beautiful illustrations are certainly stimulating and provocative enough to captivate the next generation of aspiring neophytes. Terry Harrison
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## Books Received

Agar M (1994) Language Shock: Understanding the Culture of Conversation. New York: William Morrow, 284 pp. \$22.00 (cloth).

Crews DE and RM Garruto (eds.) (1994) Biological Anthropology and Aging: Perspectives on Human Variation Over the Life Span. New York: Oxford University Press, 445 pp. \$75.00 (cloth).

Fox R (1994) The Challenge of Anthropology: Old Encounters and New Excursions. New Brunswick, NJ: Transaction Publishers, 431 pp. \$49.95 (cloth).

Guldin GE (1994) The Saga of Anthropology in China: From Malinowski to Moscow to Mao. Armonk, NY: M.E. Sharpe, 288 pp. \$55.00 (cloth).

Larsen CS and GR Milner (eds.) (1994) In the Wake of Contact: Biological Responses to Conquest. New York: Wiley-Liss, 216 pp. \$89.00 (cloth).

Lukacs JR (1993) Dental Anthropology. Weston, CT: Pictures of Record, 90 color slides \$150.00. Nieuwenhuys O (1994) Children's Lifeworlds: Gender, Welfare and Labour in the Developing World. New York: Routledge, 228 pp. \$19.95 (paper).

Owsley DW and RL Jantz (eds.) (1994) Skeletal Biology in the Great Plains: Migration, Warfare, Health, and Subsistence. Washington, DC: Smithsonian Institution Press, 408 pp. \$45.00 (cloth).

Parker ST, RW Mitchell, and ML Boccia (eds.) (1994) Self-Awareness in Animals and Humans: Developmental Perspectives. New York: Cambridge University Press, 442 pp. \$59.95 (cloth).

Sempowski ML and MW Spence (1994) Mortuary Practices and Skeletal Remains at Teotihuacan. Salt Lake City, UT: University of Utah Press, 464 pp. \$100.00 (cloth).

Stearns SC (1992) The Evolution of Life Histories. New York: Oxford University Press, 249 pp. \$29.95 (paper).

Young TK (1994) The Health of Native Americans. New York: Oxford University Press, 275 pp. \$49.95 (cloth).

The Evolution of Racism: Human Differences and the Use and Abuse of Science. By Pat Shipman. New York: Simon & Schuster. 1994. 319 pp. ISBN 0-671-75460-2. \$23.00 (cloth).

The treatment of human "races" and the genesis of racism are issues that have been part of anthropology since its beginning. These matters remain as important today, and there is an obvious need for a book that deals with them. This, however, is not the book.

Shipman's main thesis, that the scientific focus on "race" over the last century and a half has been compromised by covert politi-

cal convictions, is unassailable; its demonstration and documentation are quite another matter. While Shipman purports to behold the mote in her predecessors' eyes, she completely fails to consider the beam in her own. Despite the book's title, racism is largely ignored, science is either missing or misrepresented, and history is reinvented to the extent that the book comes close to being a work of fiction. It is filled with errors of fact, gratuitous slurs, and glaring omissions.

Shipman approaches her topic by squaring off a series of eminent historical figures in a crude "good guy versus bad guy" fashion, illustrating her theme by vignettes from their careers. Most are two-dimensional,

cardboard caricatures. It is an approach which assumes that humanizing the figures of the past will provide better understanding of them and the issues with which they were involved. Unfortunately, it often means ungenerously reading into them the flaws that characterize the world of today. Over a generation ago, Sir Herbert Butterfield in *The Whig Interpretation of History* (1931) warned of the distortions that can result from the "presentism" in what he called "Whig history," and Shipman's book is an example of presentism at its most flagrant.

The book begins with an assessment of the roles of Darwin and Huxley in creating evolutionary biology. While Shipman has toned down an earlier contrast (Trinkaus and Shipman, 1993) between the "more brilliant" Huxley and an inept and plodding Darwin, she continues here to denigrate Darwin's "diffuse style" and "carelessness" about footnotes and attributions (p. 92). Speaking of such, she misattributes his phrase "Much light will be thrown on the origin of man and his history" to page 449 of the first edition of his Origin. In fact, it was "Light will be thrown ...," and it was on page 488. She concludes that, "He was simply blotting paper, soaking up life's ink" (p. 23).

While Shipman's bibliography lists Ernst Mayr's Growth of Biological Thought (1982) and One Long Argument (1991, incorrectly dated as 1988), there is no indication from the context that she read either one, and there are no citations to them in the footnotes for the chapters dealing with Darwin and Huxley. It is also apparent that she is unfamiliar with the demonstration of Darwin's verbal and philosophical sophistication so compellingly documented by Michael T. Ghiselin in The Triumph of the Darwinian Method (1969) and Gillian Beer in Darwin's Plots (1983), among others. Darwin continues to be the subject of study after study, and his astounding prescience is recognized by virtually everyone at the forefront of evolutionary theory. He would have been every bit as great even if Huxley had never existed, but Huxley, who once said, "How extremely stupid not to have thought of that!" (re. natural selection), was never able to integrate Darwinian mechanism into his own worldview (see Di Gregorio, 1984), and he owes his enduring recognition much to the fact that he was the first to support publicly the man his grandson Julian referred to as "the Newton of Biology."

Having gotten off on the wrong foot with Darwin and Huxley, Shipman manages to stay on it for the remainder of the book. In her second section she counterposes the careers of Haeckel and Virchow in Germany, starting with the time-worn view that they split over the matter of Darwinian evolution-Haeckel presumably for it and Virchow against it. Although she notes Haeckel's debt to *Naturphilosophie*, she also assumes that his commitment to Darwinism relieved him of an explanatory reliance on a "Creator" or "mysterious vital force." The point she misses is that Haeckel redefined "evolution" itself as a "vital force" and produced a form of "romantic evolutionism" that owed more to the ethos of *Naturphilos*ophie than to Darwinian materialism. When she refers to Haeckel's Monism as "politicized Darwinism," she is right about its being politicized but wrong about its being Darwinism. It was proto-Nazism, and the Monist youth movement was the lineal ancestor of Hitler's youth organization.

The extent to which the conflict between Haeckel and Virchow was political exceeds even what Shipman supposes. More than merely vying for control of German science, they were each attempting to shape the direction of the whole German educational system and the ideological future of the German State. Virchow was a Social Democrat and Haeckel a proto-Fascist. Haeckel's faction won in the short run, and the result, as Shipman notes, was a defeat for "empirical science in Germany" (p. 103), although Virchow did not contribute to that defeat, as she claims. The political consequences of Haeckel's victory were the events that produced two devastating world wars and the Holocaust.

Virchow is distorted almost beyond recognition. Shipman even misquotes the Latin of his famous cell lineage dictum so that it asserts the opposite of his intent. Initially, Virchow was neutral about organic evolution when it first became an issue. His later opposition to it was generated by Haeckel's re-

definition of the concept and his attempt to use it to justify the movement toward pan-Germanic hegemony. Shipman misses the chance to show how the political nature of Haeckel's stance was revealed by his getting his university at Jena to award the degree of Doctor of Phylogeny to that "deeply perceptive . . . anthropologist" Otto von Bismarck. On the other hand, she is correct in noting the political consciousness in Virchow's lifelong commitment to the social and medical aspects of public well-being.

In her reference to Virchow's massive measurement program among school children she again gets things backward. When the French lost the Franco-Prussian War, the eminent French anthropologist Armand de Quatrefages denounced the Prussians as not being German at all but "Finns" or "Finno-Slavs," largely from the provinces of Pomerania and Brandenburg and ultimately of "Turanian" or "Mongol" origin. This, he felt, accounted for their vengeful and barbarous nature. Virchow noted that the specifically "political" nature of this charge had no scientific basis and designed his massive survey, not as an attack on the "Aryan" concept, contra Shipman, but on Quatrefages's formulation of La race prussienne (1871). Virchow had first proposed to pursue his work using German military subjects but, because of his long-time problems with Bismarck, this avenue was closed to him, and he turned to school children instead.

In assuming that Virchow was attacking the "Arvan concept," Shipman postulates that "Perhaps . . . Virchow was uncomfortable with his own obviously Slavonic ancestry" (p. 101). The truth is quite otherwise. Virchow set out to found anthropology in Germany on the model pioneered by Paul Broca in Paris (something not even mentioned by Shipman), and it was Virchow's pro-Broca views that mainly inspired his anti-Darwinian position. Furthermore, he was explicitly interested in the processes by which his native Pomerania had been Germanized through the spread of Christianity, and he promoted studies on the Germanic-Slavic interpenetration as recorded in the folklore, architecture, language, and customs of this region in much the same fashion that Broca's school studied such things in France.

Virchow, in fact, was scrupulous in studying what was there—exactly contrary to what Shipman claims. This is not a trivial point. One of Virchow's most distinguished students was Franz Boas, who followed up Virchow's pioneering work on changes in human skull shape and pursued similar studies in America early in this century. The political philosophy of Franz Boas and the anthropology that he promoted in America-never mentioned by Shipman-were directly modeled on the approach of his teacher, and this in turn is reflected in the outlook of his own student, Ashley Montagu, whom Shipman treats in snidely condescending fashion later on.

Shipman next presents a rather conventional review of the rise of eugenic thinking and properly points to its deplorable applications in Germany during the 1930s, but she misses the point that the compulsory sterilization law enacted by the Nazis in 1933 was copied directly from the American model worked up by C. B. Davenport's minion, Harry H. Laughlin. The delighted American eugenicists felt that the Nazis had improved on their ideas by making enforcement mandatory. Shipman also notes that the head of the Kaiser Wilhelm Institute for Anthropology, Eugenics, and Human Heredity in Berlin, Eugen Fischer, was "apparently a little too moderate for the Nazi party" (p. 135) and was replaced as head of the Society for Racial Hygiene by Ernst Rüdin (whose name she misspells). It was not Fischer's moderation that was the issue, however. Fischer's conservative Catholic background would have made him suspect enough, but his real problem was that he was an intellectual holdover from the Weimar era, anathema to the Nazis even though his eugenic enthusiasms and undiluted anti-Semitism were right in tune with mainstream Nazi thinking.

Shipman's lack of familiarity with European sources cannot account for the accumulation of flaws in the latter half of the book. In describing the contributions of R. A. Fisher, J. B. S. Haldane, and Sewall Wright,

she claims that "what should have been a confirmation of Darwin's accuracy backfired" because they became entranced with genetic drift to the exclusion of natural selection (p. 151). Nothing could be further from the truth. Mixed in with the complete botch of the ethos of evolutionary genetics at the time of the genesis of the neo-Darwinian synthesis is a battery of derogatory and erroneous vignettes of those involved. Fisher, she claims, had been "unable or unwilling to finish his undergraduate degree at Cambridge" (p. 150), ignoring the fact that he emerged from his Tripos in June of 1912 as a Wrangler with distinction and then spent a postgraduate year with Sir James Jeans working on statistical mechanics and quantum theory. His Genetical Theory of Natural Selection (1930) is the most uncompromising presentation of the position that natural selection is the primary force in evolution, and he spent the rest of his life denouncing Sewall Wright for suggesting that genetic drift was even possible.

Shipman describes the overbearingly arrogant Haldane as "painfully shy" and "utterly inept." "He was no man of action, no field biologist with mud on his boots and specimens in his back garden; he was more at home with numbers and ideas than with living creatures" (p. 150). Where is the legendary booming-voiced barroom wit who used himself as the subject to investigate nitrogen and oxygen effects in undersea devices, who sampled his own blood for acid and alkaline levels and who smashed the door off its hinges when the beadle tried to lock his friend Sir Ronald Fisher out of his own laboratory? And what of his house and grounds overrun with guinea pigs? Haldane always maintained that he might very well have beaten Morgan to the discovery of linkage had not World War I intervened, and he subsequently confirmed that concept with his rodent breeding work.

Another main contributor to the evolutionary synthesis prior to World War II was Theodosius Dobzhansky, described by Shipman as "short on formal education—he never received his bachelor's degree and did not pursue any further degrees—but long on brilliance" (p. 182). Dobzhansky completed

his biology degree at Kiev in 1921; he was studying in the Department of Genetics at the University in St. Petersburg in 1927 when he received a Rockefeller Fellowship to work under Morgan in the famous fly room at Columbia. It is true that he did not earn a formal graduate degree for those efforts, but to refer to him as "short on education" is false.

The remainder of the book is largely devoted to deploring those who supposedly have claimed that research dealing with "racial" difference is so politically sensitive that it should not be done. Once more her strawman approach has no basis in reality. The "bad guys" in this episode are Theodosius Dobzhansky, Sherwood Washburn, and principally Ashley Montagu, who are all said to hold the view that "there were issues of racial differences that were better left unexplored" (p. 190). The "good guy" in the scenario is Carleton Coon, although she cannot resist demeaning even him with a fabrication or two.

The events leading to the principal drama of the piece were the meetings that framed the UNESCO statement on "race" beginning in 1950, the Cold Spring Harbor Symposium on evolution and human diversity in 1950, and the publication of Coon's The Origin of Races in 1962. Ashley Montagu was involved in both the 1950 meetings, Dobzhansky and Washburn were at Cold Spring Harbor, and all of them responded with vigor (although from different perspectives) to Coon's book. Shipman portrays UNESCO meetings as more ideological than scientific, as indeed they were. However, she calls the Cold Spring Harbor Symposium an event that "owed more to political conviction than to science" (p. 191), which it most assuredly was not.

The goal of the Cold Spring Harbor meeting was to bring elements of the neo-Darwinian synthesis into an anthropology that had been notably lacking in the outlook of evolutionary biology. Since Shipman seems largely unaware of the nature of the intellectual revolution that had been going on before the war, it is not surprising that she also fails to perceive the nature of the issues in the ensuing confrontation. Her erroneous

characterization of Joe Birdsell's paper in the volume that came out of the Cold Spring Harbor Symposium as "all rather abstract and altogether too tidy, as mathematical modeling is wont to be and human beings never are" (p. 187) is illustrative. The disturbing thing about Birdsell's paper is that it was not tidy. His picture of the gene distributions in Australia did not conform to the known reality and behavior of actual human groups, and it did not then dawn on anyone, including Birdsell, that the taxonomic group as such is not the place where one should start to try to make sense out of the nature of human biological variation. That view grew out of work in field zoology during the 1950s, and its maturation during the following decade became encapsulated in Livingstone's classic phrase, "There are no races, there are only clines." It is a telling mark of Shipman's scholarship that the word cline never appears in this book. Likewise, neither Livingstone nor his work is ever mentioned. She does cite the 1964 volume edited by Ashley Montagu, The Concept of Race, in which Livingstone repeats his injunction and several other contributors try to use that new perspective to chart a course making sense out of human biological variation. but the only contribution in it mentioned is Montagu's critique of Coon's 1962 book.

It is evident that Shipman believes in the reality of "races" as typological essences, although nowhere in her book does she attempt to define either "race" or the "racism" of her title. In her view, those who defined this concept of "race" are the "good guys," and those who deny it do so out of political motives. The most enduring opponent to the essentialist view of "race" has been Ashley Montagu, in writings that predate even his seminal work, Man's Most Dangerous Myth: The Fallacy of Race (1942). This puts Montagu so firmly into the "bad guy" category that Shipman finds no need to look at the biological foundation for his positions. (He was aware of Julian Huxley's articulation of the nature and meaning of clines in the late 1930s, which is one reason why he realized that the concept of "race" was a social construct rather than a coherent biological phenomenon.) Instead, she uncovers Montagu's real motive for his "sin" in his own typological "essence." In her interview with him, she discovered that he had been a "workingclass Jewish boy" from the East End of London "who had scrambled out of his background into an upper-class persona. Changing his accept and his name were all part of Montagu's self-transformation" (p. 181). That an aspiring scholar in a profoundly anti-Semitic milieu should presume to abandon a name which "declared his Jewishness unequivocally" (p. 159) is thus an unforgivable dishonesty. (Actually, the first derogatory mention of his change of name had been made more than a quarter of a century ago in a 1967 book that Shipman cites in her references but obviously has not read; it is an unpleasant bit of racism and anti-Semitism by Carleton Putnam entitled Race and Reality: A Search for Solutions.)

To Shipman, Montagu's Jewish essence demonstrates a "political" basis for his stance in phrasing the 1950 UNESCO Statement On Race. In her interview with him. she asked about the similarity between the UNESCO statement and one published by Hooton in Science in 1936 (her actual reference is to a secondary source published a year later), but Montagu was unable to remember. She is evidently unaware of the role played by Franz Boas-Virchow's onetime protégé and Montagu's mentor—in getting Hooton to write that statement and the one passed by the American Anthropological Association in 1938. Nor did she ask about the statement that Montagu had himself offered to the AAPA at Philadelphia in 1939 (it was referred back to the Executive Committee where it disappeared). Noting that a similar motion failed to pass at the AAPA meetings in Toronto in 1993, she warns, "Let us hope those that are ignorant of history are not condemned to repeat it" (p. 221). She herself appears to have a very imperfect understanding of this history.

In order that history does indeed not repeat itself, we should recall that one reason why Boas' warnings were played down was because his identification as a Jew was regarded as the "political" reason for his views. Initially the AAA refused to adopt the resolution proposed in 1938 because they as-

sumed it was the one prepared and circulated by Boas. When Edward Sapir pointed out that it was Hooton's resolution it was passed unanimously. Shipman, then, is doing what Boas' anti-Semitic critics did 60 years ago when they claimed that Jews should refrain from making statements opposing racism because of their possible lack of objectivity, holding anti-Semitism in part the responsibility of the Jews themselves.

The only person who comes close to being a hero in Shipman's account is Carleton Coon. She presents him as a larger-thanlife, bear-like figure given to colorful and pungent commentary, but also as "a man betrayed by history" (p. 173) who took personally the criticism arising from publication of his controversial 1962 book. Shipman's distorted account of the book's production would have drawn choice epithets from its author. In Shipman's words, "The editor and copy editor had struggled heroically with Coon's academic prose, rendering this momentous book intelligible to the average reader" (p. 201). Having read that phrase to two people who knew Coon even better than I, each voiced unqualified disbelief. Coon was a natural-born storyteller, skilled in transferring his gift onto the printed page. Shipman's tabloid-style of journalism has a readable flow, but it is a far cry from the straightforward, rollicking thump of unexpurgated Carleton Coon. If an editor needed to do anything at all to Coon's prose, it was to tone it down for the censors and to instill just enough academic tinge to lend it an air of respectability.

Coon dedicated his book to Franz Weidenreich, and many have seen a similarity in their visions of continuity between the past and present populations of the various regions of the world. Weidenreich's famous diagram, however, had cross-lines and diagonals indicating that gene flow had maintained specific unity at any one time in the past, while Coon assumed that human past had been characterized by geographic isolation, and that sapient status was a separate, independent achievement in each region. In that sense, Coon's views were far closer to those of the late Sir Arthur Keith, who had long felt that "the races of mankind

must have converged ... as time went on" (1950, p. 631). Weidenreich developed his view from discussions with Theodosius Dobzhansky and, although he never accepted the role of natural selection in shaping the course of organic evolution, his formulation was much closer to that supported by the emerging synthetic theory of evolution than was Coon's.

The objections to Coon's book raised by Dobzhansky, Washburn, Montagu, and others were not based on the idea that research on the nature of modern human differences should not be pursued. Their criticism stemmed from the realization that Coon's starting units and the processes he envisioned were at odds with the findings of evolutionary biology. On the contrary, it is the view defended by Coon and accepted by Shipman that is grounded in "politics," and not the converse, as she seems to assume. "Race," Audrey Smedley reminds us, is a "folk concept" that was reified to justify the historical and political circumstances underlying its creation (1993, p. 303). Thus it is Shipman's stance which shows how "political correctness" continues to plague our efforts to make sense of human biological variation.

Shipman concludes by decrying the namecalling and bitter insinuations that have hindered the task of "fighting ignorance" in the past. This is laudable indeed, but given the rich harvest of error and unwarranted insinuation perfusing its pages, this book promotes rather than fights the prevailing ignorance about "race" and racism.

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THE EVOLUTIONARY TALES. By Ronald L. Ecker. Palatka, FL: North Bridge Books. 1994. 212 pp. ISBN 0-9634896-0-7.

As the reader might suspect from the title, The Evolutionary Tales is a compilation of Ecker's verse "tales" modelled on the Canterbury Tales of the fourteenth-century English poet, Geoffrey Chaucer. Yes, verse. The entire book (with the exception of the Preface, Notes, and Bibliography) is written in rhymed couplets of iambic pentameter. The scene, which is a variation on the original, it a field trip which 10 scientists and our narrator/recorder are taking to a Creationist seminar in Dayton, Tennessee—the site of the infamous Scopes "Monkey" Trial. Subtitled "Rhyme and Reason on Creation/ Evolution with Apologies to Chaucer and Darwin," it is not a science book but rather a curiosity by which the author hopes to "interest readers in further study of science in general and of the creation/evolution controversy in particular" (p. xi).

A "General Prologue" presents a verse rendering of the workings of natural selection and introduces the cast of characters. Then, each "pilgrim" tells his or her "tale." An astronomer relates cosmic evolution and explains the structure of the universe. Molecular evolution and a description of DNA are the realm of the biochemist. "The Biologist's Tale" outlines the scientific method and evolution, while the "Big Bang" is the topic discussed by the Cosmologist. The geologist rhymes his way through continental drift, constant sedimentation, and uniformitarianism. Human evolution is discussed by the paleoanthropologist, and the evolution

of life and the question of transitional forms are the topic of the paleontologist. "The Philosopher's Tale" deals with the topics of ethics and secular humanism, followed by a poetic discourse on quantum mechanics and thermodynamics by the physicist. Finally, "The Scholar's Tale" is a discussion of the roots of Genesis in earlier Middle Eastern mythology, and the inconsistencies between the different biblical sources.

This book has some merit, both as a *jeu d'esprit* and as an attempt at education. Conscientiously, if elliptically, it presents the viewpoint of most researchers who operate within a scientific framework. The line notes are helpful and well thought out, and direct the reader to an impressive bibliography of secondary scientific sources and the Creationist literature. Ecker cleverly addresses the topic of debate within the various fields he discusses, and how internal dissension is often used misleadingly by Creationists to suggest that science is a meaningless enterprise.

This book demonstrates that the goals of good poetic writing are at odds with the goals of good scientific writing and probably have been since Chaucer, if not Lucretius. It would thus seem churlish to quibble about many of the small inaccuracies and oversimplifications which have been introduced for the sake of rhyme or scansion—this book is clearly not meant to be taken literally as contemporary science. However, there were a few terminological problems which could have been easily changed, such as the misuse of "radioactive" (as in dating) when "radiometric" is correct and scans just the same. Also, the repeated use of "revolution-