to speculate; and an explicit philosophical idealism.

Philip Rehbock's *The Philosophical Naturalists* can now be added to this growing historical literature, and the first half of his book, on "the idealist approach to nature", offers an excellent summary of the relationship between British and Continental biology in the second quarter of the nineteenth century. Rehbock is not the first to note that Edinburgh was the cradle of much philosophical biology in Britain. Robert Knox, Robert Edmond Grant, Richard Owen, Edward Forbes, John Goodsir: these and several other apostles of the "new" biology of the 1820s and 1830s shared a common intellectual heritage in the Scottish capital. Rehbock focuses on Knox (the unfortunate surgeon and anatomy teacher who received the victims of Burke and Hare), using his original writings and translations as a vehicle for expounding the main features of British transcendentalism. Owen and Goodsir receive rather more cursory treatment.

The second half of the book deals more comprehensively with the curious and often obscure biogeographical work of Edward Forbes, the attractive and personable naturalist who died in his prime, before the implications of his speculative vision of nature could be fully worked out. Forbes's research on what he called "centres of creation", and their connection with presently observed plant and animal distribution, was much discussed in the 1840s, although it also involved him in one minor and one major priority dispute with Charles Lyell and Hewett Watson respectively.

Rehbock is a reliable guide to his chosen themes, and his book amply exposes the impact of philosophical idealism on pre-Darwinian natural science in Britain. It is not, however, a comprehensive analysis of the subject. The author is good on the Edinburgh scene, but weak on the London flowering of transcendentalism during the 1840s, when Owen, Grant, J.H. Green and others were active at University College, the Royal College of Surgeons and other London institutions. There is little attempt to place his major figures into their social, political or professional contexts. Rehbock also fails to assess (or even to cite) much relevant secondary literature, suggesting that little has been done on the book since 1975, when the PhD thesis on which it is based was completed. Occasional slips such as Humphrey [sic] Davy and Alfred Russell [sic] Wallace also mar the text. Nevertheless, publication of *The Philosophical Naturalists* is to be welcomed as another contribution to the understanding of the complex biological scene which flourished in Britain during the very decades in which Darwin was preparing his own statement.

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No stone unturned

Keith Bell

It Began with a Stone: A History of Geology from the Stone Age to the Age of Plate Tectonics.

By Henry Faul and Carol Faul.

Wiley: 1984. Pp.270. Hbk \$38.95, £35; pbk \$19.95, £16.

CHARTING the development of geology from antiquity through to post-Wegenerian times is a formidable task. *It Began with a Stone* attempts to do just that. Packed with factual information, written in a breezy style and coupled to an extensive bibliography, it documents most of the highlights in the history of the earth sciences.

In this, the book is a success. Topics are numerous and diverse; not only is the classical age of geology covered in detail, but included are such lesser known subjects as the significance of French discoveries and theories in the seventeenth and eighteenth centuries, the establishment of the US State Surveys and even the fate of geologists during the American Civil War. Important developments in the earth sciences are nicely dovetailed into both a geographical and intellectual context.

The fragmented nature of geology started to disappear with the age of travel. Lyell's visit to eastern North America, his meeting with the cranky yet brilliant James Hall, Dana's and Wilkes's journey around the world, and the opening of the American West played important roles in the consolidation of new ideas and the provision of a solid basis for the relatively young science. This backdrop, together with a cast as intelligent, as colourful and as scurrilous as one could find, are among the fascinating material included in the Fauls' book.

It is difficult to compare this book with others of similar type. *The Birth and Development of the Geological Sciences*, published in 1938, although a more scholarly and sophisticated work, stops at the turn of this century and lacks the freshness and excitement of the Fauls' book. The style of delivery in the latter does, however, tend to be frenetic — a more relaxed pace would have helped readers absorb the bewildering array of information contained in the text.

The book can be read at two levels. For idle browsing, the many interesting and amusing asides can be savoured with relish. For more serious reading, the wealth of information provides a more detailed coverage than has been available until now. Henry Faul died before the manuscript was completed. Anyone who knew Henry will recognize his style, his perception and his scholarship — this book is a fitting memorial. □

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