

between beach profile and sea level changes and on the so-called Bruun Rule; to remind us that such connections are not accepted by all geomorphologists (chapter 14, p. 469); and that the responses to sea level rise in different environments are quite varied. One of its merits will have been to show how complex the problems are and how difficult and often controversial the decisions (p. 475: "the response of some engineers to coastal problems has been to increase the complexity and the cost of the solutions").

Another excellent aspect of the book is the way in which the convener (*e.g.* p. 263) has wisely tried to keep the balance between the different opinions and statements expressed by the contributors. In a review of such controversial topics, it was necessary to give a set of interpretations as complete as possible without supporting anyone unreservedly. This has been done well, and Dr. Devoy is to be congratulated for his "ponderation" in his huge enterprise.

André Guilcher
University of Western Brittany
Brest, France

Sea-level Changes, edited by Michael J. Tooley and Ian Shennan 1987. Basil Blackwell, Oxford. 397p. £39.95. ISBN 0-971-154404-7 (Special Publication No. 20, Institute of British Geographers.)

AD 1987 must have been 'The year of the Sea-level Book', as to my knowledge this is the seventh volume on this subject to be published within 12 months. There are two obvious reasons for this activity; first sea-level rise has become an 'issue', generating column inches and research funds, and second, the year marked the culmination of a highly successful IGCP project (No. 200) on sea-level, directed by Paolo Pirazzoli. This and several other of the recent volumes form part of the IGCP effort.

'Sea-level Changes' arises largely from the work of the 'Durham School' of sea-level research, founded by Michael Tooley in the 1970s. Indeed almost half the book is given over to reports from Durham workers. Tooley is following a long, if somewhat sporadic tradition of British interest in sea-level studies, dating back to the 1930s. However, Tooley must take much of the credit not only for the advancement of palaeoenvironmental sea-level research in British since the 1960s, but also for the 'behind

the scenes' boosting of sea-level interests through the two IGCP Sea-Level Projects (Nos. 61 and 200).

To return to 'Sea-level Changes'; the book comprises 13 chapters, all but four of which are regional accounts (as befits a volume published under the aegis of a geographical society). Chapters 2, 3 and 4 are the 'Durham' contribution. In retrospect I feel that two of these, by Stephen Ireland and Andrew Haggart would have benefitted from being published elsewhere, as they are basically reports of relatively local doctoral studies. Of the two, Ireland's is a curious affair, in which he tries to place his work (in Brazil) into a more general frame. I feel sure he would have been more uninhibited had he not been aware that he was writing for a book, designed for an 'international audience.' The third 'Durham' contribution, that by Ian Shennan, is much more successful. Shennan tries, and largely succeeds, to pull together a broad spectrum of data, integrating and synthesizing them into a coherent picture of Holocene sea-levels around the North Sea basin. This type of approach is going to prove increasingly fruitful as more basic data become available.

Chapters 5 to 10 are an assorted collection of regional studies, covering the Mediterranean, Japan, eastern USA, west and east Africa and Australasia. Each author resorts to a selective review. The Australasia chapter (by John Chappell) is perhaps the most up-to-date, the African essays, as might be expected, the least substantial. Nonetheless all the contributions are well-written and informative, although the US review (by Thomas Cronin) suffers from being simply too broad, covering all the Quaternary along an extensive and variable coastline. The last three chapters consider sea-level models for predicting rheological deformation, predictions of world sea-level rise in the next century, and a 'conspectus' by the Editors. The most interesting is the attempt to predict sea-level rise due to global warming across the oceans taking ice-sheet and glacier melting, ocean expansion and isostatic delevelling into account through the use of Farrell's and Clark's equations.

Overall a useful book, well-produced and edited. It may suffer a little in comparison to other recent volumes, but still contains much useful information.

Bill Carter
University of Ulster
Coleraime, Northern Ireland