

at the once-proud bastion of the four fields, Columbia University (as was the reviewer, two decades earlier), she is the sole voice presenting a sympathetic picture of holism in anthropology, discussing some of its accomplishments, aims, and its current relevance. Lederman writes, '[c]ultivating cross-subfield accents – identifying affinities and openings that make strategic cooperation possible among the subfields – has been, and may continue to be, anthropology's distinctive disciplinary resource for addressing important scholarly and public issues' (p. 50). Lederman covers a lot of ground, offering a complex and nuanced view of the differences, similarities, accomplishments, and relations within and among the sub-fields, but her conclusions are directed to anthropology's *raison d'être* and its role in the world.

Taking the scandal of *Darkness in Eldorado* as the case in point, Lederman illustrates the importance anthropology has in both the academic and the public arena. 'Finally, reflected in our public's eyes, we are still all about foundational inquiry into the essence of "what it means to be human" ' (p. 58). Lederman does not want to leave this 'conversation' to the 'strong reductionists' who would 'subsume all knowledge to fundamental (physical) laws' (p. 63), such as E.O. Wilson (pp. 68-9). In her concluding paragraph Lederman writes eloquently of four-field anthropology as 'the ambivalent guardian less of a "sacred bundle" than of a rare nesting ground – a condition of possibility – harboring anti-essentializing evolutionists, hermeneutic realists, and other third kinds' (p. 73). She would like to keep open this 'fragile but powerful possibility' (p. 73). It is to their credit that the editors included Rena Lederman's challenge to their own views in this volume.

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STONE, LINDA & PAUL F. LURQUIN. *A genetic and cultural odyssey: the life and work of L. Luca Cavalli-Sforza*. xxi, 227 pp., maps, figs, illus., bibliogr. New York: Columbia Univ. Press, 2005. £29.50 (cloth)

This book attempts an intellectual biography of the renowned and controversial Stanford geneticist Luca Cavalli-Sforza. There have been many earlier attempts to use genetic data to study human microevolution, with varying degrees of success (see, e.g., *Man* 28: 153 and 28: 171, 1928); many attempts to model cultural evolution; many retrievals of blood samples as

objects from the field; and certainly many attempts to identify ethnohistoric events in genetic patterns. This book, however, never actually tells us what made Cavalli's work necessarily better; it unfortunately has little interest in situating Cavalli's work within the history of human genetics, or of genetic-based anthropology.

In the 1960s Cavalli-Sforza began to study the genetics of African pygmies, probably inspired by James Neel's work on Amazonians. His early work involved applying multivariate statistical techniques to genetic data from human populations to see who was more closely related to whom (assuming that genetic distance was proportional to time since splitting; that splitting was all that populations did; and that culturally defined human groups could unproblematically be considered as natural taxa); later he began to model the transmission of ideas from person to person (assuming they stay reasonably intact and do not mean different things to different people in different contexts); and finally he dreamed up a big science project for human population genetics – the Human Genome Diversity Project (HGDP) – which ultimately failed for its insufficient attention to issues in the relevant cognate fields, notably anthropology and bioethics.

Cavalli-Sforza has been a grand dilettante, in all the senses of that word, over his entire professional life. He visits Central Africa as an explorer and studies its pygmies as a geneticist, not as an anthropologist. He reconstructs the Neolithic as an antiquarian, not as an archaeologist. He models cultural processes as a statistician, not as an ethnologist. In all of these cases, Cavalli's work has been high-profile but low-impact in anthropology. Does this require an explanation, or is it simply to be expected, like the work of a spectrum of anthropological dilettantes, from Sir Grafton Elliot Smith through Thor Heyerdahl, Robert Ardrey, and Erich von Däniken, and right on up to Richard Dawkins and Jared Diamond?

Consistently opposing scientific racism, Cavalli-Sforza has nevertheless never quite understood the fundamental issues that ultimately undid his HGDP and which have recently been admirably analysed by Jenny Reardon in *Race to the finish* (2005). He still regrets his opponents' politicizing the scientific project – as if the programme to take, store, and study the blood of 700 groups of native peoples (which needs to be done before they go extinct, he constantly reminded us) did not constitute an overtly political act.

Significantly, no great burst of insights or discoveries have followed Cavalli-Sforza's work in anthropology, as it followed, say, the physicists' early forays into molecular genetics. If we are to believe the authors, the explanation lies in American anthropology's recent infatuation with postmodernism, and its stand against science. In lieu of a relevant citation, they provide an anecdote: at the American Anthropological Association meetings in New Orleans a few years ago, a sharp spike in submissions led to an unprecedented rejection rate of sessions and abstracts. The authors of some of the rejected papers decided (rather unscientifically) that this was an expression of the well-known (or perhaps widely imagined) hostility of American anthropology to science, and stormed off to found their own society and have their own meeting. But I was there, and that episode was never about 'science' at all; it was about power and paranoia and too many submitted abstracts.

In fact, I have always thought that the root of Cavalli-Sforza's failure to connect with the broader anthropological community is simply that most anthropologists simply do not know how seriously to take research that can contrast the DNA of 64 samples or 'Chinese ... living in the San Francisco Bay Area', 94 samples from 'two groups of African pygmies', and 110 samples from 'individuals of European origin from ongoing studies in our laboratories or reported in the literature', and conclude sweepingly that 'ancestral Europeans are estimated to be an admixture of 65% ancestral Chinese and 35% ancestral Africans' (*Proceedings of the National Academy of Sciences, USA*, **88**: 839, 1991). However sophisticated the statistics, they simply cannot transcend the limitations of unsophisticated epistemologies.

More of a testimonial than a critical intellectual biography, then, the book resists engaging with anyone who has had anything critical to say about any aspect of Cavalli-Sforza's oeuvre: Robert Sokal, for example, who contradicted Cavalli's interpretation of European prehistory; Rebecca Cann, whose genetic data suggested a very different global prehistory than Cavalli's; Debra Harry, an American Indian activist who contradicted the promises and predictions of Cavalli's HGDP; Bryan Sykes, who contradicted Cavalli's 'wave of advance' model; Masatoshi Nei, who applied a different statistical technique than Cavalli to global allele frequencies and got a different phylogenetic tree and different branching dates; Ranajit Chakraborty, who raised questions early on

about the HGDP's navigation of a cultural and political minefield in the large-scale collection of native blood, and was quickly dropped from its inner circle; or the numerous archaeologists (*pace* Lord Renfrew) who have been critical of Cavalli's work on the spread of agriculture, and the tenuous relationship between cryptic genetic patterns and ethnohistory.

Very oddly, the influential Harvard geneticist Richard Lewontin's famous 1972 'apportionment of human diversity' is even assigned to Cavalli, and Lewontin himself becomes just 'another researcher (who confirmed Cavalli's observation) [and] did make a big deal out of this finding six years later' (p. 196). The only sense I can make of the statement is that it may result from Lewontin's recently televised comment, 'If I were a South American Indian, I wouldn't have let them take my blood' ([www.pbs.org/race](http://www.pbs.org/race)), which may have put him in the 'enemy camp', if one sees the community of science in a sufficiently Manichaean fashion.

All of which is not to say that Cavalli-Sforza does not deserve the testimonial; only that this biography seems to replicate the very criticism that one could reasonably level at the anthropological corpus of its subject: an uncritical and cavalier approach to history, a lot of bluster, and rather too little reflection.

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YOUNG, VIRGINIA HEYER. *Ruth Benedict: beyond relativity, beyond pattern*. xii, 379 pp., bibliogr. London, Lincoln: Univ. Nebraska Press, 2005. £38.95 (cloth)

It may seem odd that we are still talking about Ruth Benedict so many years after her death in 1948, and when most of her theoretical work has been redirected or replaced, but this new and detailed biography offers many reasons why she left such a persisting legacy in our field. Virginia Heyer Young has two new angles on the subject. First, she was a student of Benedict who never threw away her lecture notes, and moreover has collected those of others. Secondly, she has gained access to letters and other materials that had not until recently been made public, possibly for as long as those mentioned in them were still alive. Now an emeritus professor herself, a career in the Department of Anthropology at the University of Virginia behind her, she is well placed to evaluate the material she has collected, and to place it in a suitably long-term context.