

in place enormously increases its disturbance potential, and there is a vast difference between a real field of ice floes free to respond to the sea by heave, tilt, and surge, and what is essentially a floating breakwater.

The author of this section seems unaware of the large amount of analysis work done on the effect of floating rafts on wave fields. She also gives no mention or acknowledgement to the very large amount of research done on other vital aspects of wave–ice interaction, such as wave attenuation in the marginal ice zone; wave generation, propagation, and attenuation in the interior of the pack-ice zone; wave interaction with fast ice; and wave propagation in icefields composed of small cakes or crystal suspensions, such as the frazil–pancake ice mixtures found in the Greenland Sea and in vast expanses of the Southern Ocean in winter. A reader who wishes to be introduced to the very large body of literature on these subjects should read Wadhams (1986) and Squire and others (1995).

One ironic aspect of this big hole in the book is that the book's authors, who set a chummy and mutually congratulatory tone from the first chapter onwards, seem unaware that there is a hole, that is, that the 8% of the ocean covered by sea ice possesses at every point a wave spectrum in which the energy (however tiny) is determined by physical interactions of the greatest interest and importance. In the central polar pack, for instance, it is found that the wind can generate wave energy if it exceeds a speed equal to the minimum velocity for the propagation of flexural-gravity waves. This implies that the wind is exerting its influence via a pattern of pressure disturbances moving over a flat elastic sheet, rather than by wave-growth mechanisms whereby the wind pushes on the inclined surfaces of an already-growing wave field. Such a wave-generation effect, which is limited to one particular kind of interaction, should be studied in its own right as a contribution to fundamental wave-generation physics.

For a blue-water oceanographer this is an excellent book, setting out the principles of the WAM model in great detail and with clear physical explanations. But it is seriously deficient in the area of greatest interest to polar researchers, and it is to be hoped that this will be corrected in a future edition. (Peter Wadhams, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

References

- Squire, V.A., J.P. Dugan, P. Wadhams, P.J. Rottier, and A.K. Liu. 1995. Of ocean waves and sea ice. *Annual Review of Fluid Mechanics* 27: 115–168.
- Wadhams, P. 1986. The seasonal ice zone. In: Untersteiner, N. (editor). *The geophysics of sea ice*. New York: Plenum Press: 825–991.

THE NIGHT SIDE OF DICKENS: CANNIBALISM, PASSION, NECESSITY. Harry Stone. 1994. Columbus: Ohio State University Press. xxx + 726 p, illustrated, hard cover. ISBN 0-8142-0547-X. \$US68.50.

For *Polar Record* to review a critical study of Charles Dickens might seem unusual. But *The night side of*

Dickens bears considerable relevance to at least two areas of Arctic history. One such area is Dickens' dramatic effort *The frozen deep* and a few other literary works appearing in *Household Words*. Another is Dickens' strange relationship to the notion of cannibalism, a relationship he no doubt shared with many of his Victorian readers. Stone's persuasive analysis and documentation of cannibalistic allusions in Dickens' novels, while occasionally thorough in the extreme, lend useful insights into the fear and fascination that cannibalism held for Victorian society. This peculiar cultural obsession, of course, achieved its ultimate expression around the final expedition of Sir John Franklin and the disconcerting reports of its end.

Stone constructs a perspective from which the reader can view Dickens' 'night side' — 'a dark, slowly accreting cluster of emotions and ideas' (page xvii) — as it developed psychologically in the man, and as it shaped this extraordinarily popular novelist's work. Dickens' boyhood 'attraction of repulsion' (page 97) to the sensationally gruesome weekly periodical *Terrific Register*, his frequenting of public morgues, and other biographical manifestations of the somberness of Dickens' evolving personality are clearly delineated in *The night side of Dickens*. Having convinced his reader that Dickens' youthful character was emphatically more troubled and dark than superficial popular readings of his novels might suggest, Stone then smoothly turns to the novels themselves. Here, he reveals undeniable evidence of Dickens using art to confront and grapple with those same demons that haunted his personality from a very young age.

One can get a good sense of the contents of Stone's book by looking at the index, which, by the way, is an excellent one, undoubtedly created by the author himself; it is certainly too 'intelligent' and useful to have been computer-generated. The following list comprises those index headings that generally warrant the greatest number of page references: childhood fears; destructive love; disorders; dissection of corpses; dismemberment; humans as fodder; inability to cauterize the past; isolation; macabre; obsessions; predators and predation; psychological imprisonment; rats; roasting human beings; savages and savagery; secret life; sense of sin; sins and sinners; skeletons; suppression and expression; and wounds.

Organized chronologically, the book is divided into three parts: 'Dickens and cannibalism: the unpardonable sin'; 'Dickens and passion: the tangled web'; and 'Dickens and necessity: the long chain.' The final (and briefest) part deals almost exclusively with the little-known *George Silverman's explanation* and its relationship to earlier works by Dickens. Consequently, this part will bear interest to students of the Arctic only to the extent that they have been won over by Stone's thesis and want to follow it to its conclusion. The first part and the early section of the second part will hold the most direct interest for polar enthusiasts.

Part 1 begins with an extract from a letter that Dickens wrote in 1854 to one of his editors: 'I am rather strong on

Voyages and Cannibalism' (page 3), and the next 268 pages demonstrate just how 'strong on...Cannibalism' Dickens was. While Stone intends Dickens largely to be the focus of his analysis, the immense popularity of Dickens in the middle of the past century suggests that this 'night side' was not Dickens' alone, but belonged also to the age that produced him and that read him so avidly. If Dickens was 'strong on Voyages and Cannibalism,' so was his audience. Dickens, after all, was not the only reader of the *Terrific Register*, nor was the government's diversion of tens of thousands of pounds into Arctic discovery achieved without the support of the British people. Thus, as we learn about Dickens' proclivities and fears in this arena, we can better understand the crucial period between 1818 and 1859 that gave such shape — both geographically and culturally — to the North American Arctic. The temptation of cannibalism was a site at which to test the superiority of British values over base animal instincts, much as the quest for the Northwest Passage was an expression of the desire to assert 'civilized' dominion over a dumb, amoral, natural universe.

As well as serving as a cultural reflector of the Empire's desire to test the limits of the special brand of 'civilization' it exported, Parts 1 and 2 address quite specifically Dickens' three works on polar voyages. These are 'The lost Arctic voyagers' (1854), *The wreck of the 'Golden Mary'* (1855), and *The frozen deep*, written in 1856 with Wilkie Collins and staged in 1857, in which Dickens also acted the lead. The two former titles appeared in *Household Words*, which Dickens edited from 1850 onward. As editor, Dickens would also have been responsible for the many other discourses on cannibalism and discovery that appeared in the periodical, even though they were written by other contributors. Clearly, in the decade after Franklin's disappearance, Dickens was busy indeed grappling with those same specters of possibility that haunted much of the Victorian sensibility.

The 145 pictures that illustrate Stone's book give it a strong visual component. Illustrations were an essential aspect of Victorian books, and *The night side of Dickens* generously incorporates interesting and instructive images into this study of Dickens' novels. The selected illustrations are not simply reproductions of the familiar George Cruikshank or Hablot Knight Browne (aka 'Phiz') pictures that accompanied many Dickens books, although these are frequent and most welcome, but include images from items in Dickens' personal library, from the *Terrific Register*, and from the drawings of William Hogarth.

The night side of Dickens will clearly interest scholars of Dickens more than it will cultural historians of the Arctic. Stone's analysis is thorough, and sometimes seems intent on leaving nothing for the reader to discover as he or she explores Dickens from this darker perspective. But any careful reader will recognize and appreciate the fullness of Stone's scholarship, of his knowledge, and of his intensity. This is clearly the remarkable culmination of the lifetime work of a meticulous scholar. And a substantial

portion of this very large book is immediately relevant to anyone interested in nineteenth-century Arctic studies. (Richard C. Davis, Department of English, University of Calgary, 2500 University Drive NW, Calgary, Alberta T2N 1N4, Canada.)

SWANSEA'S ANTARCTIC EXPLORER: EDGAR EVANS, 1876–1912. G.C. Gregor. 1995. Swansea: Swansea City Council (Studies in Swansea's History 4). xvi + 103 p, illustrated, soft cover. ISBN 0-946001-28-6. £7.50.

As every polar enthusiast knows, Edgar Evans was the Royal Navy petty officer who was the first to die on Robert Falcon Scott's ill-fated return march from the South Pole in 1912, having struggled with extreme gallantry to the very end. Yet, apart from two short articles referenced in this book, nothing has hitherto been published on Evans' background, early years, and naval service, apart from his participation in the two Scott expeditions. The present work goes a long way towards filling this gap.

Evans was born on the Gower Peninsula of Wales, but, when he was seven, his family moved to Swansea, where his father became a quartermaster with Coast Lines. After leaving school at the age of 13 and working for two years in a local hotel, Evans enlisted in the Royal Navy as a boy seaman in 1891. By 1898 he had risen to leading seaman, and, in the following year, he came to the notice of Scott, then a lieutenant, while both were serving in the battleship *HMS Majestic*. It was indeed a fateful encounter in every sense of those words.

There followed the *Discovery* expedition, 1901–1904, for which the author gives a succinct account of the role of Evans, by now a petty officer second class, particularly as one of the two sailors accompanying Scott on his western journey to the South Polar Plateau in 1903.

Within months of his return from that expedition, Evans married his first cousin, and was promoted petty officer first class, not to be equated with chief petty officer, as the author states, for the rate of CPO was established as long ago as 1853. For the next five and a half years, the couple lived in Portsmouth, where Evans qualified as a gunnery instructor from *HMS Excellent* (Whale Island) and then served as an instructor at the shore base *HMS Vernon*. He was known for his great physical strength and as a tough disciplinarian, whose gun crews twice won the field gunnery competition in the Royal Naval Tattoo at the White City.

From the bond between the two men, forged in the field, Scott inevitably recruited Evans for his *Terra Nova* expedition, 1910–1913. However, Evans almost did *not* sail south from New Zealand as, pulling no punches, the author relates. He was dismissed from the ship for falling drunk in the water while attempting to reboard at Port Lyttelton, but persuaded Scott to give him another chance. Scott's second-in-command, Lieutenant E.R.G.R. Evans, deplored this re-instatement, with the result that relations between the two Evans were strained throughout the expedition.