Book reviews 1439

The next section entitled Tectonics of the Cenozoic Indo-Asian collision contains my choice for the best paper in this volume and, coincidently, the one perhaps of most interest to structural geologists. This is the paper by Thomas, Cobbold, Wright, and Gapais on the Cenozoic Tectonics of the Tadzhik Depression. Its appeal is that it integrates a wide variety of data types, including core elements of structural geology at both small and large scale, into a new and highly convincing overall model. This section also contains a useful synthesis of results from the Ailao Shan Red River shear zone, and a reconnaissance report on paleostress results from eastern Tibet.

The final section in the book contains papers on the Mesozoic and older geology of Asia. Two summarise different viewpoints on the ultrahigh pressure metamorphic rocks and their setting in the Qinling-Dabie Shan, one concentrating on the metamorphic aspects, the other on the geology and the isotopic ages, but this does not contain any detailed reports on the structural geology of the occurrences. Another paper reviews the Songpan-Ganzi flysch as a paleo-Bengal Fan related to the Qinling Shan collision zone, adding some detailed observation evidence in support of this familiar concept. There are also papers on Mesozoic wrench tectonics in Korea and Japan, possibly related to the late stages of the Oinling collision and the Tan Lu fault, and, another of interest to structural geologists, a very well-documented study of a Cretaceous low-angle detachment and metamorphic core complex in the Yunmeng Shan, near Beijing. Another paper integrates Triassic and Jurassic paleofloral gradients, and using very carefully selected paleomagnetic poles, shows that the floral changes follow the latitudinal motion of the Asian continent. There is also a tectonic updating from Turkey, somewhat revising Sengor's Paleo- and Neo-Tethyan history of who did what, to whom, and when. There is also a paper integrating the tectonic history of China and neighbouring regions for the whole Phanerozoic; this ambitious undertaking provides a useful summary for those unfamiliar with the geological history of China (including Tibet and Xinjiang) but, in an article of reasonable length, it cannot help somewhat uneven treatment of different areas and events.

Finally, at the back, like a Russian doll, this book contains another book, namely 154 pages on the Paleotectonics of Asia by Sengor and Natal'in. This article alone would be justification for a research library to purchase the volume, since there is nothing like it anywhere in the published literature and, whatever you may think of the interpretations, it provides access to information and references on the geology of a huge, remote and (outside the FSU) poorly known region of the continent.

This volume is one that should definitely be in all university libraries serving geoscience departments, particularly because it contains new information and ideas about the Indo-Asian collision, and collision tectonics in general. All researchers active in the field of the Indo-Asian collision, and those who seek to understand the older tectonics of central and eastern Asia, will want to have a copy readily available. This is, however, not an essential item for the personal library shelf of structural geologists working elsewhere.

William S. F. Kidd

Albany, U.S.A.

## **Out of Africa**

Scholz, C. 1997. Fieldwork—A Geologist's Memoir of the Kalahari. Princeton University Press, New Jersey. Price: \$24.95, £19.95. ISBN: 0-691-01226-1.

This book arrived on my desk for review in JSG, just as I was packing up for a week's fieldwork in Scotland. I took it with me to take a look, and decide about its review; but once I had begun to read it, there was no turning back. By the time Jack Treagus had dipped into it, too (sparking reminiscences of his year spent in West Africa), the book was much handled, and in no state to pass on to another reviewer. So this preamble is the Editor's confession of selfishness in keeping an interesting book for myself! My only excuse is that, for once, I was doing fieldwork rather than desk work; and what better book to take for evening reading than Chris Scholz's Fieldwork?

This is not the usual kind of book that arrives for review in JSG. It is not a text book, nor a research tome, nor a collection of papers. It is autobiographical, but written in a lively and provocative style: the memoirs of a relatively short period in Chris Scholz's career, but one that clearly altered many of his perceptions of science and life. This lifts the book away from what might have been a rather straightforward account of a research enquiry, into a book that sometimes reads more as a novel, capturing places and events vividly. The year is 1974, when Chris and his friend and technical collegue at Lamont, Teddy Koczynski, engaged in two months of fieldwork in Botswana, hitherto a barely-heard-of spot on the map of Africa for them.

The approach came from the United Nations Food and Agriculture Organization (UNFAO), inviting Scholz to be an earthquake consultant for the UN Development Programme in the Okavango delta, Botswana. He would probably have declined the offer, but for natural curiosity; plus some rapid investigation showing there were indeed recent earthquakes in this region, hinting that the east African Rift might extend further south than formerly described. Chris talked Ted into joining him to undertake field-based seismic surveys in the region, with the support of the Botswana Geological Survey. What the FAO expected the two Americans to do was not very clear, but Chris hoped that the visit might answer some of his burning questions regarding continental rifting, faults and earthquakes. The scientific results were eventually published in science journals. This is the human account: what happened, what they did, how they felt. Such is the skill in writing that I felt it was a privilege to be sharing these experiences.

It would spoil the book for potential readers if I told all the best bits here. Sufficient to way that our two intrepid Americans found many culture shocks, even before they arrived in Africa: European bureacracy in Rome, where they appeared to be unexpected; travel arrangements onwards to Africa, more complicated than could be imagined. Already chastened, they then received a dose of the snobbishness and misplaced values of the old British Empire. We then read of the frustrations of being delayed in the start of their fieldwork and seismic surveying: all that time spent whiling away the hours in bars! Life finally hots up for the lads, as at last they go into the field, develop working and living arrangements with the Survey and their staff, encounter elephants and other wildlife, and manage to avoid collecting new wives along the way. Scholz's vivid writing captures the culture shocks that came with this expedition, but is written sensitively and makes no boasts of heroism.

Some readers might wonder why, and for whom, this book was written. In all memoir-writing, there will be a degree of catharsis for the writer, and in some cases one might ask what is there of interest for the reader? In the case of this book, we have an unusual mix that might not have worked: but I think it does. I am not sure that a non-geologist, without any understanding of plate tectonics or faulting, and with no geographical interests, would choose to read it. But all geologists, not just those whose speciality is structure and tectonics, should be enthralled. One could nitpick a little, and wonder why the only two illustrations (maps) were presented as preface figures. This required the fussy reader, trying to work out where our explorers went, to keep turning back; nor am I sure that all the places were on the two maps. But this was a brave and successful attempt not to make this text-bookish, based on learned detail and diagrams. It is flowingly written, and with humour; so perhaps it was better to tuck the maps in at the front. without making them intrusive.

You will have to read it for yourself to discover whether Chris and Ted fulfilled their obligation to the UNFAO, and at the same time, answered their own questions about whether the East African Rift was still actively rifting and propagating in the Okavango region. True adventure stories do not necessarily have 'happy endings', and perhaps this was an experience more like a beginning than an ending. Twenty-three years have elapsed since they undertook Fieldwork, over which time this part of Africa has hugely changed, and Chris Scholz and colleagues have continued their research in earthquakes and faulting, published in conventional ways (including in this Journal). The magic of this book is that it provides us with a rare glimpse of what goes on behind the scenes in research: which in this case takes us into deepest

Susan H. Treagus

Manchester, U.K.