

The authors have utilised their skills in glacial geology and computer science to develop an excellent introduction to the analysis of glaciers and glacial environments. The amount of work required in the creation of this programme should not be underestimated. This is not only the first interactive educational CD-ROM in glaciology, it has extraordinary detail and depth. These facts indicate that a great deal of effort has been given to the creation of this package, a point that should be acknowledged by the university lecturers who will undoubtedly use it as a teaching tool.

The CD is compatible with modern PCs and Macintoshes and will run on machines usually mounted in university computer rooms. The visual display of the programme is arranged so that text appears on the right-hand column of the computer screen, a picture appears on the main central block, and a permanent menu (which guides the user around the package) is available at the base of the screen. Thus, the user is able to read about and synthesise the varied illustrative material that is introduced in the programme. One fault with the arrangement is that the dark blue colour of the menu and border mask the black lettering on the menu, which makes it difficult to identify the words. Thus, the navigation of the package is not as obvious as it should be.

Another problem is that the resolution of the images is often poor. In some circumstances, this hinders the interpretation of pictures. This problem is due to hardware constraints rather than any fault of the authors, and will probably be resolved through time as scanners and machines become capable of displaying high-resolution pictures. However, for this version, the images are often difficult to interpret unequivocally. This causes some problems when attempting to answer some of the questions set in the exercises at the end of the programme.

The CD-ROM begins by demonstrating how to navigate around the programme, introduces the themes of the package, and then goes on to the programme proper. The glaciological and academic contents of the CD-ROM are excellent. There is a great deal of information here, including pictures of glacial environments, diagrams of how to analyse and record data, several exercises to perform, a glossary that is available by clicking the mouse button over highlighted words, and a useful link to the Routledge on-line homepage via the internet.

The structure of the programme has been well thought out. The aims and objectives are stated clearly at the beginning, followed by information on how the CD-ROM package should be used. Glacial processes are then introduced in an appropriate order. The action of ice is first, since it represents the main process active in these environments, followed by glacial erosion and deposition (subaerial, glaciofluvial, and then glacialmarine). These sections set the background information for the remainder of the programme. A significant amount of time is spent on the teaching of interpreting and analysing glacial sediments. Techniques used in the analysis of these

sediments are well explained and illustrated.

The main element of the CD-ROM is the interpretation of subaerially exposed glacial sediments. However, no real time is spent on interpreting glacialmarine/lacustrine environments. This is a potential flaw with the package, since these environments are important. However, if the CD-ROM is meant as an introduction to glacial fieldwork, the marine setting is not as appropriate as the land-based analysis. Maybe in a future version, the glacialmarine environments could be examined in further detail.

One aspect that appears unusual is the lack of sound. One would imagine the reason for this is due to its use as a teaching package, where a dozen or so soundtracks would culminate in a dreadful din! However, the lack of a soundtrack made me slightly uncomfortable with the programme.

The package has several animated sequences of glacial environments. These displays are often awkward to visualise appropriately (that is, they are jerky, of poor resolution, and too small). One would assume that in future releases of this package, more of such animation will be included and that as computers become better equipped to handle multi-media, this problem will doubtless be resolved eventually. However, in this first version, the animation sequences are rather clumsy. One other point to mention is that the navigation of the programme sometimes 'freezes.' For example, when in the exercise section, there can be trouble moving onto the next questions. If this was user error, the instructions are not obvious. If not, then the programme has a few minor bugs that need ironing in due course.

In summary, this CD-ROM is a novel and unique introduction to glacial environments. It serves as an ideal start to undergraduate investigations of glacierised regions and as a prelude to field studies. (Martin J. Siegert, Centre for Glaciology, Institute of Geography and Earth Sciences, University of Wales, Aberystwyth SY23 3DB.)

**TRIAL BY ICE: THE ANTARCTIC JOURNALS OF JOHN KING DAVIS.** Louise Crossley (editor). 1997. Huntingdon and Norwich: Bluntisham Books and the Erskine Press. vii + 203 p, illustrated, hard cover. ISBN 1-85297-047-2. £29.95; \$US55.00.

John King Davis was the captain of the vessels engaged in many of the great expeditions of the 'Heroic age' of Antarctic exploration. His career in the south spanned the period from 1907 to 1930, and, during that time, he established a reputation as probably the most capable of all Antarctic masters. His first appointment in the area was as first mate of *Nimrod* on Ernest Shackleton's British Antarctic Expedition of 1907–1909. He eventually became captain of *Nimrod*, and this was followed by the captaincy of *Aurora* on Douglas Mawson's Australasian Antarctic Expedition of 1911–1914. He commanded the Ross Sea Relief Expedition of 1916–1917, and it is worth noting that in this case he was not simply the master of the ship. His final appointment was on board *Discovery* on the BANZARE expedition of 1929–1930.

Davis' career intersected with that of Mawson, in general with reasonable harmony, but on the last of Davis' voyages there were serious disputes between Mawson, the leader of the expedition and Davis, the master of the ship. Davis did not participate in the BANZARE voyage of 1930–1931, during which there were similar difficulties between master and leader. These disputes arose from the disparate roles of the two, and to some extent the case against Davis has gone by default with the publication of Grenfell Price's 1962 book *The winning of Australian Antarctic: Mawson's BANZARE voyages 1929–31* and of Mawson's diaries (Jacka and Jacka 1988). Therefore this book, setting out Davis' diary entries for the Antarctic sections of his voyages, is most welcome from the point of view of redressing the balance. But this is only a minor aspect of the volume, in the totality of which the reader is led to appreciate how remarkable a man Davis was. In the words of Mawson himself, he was 'God fearing...kind, trustworthy and courteous.'

This is a splendid edition of Davis' papers, which will serve as a model for all those who attempt similar work. Edited diaries tend to fall into two categories: those in which the editor almost submerges the text in critical apparatus and personal opinion and those in which the editor's impact is so slight as to be almost unnecessary. This edition avoids both hazards. The character of Davis is clearly evident from his writings, which constitute the bulk of the book, while the editor places them into context in a most satisfactory way. She has immersed herself in her subject, and the editorial apparatus, while relegated to its proper place, is formidable both in quantity and quality.

After a general chapter entitled 'The making of an Antarctic seaman,' in which Davis' career is outlined, there is a chapter for each of the voyages. In each case there is an introductory essay by the editor. These vary in length from a few paragraphs to several pages in the case of the Ross Sea Relief Expedition, for which it was necessary for her to go into some detail about the convoluted and acrimonious negotiations that led to Davis' appointment.

After each introduction, the text of the diaries is presented with only slight amendment, most particularly with regard to the punctuation that in the original was, as the editor notes, 'sparse.' In his somewhat terse style, Davis reveals himself as thorough, meticulous, and somewhat introverted. One can understand why he was referred to, by many, as 'Gloomy Davis.' He uses the privacy of his diary to comment on the shortcomings of his subordinates, who obviously in some cases did not have the same high standards as did Davis himself, and of the expedition staffs, including their leaders, particularly Mawson. At the end of the chapter for each voyage, the editor gives full references not only to the entries in Davis' diaries but also to the other sources, both archival and secondary, to which she has referred. A perusal of these indicates the thoroughness with which she has approached her work. There is a final chapter entitled 'Aftermath,' in which she sums up events following the return of *Discovery* in 1930.

In addition to the text, the book includes a very large selection of contemporary pictures. These are set out on 37 pages, and while some are familiar, many are not, and in themselves, they constitute a valuable resource. At each end of the book is a track chart for the voyages. The only serious deficiency in the work is that one would have welcomed larger scale maps of some of the places referred to in the text, for example Commonwealth Bay, where important incidents took place. There is a comprehensive index together with a list of members of all the expeditions. There are a couple of slips here: the Australasian Antarctic Expedition becomes the Australian Antarctic Expedition, and the Ross Sea Relief Expedition bears the dates 1917–17. Surprisingly, the editor omits Shackleton himself on the Ross Sea Relief Expedition list, although she does in the text explain his supernumerary position.

The presentation of the book is most attractive and up to the high standards one has come to expect from the publishers. The dust jacket has the well-known photograph of *Discovery* held up in pack ice, and is in itself designed to appeal to the prospective purchaser.

To conclude, an excellent book, and one that should be read by all with interests in the expeditions in which Davis was involved. The editor and publisher are to be congratulated. (Ian R. Stone, Laggan Juys, Larivane Close, Andreas, Isle of Man IM7 4HD.)

#### References

- Jacka, E., and F. Jacka (editors). 1988. *Mawson's Antarctic diaries*. Sydney: Allen and Unwin/Susan Hayes.  
 Price, A.G. 1962. *The winning of Australian Antarctic: Mawson's BANZARE voyages 1929–31*. Sydney: Angus and Robertson.

**DRAWING SHADOWS TO STONE: THE PHOTOGRAPHY OF THE JESUP NORTH PACIFIC EXPEDITION, 1897–1902.** Laurel Kendall, Barbara Mathé, and Thomas Ross Miller. 1997. Seattle and London: University of Washington Press; New York: American Museum of Natural History. 112 p, illustrated, soft cover. ISBN 0-295-97647-0. £22.50.

This volume accompanied the American Museum of Natural History exhibition 'Drawing shadows to stone: photographing North Pacific peoples, 1897–1902,' which ran between 14 November 1997 and 1 March 1998. The exhibition marked the centenary of the museum's Jesup North Pacific Expedition (1897–1902), and both exhibition and book took their title from the turn-of-the-century Yukaghir people of northeastern Siberia. Many Yukaghir had never before experienced the glass-plate, tripod cameras that they were to call 'the three-legged device that draws a man's shadow to stone' (page 33).

The Jesup Expedition provides an early example of an anthropological enterprise that appropriated and assimilated photography as a form of collecting and as essential anthropological practice. Both exhibition and book explore the processes at work in turn-of-the-century photographic representations of anthropological subject matter.