices tackle today's most provocative issues" – issues including *Jones v. Clinton*, Tiger Woods, and the Disney empire.

Conkin holds that the widespread acceptance of evolution brought about a crisis for Protestant America at the turn of the last century. While offering brief outlines of Darwin's argument and the Scopes Trial of 1925, Conkin's main goal is to show how intellectuals such as John Graham Machen, H. E. Fosdick, and Shailer Mathews coped with what Walter Lippman termed "the acids of modernity." To Conkin it is obvious that this assault led to different views of "God" within the Christian community, views that for some received support, rather than opposition, from Darwinism. In outlining the views of the above, and of non-theists such as John Dewey, George Santayana, Walter Lippmann, H.E. Barnes, and John Crowe Ransom, Conkin provides a useful, albeit short, introduction to the cultural crises of the 1920s. What is clear

from the work is that the debate in the 1920s was much more interesting than the modern fixation on the Scope's trial would suggest.

Stephen Jay Gould's status as a public intellectual is well known. As the Huxley of late-twentieth-century America, he has often touched on the relations between science and religion, and as such it comes as little surprise that we would eventually be confronted with a volume outlining his views. The work is largely an expansion of essays found in three of Gould's previously published books – essays that are extracted from his column in *Natural History*. Thus, to the dedicated Gouldite there is little new here. Indeed, given the repetitive nature of much contained in this work, most readers will have got the message by page 45, and will have little reason to continue as Gould hammers his point home.

Gould's claim is simple. The magisterium of science covers the empirical world, while that of religion covers the realm of moral values and ultimate meaning. These two realms form “non-overlapping magisteria” (NOMA) which do not extend beyond their respective boundaries. Gould sees this principle of NOMA as the key that allows science and religion to co-exist. He freely admits that his solution is “nothing original” (p. 3) being a form of Aristotle's Golden Mean which grants “dignity and distinction to *each* subject.” Yet within this comfortable solution there are problems. Gould describes Pius XII's statements on evolution in *Humani Generis* (1950) as “a helpful perspective from an intelligent and concerned outsider” rather than the incursion across NOMA that it must surely represent. So intent is he on being irenic, and thus not wishing to disenfranchise a Catholic readership, that he chooses to ignore any hints of Papal traditionalism and dogmatism (see p. 70 ff.). In framing his argument, Gould uses persuasive rhetoric to ensure that the reader accepts his viewpoint. He aligns himself with such sages as Charles Darwin and Thomas H. Huxley, along with other “seekers of wisdom” and “people of goodwill” (p. 170). NOMA is a “humane, sensible, and wonderfully workable solution” (p. 92). It is a “logically sound, humanely sensible, and properly civil way in a world of honorable diversity” (p. 170). One feels positively boorish and illiberal disagreeing with Gould, but disagree I must.

The work suffers from one overarching flaw. Gould defines religion so as to essentially ensure the success of his proposal of NOMA, but in so doing gives the reader a theology solely with jurisdiction over ethics and morals, thus relegating religion from much of its previously held domain. To Gould, ethics and morals are the essence of “true religion” (p. 42, a phrase which frankly reminds me too much of Creationist claims regarding “true science”). Religion is stripped of most of its traditional meaning and power – there is no talk of origins, design, progress, purpose, guided process, or a personal

deity. In short, we are left with a view of religion that would be alien to any theologian within the Judeo-Christian tradition and many others besides. By defending religion thusly, it becomes easy for Gould to claim no overlap or conflict between his non-overlapping magisteria – science retains all its power and prestige, while religion becomes redefined so as not to cause any trouble. Rather than “strongly upholding the general importance of religion” (p. 93), NOMA neuters it.

As Conkin demonstrates, the Protestant theologian Charles Hodge quite correctly noted inconsistencies between Darwinism and the major themes of evangelical Christianity. In particular, Darwinism removed the prop from under the last intellectually justifiable support from deism – the argument from design. Conkin eschews the irenic path, correctly noting that the God of the irenicists (and of Gould) differs greatly from the transcendental God of the Old Testament – the God of Miracles became no more. In this, Conkin sees much to be sorrowful about as the Protestant religion became watered-down and changed irrevocably. As the notes – “the irenic idealists had created all the new gods in their own image, had helped kill the old, personal, visceral, willful God of Christianity. Yet those who indulged in deicide were so dense, so upcomprehending, that they did not yet appreciate the horror of their actions” (p. 174).

In the preface of his work, Conkin accuses those who claim that science and religion “when fully or properly understood, do not conflict” of making a claim that “reflects either stupidity or a deliberate refusal to define terms and think rigorously” (p. ix). I suspect Conkin would have little time for Gould’s oversimplified (and somewhat disingenuous) solution of NOMA. Frankly, I see little reason why other philosophers, historians, and theologians should either.

John M. Lynch

C. Lee Campbell, Paul D. Peterson, and Clay Smith, *The Formative Years of Plant Pathology in the United States* (St. Paul, Minn.: APS Press, 1999), xvii + 427 pp., illus., \$49.00.

Although there have been other histories of plant pathology, they have tended to be either wide-ranging books surveying across both centuries and continents, or narrow-focused articles dealing with specific diseases, institutions, or individuals. This book tackles the history of plant pathology in its early years in the United States, from the colonial era through the immediate World War I period. The authors have nicely filled a gap in the general narrative of agricultural history with a wealth of details both technical and biographical