Misdeeds in Anthropology

Bones, Bodies, Behavior. Essays on Biological Anthropology. GEORGE W. STOCKING, JR., Ed. University of Wisconsin Press, Madison, 1988. viii, 272 pp., illus. \$25. History of Anthropology, vol. 5.

Physical anthropology has a lot to answer for. Some of its misdeeds-for instance, its 40-year failure to detect the Piltdown hoax-are merely scientific; but others have had important and evil social consequences. From Darwin's time down to World War II, a large part of its literature was devoted to cooking up objective-looking sanctions for the myths of racial identity and European superiority, and some of its leading figures were deeply implicated in helping to formulate either the theory or the practice of Naziism. In this collection of historical essays, physical anthropology comes out smelling like a long-dead rat. No doubt it deserves some of the hard knocks it receives in this volume-but not, I think, all of them.

The book is divided about equally between chapters on race and chapters on paleoanthropology. Two chapters focus on the Piltdown fraud and reach rather different conclusions. Frank Spencer argues that even before the forgery was unmasked in 1953 most students of human evolution either ignored the Piltdown remains or shoved them off onto a side branch of our family tree. Michael Hammond, on the other hand, sees the Piltdown "discoveries" as having furnished crucial support for the redrawing of that tree in the 1920s as a many-branched bush, in which practically all the real fossils were also represented as sterile sidelines. Hammond thinks that this fossilhating "shadow man paradigm" had its roots in conservative French reaction against the unilinear, left-wing progressivism of Mortillet and his followers. I found all this a refreshing departure from the currently fashionable belief that bushy evolutionary trees are inherently products of revolutionary socialist thought.

Three chapters deal exclusively with the racial follies and crimes of physical anthropologists. Claude Blanckaert leads off with an account of the role played by Paul Broca's mentor, W. F. Edwards, in the origins of French ethnology. Edwards is largely responsible for the notion that the individual inhabitants of Europe can be sorted into racial types—Teutons, Cymrics, Gallics, and so on—differing in physique and moral

character. Blanckaert paints a sadly comic picture of patriotic Frenchmen named Edwards, Rodrigues, and d'Eichthal struggling to prove that Europe's ethnic nationalities are fixed and unchanging. The comedy rapidly gives way to tragedy. In his lucid and disturbing chapter, "From Anthropologie to Rassenkunde," Robert Proctor traces the development of physical anthropology in Germany from a medical anatomists' hobby into the clinical specialty of Rassenhygiene. He shows how the major German societies of physical anthropologists collaborated with the SS program of race hygiene, helping to make racial policy, train SS physicians, and organize Gestapo sterilization programs. Eugen Fischer, the most distinguished of German physical anthropologists, regarded by many as the founder of human genetics, was particularly helpful in these efforts. Proctor quotes Max Weinreich: "There were in the history of mankind Jenghiz Khans and Eugen Fischers but never before had a Jenghiz Khan joined hands with an Eugen Fischer. For this reason, the blow was deadly effective."

But surely American physical anthropologists spoke out clearly against the Nazi perversion of their science? They did not. Elazar Barkan's chapter relates their failure in depressing detail. American anthropologists active in the eugenics movement cautiously applauded Nazi experiments in race hygiene. As late as 1939, the American Association of Physical Anthropologists timidly referred a mild resolution condemning Nazi racial myths to its executive committee, where it died. Apart from Jewish scientists like Boas, almost the only prominent physical anthropologist to speak out strongly against the Nazis in the '30s was (of all people) E. A. Hooton, who comes away with most of whatever honors there are to be garnered from this sorry history.

Nowadays, most physical anthropologists admit these failures of their science but insist that everything changed rapidly for the better after World War II. In the postwar decade, we like to tell ourselves, we finally got the human family tree more or less straightened out, threw out Piltdown, gave up our old racial typologies, and became truly scientific by receiving functional anatomy, population biology, and the neo-Darwinian synthesis into the heart of our discipline.

This self-congratulatory story is called

into question by the book's longest, most radical, and most interesting chapter, in which Donna Haraway offers to deconstruct the "new physical anthropology" that S. L. Washburn proclaimed in 1951. Haraway thinks that the main thrust of the postwar school was the effort to identify a fundamental hominid adaptation-a sort of vanillaflavored generic humanness-and that that effort was part of a vast unconscious conspiracy between anthropologists and psychiatrists to proclaim a new capitalist world order grounded in "postwar anxieties and hopes about nuclear civilization." For political reasons, technology was singled out in the 1950s as the fundamental human characteristic: "The animal adopted [tool-using] behavior to remake itself. This is the key mythic element of evolutionary scientific humanism. . . . Culture remakes the animal; the persistent Western dualism of nature and culture is resolved through a self-making productionist dialectic, providing a universal foundation of human unity." In this new postwar myth, the nuclear family was represented as the foundation of human social life, "thereby coding the border between animal and man in terms of the poles of Cold War ideological discourse."

Haraway's analysis of the old "new" physical anthropology sparkles with flashes of keen insight, but-like some other products of this school of textual criticism-it seems ultimately like a literary exercise that doesn't lead to anything much beyond consciousness-raising. Truth and falsity are not at issue for Haraway in evaluating such stories; all claims about "facts" (her snigger-quotes, p. 212) must be deconstructed to reveal their underlying political agendas. Once Haraway has satisfied herself that some assertion or way of looking at things has political content and has identified the underlying politics as wicked (that is, competitive, liberal democratic, individualistic, capitalistic, masculinist) or virtuous (sharing, socialistic, collectivist, feminist, pluralistic), she has nothing more to say. This, it seems to me, is name-calling raised to the level of an epistemology.

Haraway tacitly acknowledges that the new stories about human evolution that she favors, and even her own historical analysis of postwar anthropology, are simply more myth-making (or, as she prefers to call it, "rehabilitative narrative technology"); but it evidently doesn't bother her much. I think it ought to. Unless scientists can manage to employ facts as a check on their construction of virtuous mythical narratives, choosing between Donna Haraway's myths and Eugen Fischer's becomes a matter of one's personal taste in virtue. Giving up on the hard job of finding real explanations of things, and settling for rehabilitative narrative technology, has been one of physical anthropology's persistent problems. Doing it on purpose does not constitute a solution. MATT CARTMILL

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A Missing Link

Eugène Dubols and the Ape-Man from Java. The History of the First "Missing Link" and Its Discoverer. BERT THEUNISSEN. Kluwer, Norwell, MA, 1988. xii, 216 pp., illus. \$49. Translated from the Dutch edition (Amsterdam, 1985).

Evolutionists have not always recognized the crucial importance of fossils in the reconstruction of our evolutionary past. In the Origin of Species (1859) Darwin admitted that the fossil record was meager and relied instead on indirect evidence from embryology, comparative anatomy, and plant and animal breeding. Of course, hardly any important human fossils were then known—in fact only one, the first Neanderthal, discovered in 1856. Yet, throughout the 19th century, as more and more Neanderthal and other Ice Age fossils were discovered, evolutionists still failed to cite them in support of their position. Why?

One reason was scientific "racism." Darwin and his contemporaries exaggerated racial differences so much that fossils like Neanderthals appeared no more primitive than Africans or Australian aborigines. Another reason was the long-held doctrine that Caucasians originated in Asia and could not possibly be descended from prehistoric inhabitants of Europe. Because the main arguments for (and against) evolution were not based on fossils, hardly any 19th-century evolutionists even bothered to look for "missing links." An outstanding exception was Eugène Dubois (1858–1940).

Dubois was a Dutch army surgeon who believed in Darwinism and journeyed to the Far East to find human fossils to prove it. After years of searching, he found them in a river bank in central Java in 1891-92. What he found was a well-preserved fossilized molar, skullcap, and femur presenting a mixture of apelike and human traits. The femur looked fully human, indicating that it belonged to someone who walked upright, and the skullcap resembled a gibbon's, with a brain too large for an ape yet too small for a human being. To Dubois, these fossils showed clearly that in the transition from early ape to human being walking on two feet had been the beginning. He called his



Eugène Dubois's reconstruction of Pithecanthropus for the World Exhibition in Paris, 1900. [From Eugène Dubois and the Ape-Man from Java; Dubois Collection, Rijksmuseum van Naturlijke Historie, Leiden]

find Pithecanthropus erectus, the erect ape-man from Java. Anthropologists today have changed the name to *Homo erectus*, but they still accept Dubois's basic interpretation. It is fair to say that Dubois discovered the first true missing link.

Despite Dubois's importance, historians of science have until now written relatively little about him. The following curious story, based largely on hearsay, has been retold in anthropology textbooks: Pithecanthropus created an immediate scientific controversy; Dubois defended his interpretation against countless critics; then, about 1900, he took himself and his bones into seclusion; finally, 25 years later, just as other scientists were converting to his view, he resurfaced to announce that he had changed his mind and now considered Pithecanthropus to be an ape. Bert Theunissen's new book shows that this story is neither complete nor completely true.

Eugène Dubois and the Ape-Man from Java is a translation of the author's doctoral dissertation. It is not a thorough biography, or even a scientific biography. Rather it is a carefully researched account of Dubois's adventure with his missing link. According to Theunissen, Dubois was a true pioneer in recognizing the importance of fossils. This was his lasting contribution to science, along with the impetus he gave to others to think the same way. Theunissen provides a good background to Dubois's Javanese finds and analyzes all the scientific arguments about them. The most exciting part of his book, however, is its surprising account of Dubois's later life. Though Dubois did in fact remove himself from the debate about Pithecanthropus, Theunissen reveals that he never really changed his mind about its status as a missing link but merely exaggerated its apelike traits to distinguish it from other fossils being discovered at the time. Meanwhile he was engaged in ingenious research on the allometric relation between brain and body weight in mammals, research that confirmed his belief that Pithecanthropus's brain size was halfway between that of apes and human beings. This research eventually led him away from the gradualist Darwinian model of evolution to a saltationist model like that of punctuated equilibrium. Ironically, he ended up defending his missing link on non-Darwinian grounds.

Eugène Dubois and the Ape-Man from Java does not tell us everything we might want to know about its subjects, but it does place them in clear historical perspective and correct misinformation about them that has been around for a long time. Its contribution to the historiography of anthropology is overdue.

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Ape Affinities

Orang-utan Biology. JEFFREY H. SCHWARTZ, Ed. Oxford University Press, New York, 1988. x, 383 pp., illus. \$79.95.

In the late 19th century, as the notion of the relatedness of humans and great apes gained acceptance, anatomists searched among the higher primates for "man's" closest relative. For a time, when Asia was the focus of interest in human paleontology, some scientists, such as Ernst Haeckel, believed that the Asian orangutan (genus Pongo) was the extant ape most closely related to our own species. Others did not agree. Charles Sonntag, in addition to suggesting that orangutans were "heavy in build, ugly in appearance and sluggish in habits," marshaled comparative anatomical evidence that suggested that African apes and humans shared a common ancestor at a time that postdated the divergence of Pongo. The following year (1925) Australopithecus was discovered and the search for the fossil evidence of human evolution shifted to Africa.

In 1984 Jeffrey Schwartz sought to restore the notion of an orangutan-human clade. Orang-utan Biology is a follow-up that was prompted by his interest in the phyloge-