## **REVIEWS**

Bonfire of the Humanities: Rescuing the Classics in an Impoverished Age, by Victor Davis Hanson, John Heath and Bruce S. Thornton. Wilmington, DE: ISI Books, 2001, 358 pp., \$24.95 hardbound.

## E. Christian Kopff

The fine French Hellenist, Jacqueline de Romilly, ended her Problèmes de la démocratie grecque (Hermann, 1975) with a warning: "A democracy which allows teaching to fall into the hands of the enemies of the regime, which does not even attempt to preserve for education its quality of formation-not just political, but civic formation—such a democracy is lost. Aristotle said it loud and clear." For the next twenty years she exhorted the French reading public to stay in touch with the Greek roots of Western civilization in a series of best sellers that were the equal of her important scholarship. A Jacqueline de Romilly, who could combine first-rate scholarship with popular outreach, seemed an impossible dream in America.

Then Victor Davis Hanson of California State University, Fresno, and John Heath of Santa Clara University published Who Killed Homer? The Demise of Classical Education and the Recovery of Greek Wisdom (Free Press, 1998) (WKH?). The authors argued that the Classical Tradition was essential for preserving such values as freedom and rational self-criticism.

The Bonfire of the Humanities is a series of articles published by Hanson, Heath, and Hanson's Fresno colleague, Bruce S. Thornton, on the themes of WKH? The language is vigorous and clear. The arguments are logical and based on facts. The authors are effective teachers and good scholars. (Hanson is more than that, one of the truly important classical scholars of

his generation.) There is something here for everyone who can stomach frank and clear discussion of the woes of American academia. The tone is passionate and witty, if somewhat negative. Those who want to read about the positive side of the Greek legacy can turn to WKH? or Bruce Thornton's Greek Ways: How the Greeks Created Western Civilization (Encounter Books, 2000), a marvelous up-dating of Edith Hamilton's The Greek Way of 1942.

Those unfortunate souls who have not read WKH? will enjoy Hanson and Heath's 'Who Killed Homer? The Prequel," which first appeared in the journal Arion, as did Bruce Thornton's articles reviewing recent trends in literary studies. Thornton subjects incoherence and pretension to rational thought and plain language in his own distinctive two-fisted style. His demolition of Martha Nussbaum's Cultivating Humanity (Harvard, 1997) devastates current educational fads by a clear and fairminded discussion of the issues and reminds us why educators avoid such discussions like the plague. It is followed by an equally compelling critique by John Heath, who pours salt on the ravaged fields of Nussbaum's "classical defence of reform in education."

Hanson's essay on "Personal Voice" scholarship, "Too Much Ego in Your Cosmos," makes a real contribution to scholarship. The assault on academic standards deconstructs the ideal of objective scholarship. While one wing of the attack argues that all research reveals bias and prejudices, the other wing intrudes their own personal life into scholarship. Such experiences can be relevant. Thucydides devotes part of his memorable depiction of the plague in Athens to his own sickness. Hanson's masterpiece, The Other Greeks (Free Press, 1995), an exploration of the agricultural basis of Greek culture displaying a masterful command of the

techniques of classical scholarship, is enriched by his own farming experience.

So he was the perfect reviewer of the articles in Compromising Traditions: The Personal Voice in Classical Scholarship (Routledge, 1997). This book shows careerist academics at their worst, unable to master scholarly techniques and interrupting serious discussion with accounts of personal anxieties. The wittiest section deals with Judith Hallett, chair of the Classics Department at the University of Maryland. To demonstrate how unfairly she was treated by the male Classics establishment, Hallett published the letter her chairman at Boston University wrote for her file when she was turned down for tenure. Hanson shows that the traits noted by Hallett's chairman are true of her scholarship. The fact that shallow teachers and poor scholars are turned down for tenure does not prove that their self-proclaimed victim status is relevant to scholarship.

Heath reprints "Self-Promotion and the 'Crisis' in Classics" from Classical World 89.1 (1995), where he first argued that a narrowly philological Right and the multicultural Left were mutually and jointly responsible for the collapse in the numbers of students of Greek and Latin since the early 1960s. CWs assistant editor was Judy Hallett. Heath introduces the essay with a description of her demands that he rewrite the article four times in order to tone down criticism of feminism and other leftist icons. It was eventually published with responses by four feminists and some other classicists. I wish Heath had printed his first draft, "Genitals and Genitives." Since Bonfire begins with Thornton and Heath taking turns with Martha Nussbaum, it seems only fair to see what John Heath looked like before the haridans from Aristophanes' Ecclesiazusae had their way with him in the editorial offices of the Classical World.

Heath objects to my description of Classics as "populated and run by 'hundreds of bookless, grantless zeroes." (The last five words are mine.) I think that successful teaching requires scholarly accomplishment. All too often, people are granted tenure without significant refereed publication and then become chairmen and administrators. I remember a young scholar with two books from major presses who was denied tenure for insufficient scholarship. His dossier had been prepared by a chair who had been tenured with no refereed publication. I think of a book review editor who was fired for allowing criticism of a feminist book by a scholarly organization whose president had been granted tenure with no refereed publication. Heath's gelded article makes some good points, but I reject the implication that insisting on minimal standards is "elitism." We are cheating students when we drive good scholars and award-winning teachers out of the field in favor of people who "publish in the classroom," in John Silber's immortal words. These mediocrities are the Classics establishment's first line of defense.

The most titillating article is Heath's "Not the Unabomber." In 1999, during a discussion on the Classics email list, Judy Hallett (Do you see a pattern here?) announced that she had reported Hanson and Heath to the FBI as fitting the physical, ideological, and stylistic traits of the Unabomber, The Unabomber, like Hallett, did his graduate work at Harvard and writes like the ghost writers for Al Gore's Earth in Balance, nothing like Hanson's emphatic and brooding clarity. What are the odds that people who cannot tell Hanson's style from the Unabomber's leaden prose can make relevant distinctions about texts written in ancient Greek and Latin? Hallett's account as it came out on list and elsewhere,

including an article by Jody Bottum in the Wall Street Journal (Friday, 28 May 1999) makes no chronological or logical sense, a trait that Hanson and Heath find significant. They think that Hallett falsely claimed to have reported them to the FBI to discourage editors from allowing them to review her "scholarship" in the future. Despite being denied tenure by the futile academic integrity of the Classics faculty of Boston University, Hallett became chair of a department at a large state university and serves on national committees of the APA. What kind of field allows that to happen? Short answer: One that fits the description of Classics found in Who Killed Homer? and The Bonfire of the Humanities.

Hanson, Heath, and Thornton are absolutely right that Classics needs a complete overhaul of its leadership in light of the catastrophic mismanagement of the last forty years. I have some reservations about their talk of "academic populism." In politics, populists defend farmers and factory workers who grow or make things over financial manipulators who get rich without creating anything. The parallel in academia is defending teachers and scholars against administrators who are neither. Real academic leaders display excellence in both teaching and research and can defend difficult and important subjects when they are attacked. Whether they like it or not, Hanson, Heath, and Thornton are an elite.

The pose of academic populism leads to unnecessary concessions. When a feminist complains that he sees feminism as monolithic, Heath protests that he explicitly said that there was great diversity among feminists, "incorporating such (often conflicting) variations as liberal, Marxist, radical, socialist, and eco-feminism." This is what passes for diversity and conflict in American academia, the in-house squabbles of liberal Tweedledee and radi-

cal Tweedledum. Naturally there is no room for traditionalists or conservatives. Denouncing Hallett's FBI story, Heath waxes wroth over Elia Kazan and others who testified about communism in the film industry. Can't Hallett see that she was behaving the same way? Can't Heath see that liberals were objecting to people truthfully discussing the role of real communists in Hollywood? They have no objection to smearing people who will not follow the party line. Hanson describes Hallett's FBI claims as "quite unexpected for someone who is a professed woman of the Left." Where has he been for the past two hundred years? Smearing independent-minded people has been a standard part of the leftist agenda from Marat to Bill Clinton. Despite their squawking about free speech when out of power, there is no area controlled by the left where substantial freedom of speech is permitted from Liberal American academia to Communist China or Socialist France and Germany.

The hypothesis that philology and literary theory are mutually responsible for the collapse in enrollments in Greek and Latin does not meet the test of the facts. When American Classics was dominated by narrow philologists, like Basil Gildersleeve and Paul Shorey, many high school students took Latin and some took Greek. The numbers of high school Latin students imploded in the sixties when the literary critics took over Classics, as a glance at what got published in the Transactions of the American Philological Association shows. The current set of theorists and feminists are the lineal descendants of the "New Critics." Despite their factional infighting, both groups are contemptuous of traditional philology, the traditional arguments for Greek and Latin, and the preservation of high school Latin. A frank history of the decline of the Humanities

in American academia needs to confront directly and explicitly the connection between the literary critics of middle third and the literary theorists of the last third of the twentieth century. Until that day comes, readers who enjoy common sense expressed in vigorous prose are going to love *The Bonfire of the Humanities*.

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Voodoo Science: The Road from Foolishness to Fraud, by Robert L. Park. London and New York: Oxford University Press, 2000, 230 pp., \$25.00 hardbound.

Science or Pseudoscience: Magnetic Healing, Psychic Phenomena, and other Heterodoxies, by Henry H. Bauer. Champaign: University of Illinois Press, 2001, 275 pp., \$29.95 hardbound.

## Lee L. Zwanziger

Robert L. Park directs the Washington office of the American Physical Society, prior to which he was professor of physics and chairman of the department of Physics at the University of Maryland. Henry H. Bauer recently retired from Virginia Polytechnic Institute, where he was professor of chemistry, professor of science and technology studies, and dean of arts and sciences. The authors bring significantly different perspectives to their work,

so these two books make an interesting pair. Let me say at the outset that both are well written and I would recommend reading both. Since both are enjoyable as well as accessible, I would also recommend them as gift books.

Both books address certain aspects of the demarcation problem, a classic question in the philosophy of science, namely what distinguishes science from other pursuits. Suggested approaches to criteria for the demarcation of science and non-science range from epistemological matters such as the methods of inquiry and the form of hypotheses (e.g., falsifiability), to historical matters such as the track record or progress of a field, to social or psychological matters like the motivation or integrity of practitioners. The result of a great deal of very serious inquiry is that we do not have a clear demarcation of science and non-science, even in many historical cases and certainly not in contemporary cases. There are clear cases at the extremes, no matter how blurry the line remains, and like other matters of judgment—attempts to define obscenity for example—we often may know (or, at least, think we know!) an activity to be one or the other when we see it. Also like other matters of judgment, the difficulty of developing an airtight formula for demarcation does not diminish the importance of the judgment involved.

In the ongoing consideration of science and pseudoscience, both authors contribute to increased precision in the use of the term "pseudoscience." The term "pseudoscience" looks like it should refer to activities that are superficially similar to science, and that are both presented as, and are easily mistaken for, science. But in actual usage, the term has been applied to such disparate activities that it often means little more definite than a generalized and severe intellectual opprobrium.

In Voodoo Science, Dr. Park introduces a taxonomy including pathological science, junk science, pseudoscience, and fraudulent science. He explains pathological science as the case where scientists fool themselves (a more extreme situation than being mistaken about facts). Junk science is the application of superficial features of specific scientific fields to develop accounts of something that appears potentially plausible on the basis of a correlation, without requiring evidence as to whether it is in fact the case-often, unfortunately, a problematic use or misuse of public health and epidemiology. Park analyzes several such examples, notably the history of claims about carcinogenic effects of power lines. He reserves the term pseudoscience for areas of interest where non-scientific claims are superficially draped in scientific language. Finally, fraudulent science is intentional deception by scientists in regard to scientific results. Park collects all these under his general term, voodoo science.

The stated goal of the book is to "help people recognize voodoo science and to understand the forces that seem to conspire to keep it alive." Another, perhaps secondary, goal of the book is to locate the line between "foolishness and fraud." The search for a line between foolishness and fraud might seem to suggest that the four types of voodoo science lie along a continuum, but that is neither the situation nor the intention: fraud can occur in the activities Park describes as junk or pseudoscience as well. Park's major case study, however, is cold fusion, and in that case he is primarily concerned to describe a progression from error through self-deception and perhaps finally to intentional public deception or fraud.

Voodoo Science is very good when Park describes some of the social currents particularly in the U.S. that support certain less rigorous areas of interest, notably populism, an affection for inventors in general and a particular affection for the lone and unorthodox individual discovering previously unknown truth despite lack of support from the (scientific) establishment. He has also a keen ear for how to tell a story. If the book has any weaknesses, I think they may lie in a couple of points furthest from physics, perhaps not surprisingly as the author is an eminent physicist. The idea that we harbor a "belief engine" is, as a metaphor, both useful and evocative. But mixing the metaphor with neuroanatomy and pre-linguistic paleoanthropology may suggest reification prematurely. If the reader, however, leaves it as a metaphor, as the author usually uses it, it indeed serves well as a helpful descriptive and rhetorical device. The other point is the author's repeated use of Pascal's Wager to represent any instance of cost-benefit analysis. Pascal's Wager has a particular history and using it in cases of public policy cost-benefit considerations confuses the policy analysis. Further, the reader can hardly help but notice that the author invokes the term when describing a government decision to fund something he believes (often for very good reasons) to be without foundation, and suggests that author may regard the original question, the existence of God, as a similar matter. Thus the pattern comes across as almost petulant towards religion, ultimately cheapening the rhetoric of the argument without affecting its substance either positively or negatively.

The book is really wonderful, however, in its accounts of junk science and public policy; not only power lines and cancer, but microwaves, breast implants and others. Similar situations are legion—if anything, the author understates this current in our society. But when the author observes that "junk science is an example of

voodoo science that survives by avoiding the full scrutiny of the scientific community," one must likewise note that this is happening in the open, indeed in the news media, and if it is not getting the full scrutiny of the scientific community, then perhaps it is scientists, not purveyors of junk science, who are avoiding such engagement. Dr. Park's work, in this book and through the American Physical Society, is a call to attention.

Dr. Bauer addresses "the study of things that science denigrates or ignores," a study which he designates as "anomalistics." The goal of Science or Pseudoscience is to "make a detailed comparison of the actual practices in anomalistics and in scientific work ... [showing that] ... there is no easy or sharp distinction to be made between science and anomalistics." Bauer characterizes inquiry as dealing with data, methods, and theories, and suggests that normal science extends any of the three while not seriously challenging their foundations. He suggests that revolutionary science is revolutionary just because it fundamentally overturns some accepted body of data, or method, or theory. He then likens serious anomalistics to frontier or very revolutionary science in that it seeks to proceed by overturning two or three of the accepted categories at once, thereby rendering itself strange in so many dimensions as to be uninterpretable by science. Dr. Bauer continues with an excellent and engaging account of general lack of appreciation of probability and statistics, a deficit providing ample fuel for the "belief engine" that Dr. Park invokes. Bauer also offers a very insightful catalogue of fallacious modes of argument regarding anomalistics, in versions tailored to defenders and to debunkers.

Bauer's taxonomy of anomalistic activities begins at *pseudoscience within science*, which he describes as phenomena that appeared to be scientific discoveries but turned out to be errors (he suggests N rays and cold fusion, among others). He next considers cases where a field or theory may straddle the demarcation line, having appeared to be completely extra-scientific at some point(s) in its history, but adopted at least in part as accepted scientific subject matter, notably some elements of biomagnetics and bioelectricity. Finally he turns to scientific heresies, in which he includes both self-seeking frauds and genuine knowledge seekers, and addresses phenomena from Velikovskian and Reichian theories, through searches for the Loch Ness monster (his own particular interest), to extrasensory perception (ESP).

The final chapter of Science or Pseudoscience offers some guidelines for identifying real fraud (such as obviously and impossibly inflated promotional literature), and argues that pursuing anomalistic inquiry need be neither dangerous to the individual enthusiast nor to our society. Bauer is also very good on describing certain social currents in and about science, in this case the contrast between establishment attitudes toward different unorthodoxies (some dead-end ideas occasion relatively little comment, others are relegated not to the dusty dry attic of scientific errors but to the bottomless boiling pit of humiliation that we call pseudoscience). If the book has a weakness, I think it may be that Bauer does not address certain epistemic distinctions in his subjects. The question of whether there is (or is not) a large and hitherto unidentified animal in Loch Ness is a different type of question than that of whether (some) people have hitherto undefined sensory modalities that operate in ways not previously recognized and not detectable by means of conventionally recognized sense data. That difference

is in no way eliminated by the fact that both cryptozoology and parapsychology are quite far from scientific orthodoxy; similar social status neither follows from nor signifies similar epistemological status.

The social currents in and about science are important, and it is important to recognize their role in the human activity of science. But it is also important to maintain clarity about the limits of social factors, as opposed to matters of fact. Bauer observes

As Camille Paglia noted, it's "elitist class bias" that lauds high art but denigrates pornography: "Pornography is simply art for the masses" (Allen-Mills 1998)—just as demagoguery is politics for the masses, and pseudoscience is populist science.

(quoted from Bauer's page 186; the Allen-Mills reference is to the London Sunday Times, 5 July 1998, 25). But here one must observe that these three distinctions depend on much more than classism: pornography is distinguished by the lack of, indeed the trampling of, the point of artbeauty, in this example, erotic beauty; demagoguery by the lack or trampling of the point of politics-justice; and pseudoscience by the lack or trampling of the point of science, which is a true understanding of the natural world (and, to include social science, those aspects of human society that are amenable to scientific inquiry, which is not to say all that is humane is so amenable!).

Dr. Bauer argues very persuasively that anomalistics, rightly and humanely pursued, can yield benefits including increased understanding of scholarly inquiry in general, a glorious entertainment, and a mature and reasonable humility as we stand on the beach before that ocean of the unknown. But that is surely true of any field of human inquiry, rightly

and humanely pursued. Mainstream or orthodox science, rightly and humanely pursued, does not imply or encourage arrogance but humility along with intellectual engagement, and the same is true of art or politics at their best.

I believe the question of the existence of criteria or foundations independent of political or social factors to be exceedingly important at present, because the great protection of the honest but unorthodox endeavor in any field is the rock bottom point of that field: in science or any of the serious (not fraudulent) anomalistic investigations Bauer describes, that point is true understanding of the natural world. This shared belief in truth is why a really unorthodox pursuit can be tolerated: it may prove true, and if so then such new knowledge would be a wonderful benefit for everyone, or it may prove false, and that knowledge would also be a benefit for everyone, but in either case the risk is up to the unorthodox investigator to incur. If we accept social constructivism, and concomitant neglect of truth, as an epistemic standard, then there can no longer be any tolerance for unorthodoxy. When social mores become accepted as if they were the standard for what is true, then it becomes in principle impossible for the unorthodox, lone, revolutionary investigator ever to prove his unorthodoxy by reference to the facts of the matter. It likewise becomes impossible for the society to tolerate any unorthodox (or lunatic) fringe, let alone to welcome it as American society in many ways has traditionally done, because such a society cannot appreciate its unorthodox elements as members who are risking the falsification of their unorthodox ideas by testing them in a shared atmosphere of respect for truth. When there is no such reference to truth, then when the unorthodox believer suggests novelty, this risk is not just

potential error, the risk becomes rather social nihilism. The society thus loses both the potential for revolutionary and true new understanding, and the robust freedom of inquiry that are necessary for any unorthodoxy.

It is not emphasized in either book but is nevertheless important to point out, that the reasoned free scholarship that permits and protects rigorous and potentially revolutionizing scientific inquiry, is not only scholarship in science. Many of the furthest flung areas of pseudoscience or other heterodoxy are faulty not just because they do not meet methodological or other scientific standards, but rather in that they represent muddled thinking and ignorance of previous scholarship in extrascientific areas. Some resurging neo-platonic or neo-pagan magical practices, for instance, show muddled thinking or ignorance in theology, philosophy, and history just as much as in science. The struggle for clarity here

does not depend only upon good science, but upon reasoned scholarship in all areas.

Though, as noted, the authors have significantly different perspectives and very marked differences in sympathy for unorthodox, anomalistic, or pseudoscientific pursuits, both books show us the importance of reasoned free scholarship. Reasoned free scholarship in science is our protection, indeed our only defense, against our potential to be fooled by our own wishful thinking, and by junk and by fraud. But reasoned free scholarship is also our protection for developing the novel, the revolutionary and, every now and then, the new and socially unlooked-for truth.

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