subjects covered in this history, namely, the emergence and establishment of the mechanical or corpuscularian philosophy as a replacement for the synthesis of Aristotelian and Scholastic philosophy that was dominant at the beginning of the century. Most of the articles focus on a series of thinkers, starting with humanists of the Renaissance and late Scholastics and following the development of pertinent ideas in the writings of important seventeenth-century philosophers. Most of the articles, too, devote a great attention in some of the articles, but the reader is left with the impression that the only essential thinkers are those who have formed the traditional canon of early modern philosophy. Given recent developments demonstrating how vital many noncanonical figures were to the history of science, one wonders whether the history of philosophy might be ready for a similar revision of its canon.

Organizing a work of such vast scope presents problems however it is done. This volume follows the tradition of the other Cambridge histories of philosophy in pursuing themes rather than individual thinkers. As the editors note, this practice inevitably produces some overlap among articles. Further, it makes it difficult to present the individual philosophers’ ideas within the context of their projects. To understand Gassendi’s views on the motion of atoms or the nature of the soul, for example, the reader needs to understand that these issues arise within the context of Gassendi’s project to Christianize Epicureanism. Because parts of Gassendi’s philosophy are discussed in different places in the volume, a reader unfamiliar with Gassendi might find it hard to keep that broader context in mind.

All carping aside, the editors of this work should be congratulated for producing a magisterial and accessible history that will serve as an essential reference for anyone doing research in this period. I began consulting it the day it arrived, and it will never be far from my desk.

MARGARET J. OSLER


Before his death last year, Wilcomb Washburn gathered together fifteen essays (all but two previously published) spanning thirty years of his long career as a historian of Native American–white relations at the Smithsonian Institution. Against the Anthropological Grain constitutes Washburn’s final iteration of a long-standing set of grievances against some central tendencies of American anthropology since World War II. A sense of sadness and loneliness pervades this posthumous book, and the tone ranges from curmudgeonly to nasty: it is clear that Washburn increasingly came to see himself as an unwelcome but determined voice of conscience for the anthropological community. Whether this final statement will, as he hoped, “lead to a more informed discussion of the future of anthropology both within the university world and the museum world” (p. 14) seems, I think, doubtful. Nonetheless, the essays reprinted here should provide instructive cautionary reading for anthropologists and their students at century’s end.

The essays fall into three groups, each with a central concern. Six essays address, from various perspectives and on varying occasions, the growth of “action anthropology” (in one essay, “action archaeology”), which Washburn deplores and denounces as an ideologically wrong-headed and professionally suicidal abdication of scientific objectivity—a major wrong turn that he traces largely to Sol Tax’s inimical influence after World War II. But the lead essay—an appreciation of John Collier’s “monumental work” in creating the Indian Reorganization Act—demonstrates what, to Washburn’s way of thinking, is a positive model of “action anthropology.” (It is also the only essay that can be generally described as constructive.) Five essays then lay out Washburn’s case against “museum professionals,” the new class of museum administrators who have emerged, he says, in the last two decades, pushing aside competent scientists and other experts and turning museums from scholarship to popular education. Cultural relativism is the subject of two essays, in which Washburn takes the anthropological profession to task for both the influence of relativism, in its myriad shadings, and its meddling “idealism” regarding human rights around the globe. A final essay calls for removing the boundaries between history and anthropology: “The historian . . . will force the anthropologist to deal more effectively with the elements of chronology, the role of the individual, and conflict,” while the anthropologist would teach the importance of structure and symbolic meanings (p. 199).

Washburn long railed against the left-leaning “idealism” of “action anthropologists,” Marxists, and other anthropologists who criticized American foreign policy during the Vietnam
War, seeing himself as a realist by contrast. But underlying the various critiques in these essays is an embedded and profound idealism resting on two core beliefs: that objective, scientific knowledge is both desirable and possible; and that, despite the massive tragedies of the twentieth century, the direction of global history is toward democratic, individual freedom. As an unapologetic patriot and a committed empiricist, Washburn was offended to the core by the emergence of “a relativistic, reflexive, personalistic, postmodern anthropology, in which feeling replaced scientific detachment” (p. 45). Whether or not one entirely shares his sensibilities, his voice provides an important polarity as we seek to understand the political and intellectual shiftings in anthropology’s past half-century.

Curtis M. Hinsley


The evolutionary synthesis and the synthetic theory to which it supposedly gave rise are delightful topics for discussion. Was it really a synthesis? Was it even a theory? Did genetics provide the foundation, buttresses, or gargoyles? Betty Smocovitis lays out the historiography of the subject in vast detail, ponders methodological issues at great length, and devotes less than a hundred pages to her actual narrative.

The result is a work that is as stimulating as it is unabashedly idiosyncratic. Rather than define synthesis in terms of its product, Smocovitis looks upon it as more of a process and part of an ongoing tradition. For those of us whose outlook on biology, its history, and things in general is fundamentally historical, this perspective is most attractive. Herein, however, lies a crucial problem, for the very historicity of evolution has rendered it metaphysically, as well as academically and ideologically, unacceptable in some quarters.

Smocovitis maintains that the thinking of biologists and other scientists has been strongly affected by positivism. Her thesis makes a great deal of sense, not only of what she takes into consideration, but of what she leaves out. Trying to make evolutionary biology resemble the public image of physics is precisely what its advocates would attempt to do in following positivist canons of scientific respectability. Positivist metaphysics implies that history is unimportant because what really counts is laws of nature. That very metaphysics is presupposed by the traditional historiography of her subject, and unable to shake it off, Smocovitis gives scant attention to the historical disciplines, in spite of Ernst Mayr’s repeated insistence on the crucial role of systematics in the synthesis.

To some degree Smocovitis would seem to have reversed the order between causes and their effects. In my experience, scientists do in fact absorb a substantial amount of philosophy, both implicit and explicit, in their general and professional education. But they generally do not get serious about it unless they find themselves challenged, or perhaps threatened, by their competitors. Even then they usually just grab whatever philosophical pie is handy and hope that it connects with the appropriate face.

My own serious philosophical work was provoked by the assault of a faction called the “pheneticists” while I was still a graduate student at Stanford. By the time I began my first postdoctoral year with Ernst Mayr, I was philosophically loaded for bear. My book on Darwin was largely directed against the naive epistemology that had been enjoying some popularity at the time, especially among systematists. More important, perhaps, was the prevailing naive ontology, which I rebutted by proposing the individuality thesis with respect to species. Treating species as something other than classes went against the grain of traditional positivist metaphysics, and it still does. Several years passed before Mayr endorsed the individuality of species and, not surprisingly, claimed to have believed in it all along. Mayr seems to have had a hard time seeing through Simpson, who accepted Gregg’s set-theoretical analysis of systematics.

Over the last thirty years there has been a veritable revolution in the philosophy of systematics as understood and advocated by its practitioners and by some of the onlookers as well. Ontological issues are recognized as important and are freely and openly discussed in the professional literature. Biologists can do their metaphysics well or they can do it badly, but believing that scientists can get away from metaphysics altogether is just another example of bad metaphysics. The same, of course, may be said of historians of science. If one wants to understand the history of the sciences one had better not presuppose the sort of metaphysics that treats the historical sciences themselves as of marginal significance at best.

Michael T. Ghiselin

Elliott Sober; David Sloan Wilson. Unto Others: The Evolution and Psychology of Unselfish