severe disappointments in their different ways. Johanna Turner's Cognitive Development and Education is largely a rehash of the work of Piaget and criticisms of him; Turner does not even cover Piaget's own lamentations about the narrow role of teachers whose cognitive development is often stunted but prefers to take us, yet again, through his ideas. She does tack on a few sections on practical topics such as "school readiness" but this is very traditional book which challenges no old distinctions.

Keith Oatley's Selves in Relation, which deals with psychotherapy, is a more novel failure. Much of the book centres around fictional case-histories, so that we now have a distinction between pure, applied and utterly invented psychology. As a fiction writer, Oatley is not very good as his suffering characters are more wooden than the virgins of Barbara Cartland. He is also too concerned with showing off as a radical. One would never guess that psychiatrists carry out much psychotherapy and that most "clients" are seen, in Britain

at least, in the context of some psychiatric care. Oatley tells us as well that he became bad-tempered while finishing the book so that we remember he is a human being whose subjective voice is crucial. We get, too, the now mandatory chapter on Lacan. Given the philosophy of the series, it would have been nice to see some attention paid to why psychotherapy became so popular in the 1970s and to the whole question of why people feel impelled to change themselves. Oatley does offer a sensible account of the research into the effectiveness of therapy for individuals and groups. Ironically, the book is best when it is conventional.

As a whole, the series is a nice "selling idea", as Watson coined the phrase, but it needs rather more thought and imagination in its execution. A challenge to the dichotomy between pure and applied work is a worthy aim; however it will require re-doing much of psychology, not merely re-writing the results with an eye on the real world.

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Old Americans

Warwick Bray

Ancient North Americans. Edited by Jesse D. Jennings. W.H. Freeman: 1983. Pp.642. \$27.95, £23.95.

Ancient South Americans.
Edited by Jesse D. Jennings.
W.H. Freeman: 1983. Pp.414.
\$24.95, £21.50.

THE precursor of these two volumes was a single book, Ancient Native Americans, published as recently as 1978. In its day this was one of the best textbooks on the market, though some of us (mainly those working in Latin America) grumbled that it was aimed too specifically at North American university students, and also complained that the less fashionable areas of South America were ignored.

The pace of archaeological research is so fast nowadays that some revision would, in any case, have been necessary, and the editor has taken the opportunity to split the work into two volumes and to commission completely new chapters on the northeastern United States, the northern Andes (i.e. Colombia and Ecuador), and the south Andes (the Titicaca Basin and adjacent parts of Chile). In addition, Frank Hole contributes a new chapter on "Changing Directions of Archeological Thought", which appears in both volumes; this is one of the sanest and best balanced statements I have read for a long time.

The original chapters, all of them by acknowledged specialists, have been extensively revised in order to incorporate new information, much of it unpublished, so that the reader feels he is getting his news

hot from the field. Several papers go beyond mere textbook summarizing, and are serious contributions to scholarship. Sadly, though, there is still nothing on the Isthmian cultures or the southern part of South America.

As well as Hole's essay, the articles on Mesoamerica and on transoceanic contacts appear in both volumes. So out of the eight chapters in *Ancient South Americans*, three are duplicates. This verges on sharp practice, for the two volumes were clearly designed as a set, and all librarians (if not all students) will want to buy both of them.

In other respects the new version preserves the virtues of the 1978 edition. with up-to-date information, literate text and generous and intelligently chosen illustrations; excellent bibliographies appear at the end of each section. A major theme of these books, and one which will appeal to geographers and ecologists, is the relationship between man and the changing prehistoric landscape. How many archaeology books bother to show the reader what a jiquima tuber or an extinct ground sloth actually look like? Within this general framework, some authors concentrate on problems of interpretation, while others show more interest in lists of artefacts, dates, sites and cultures. Such facts are essential, of course, but they do not speak for themselves, and the sceptic might need to be shown why it is worth the effort of mastering all the detail. This, however, is a minor complaint. At a time when archaeology is becoming more popular, all teachers, university students, and the more informed amateurs, should be grateful for textbooks they can trust.

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The magnetic past

K.M. Creer

Palaeomagnetism: Principles and Applications in Geology, Geophysics and Archaeology.

By D.H. Tarling. Chapman & Hall: 1983. Pp.379. Hbk £25, \$55; pbk £12.95, \$29.95.

PALAEOMAGNETISM is a discipline that has drawn in research workers with both physical and geological backgrounds. In consequence, the subject now covers a very wide range of methods such that no single person can become a master of all of them.

D.H. Tarling, the author of this book, is himself a geologist with many years of research and teaching experience in palaeomagnetism, so one is not surprised to find his chapter on geological applications to be written with authority and the topics to have been well selected. One of the strengths of his book, however, results from Tarling's good fortune to be based in a Geophysics Department which constitutes part of a School of Physics, and he has clearly taken full advantage of the proximity of his physics-orientated colleagues to test out his chapters dealing with the physical basis of the subject, magnetization processes in minerals and rock assemblages, instrumentation and statistical methods. The Department of Geophysics and Planetary Physics at the University of Newcastle has played a leading role in both the development and the application of techniques in palaeomagnetism and rock magnetism through the past quarter century or more, so one could hardly find a better environment from which an authoritative text could be created.

Although Tarling has followed the overall plan of his earlier work Principles and Applications of Palaeomagnetism, published by Chapman and Hall in 1971, this is very much a new book. While the chapter titles are almost identical with those of the earlier book, the contents have been considerably expanded and updated, and there is an additional chapter on "Archaeological Applications". Well over 1,000 papers are referenced and a quick browse suggested to me that the book could be considered as a primary text and reference source for the research worker specializing in palaeomagnetism. Further perusal confirmed my initial impression and I recommend it strongly both to the research worker and to the post-graduate student interested in palaeomagnetism. Tarling's new book has no obvious weaknesses and compares most favourably with the current best-selling texts on the subject.

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