and pessimistic, concluding that people quickly forget lessons in how earthquake effects might be mitigated, and become resigned or fatalistic to their consequences. Many places in the region that have been destroyed by historical earthquakes, with (by modern standards) relatively little loss of life because of their small populations at the time, are now occupied by megacities with no significant improvement in the building stock. The outlook for such cities is bleak. The contrast between places like California and Japan, where earthquakes of moderate size are mostly stories about money, and much of the developing world, where earthquakes of the same size kill large numbers of people, is one of the most chilling realities of the modern world.

Cambridge should be congratulated for publishing this book; such should be the purpose of an academic publisher. This book will never go out of demand, though that demand will be slow, steady, and professional: for libraries, researchers, consulting engineers and the insurance industry. It will not be a student textbook, and its substantial price is probably inevitable. Ambraseys and Melville's 1982 book was out of print for a number of years, but was in constant demand, with second-hand copies much sought-after and coveted: it is pleasing to know it is now re-issued in paperback.

James Jackson

Reference

AMBRASEYS, N. & MELVILLE, C. P. 2005. *A History of Persian Earthquakes*. 240pp. Cambridge University Press. Price £40.00, US $70.00 (paperback). ISBN 978 0 521 02187 6.

SCARTH, A. 2009. *Vesuvius: A Biography*. 342 pp. Harpenden, England: Terra Publishing. Price £24.95, US$29.95 (hard covers). ISBN 978 1 903 54425 9; 978 0 691 14390 3 (US).
doi:10.1017/S0016756810000622

For both historic and contemporary reasons, Vesuvius is one of the most famous volcanoes in the western world. The eruption of AD 79 (of Vesuvius' precursor Monte Somma), which buried Pompeii, Herculaneum and other surrounding towns and villages and killed Pliny the Elder, the Roman admiral, natural historian and man of all parts, has ensured this volcano's place in history. Today, Vesuvius is one of the world's most dangerous volcanoes since it has not had a major eruption for some 200 years and is situated within 10 km of suburban Naples and a population of a million and more.

Alwyn Scarth's biography of Monte Somma, Vesuvius and the whole Campanian volcanic field in southwest Italy takes an historical approach to the development of volcanism in the region. He starts 35,000 years ago with the impressive eruption of the Campi Flegrei volcano, which lies to the west of modern Naples. At that time it expelled some 500 km^3 'of glowing dust, ash and pumice in an enormous cloud, which formed great ashflows of phonolite. . .over an area of 30,000 km^2. . .and reached thickness of 60 m in many places'. Then some 25,000 years ago the Somma region to the east of modern Naples joined in and has since produced a dozen or so major eruptions and another couple of dozen and more significant eruptions up to 1944. The last major eruptions were in 1631 and 1794, so over 200 years ago, and there are fears that another big one is due. Inevitably, the eruptions of AD 79 and 1631 and the subsequent discovery and excavations of Pompeii and Herculaneum are covered in considerable detail along with the history of the scientific observation and discovery of the geology of the volcano in which Sir William Hamilton played a pioneering role whilst his wife Emma was latterly entertaining Nelson in 1799.

Finally, Scarth discusses the current problems of prediction associated with future eruptions in the region such as the recent 'bradyseismic' movements of the ground around Pozzuoli in the Campi Flegrei region, which may herald changes in the magma level associated with future eruptions. As he says, 'forecasting when Vesuvius will erupt again is perhaps the most important question in volcanic Europe. . .but it is still impossible to make an accurate long-term forecast of even the year when the next eruption will occur'.

Vesuvius' biographical details provide a salutary tale of human need, adaptation, short-term memory and wishful thinking over the centuries. How many times do people have to be reminded of the dangers of 'playing with fire'? But the pressures of survival, the temptations provided by of fertile volcanic soils and the seemingly lengthy pauses between eruptions on the human lifetime scale have led millions of needy people around the world to live within the shadows of potentially lethal volcanoes. Scarth tells a gripping historical tale for the general reader and whilst the geology will be familiar to those in the profession, it provides an excellent well illustrated introduction for the student and plenty of fascinating detail that will be unfamiliar to all but specialist volcanologists.

Douglas Palmer

TAUXE, L. 2010. *Essentials of Paleomagnetism*. xvi + 489 pp. Berkeley: University of California Press. Price £34.95, US $49.95 (paperback). ISBN 978 0 520 26031 3.
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As is made clear at the start, the book is a collaborative effort with contributions from R. F. Butler, S. K. Banerjee and R. van der Voo and indeed this book replaces and surpasses Butler's as the new 'standard' text for anyone requiring an introduction to palaeomagnetism. In many ways it follows the original format of the Butler text but integrates this with Tauxe's previous volume which was much more focussed on the physics and statistics behind the subject. It starts by introducing the reader to a series of essential background information: the essential physics of magnetism (chapter 1), the nature of the geomagnetic field (chapter 2) and rock magnetism (chapters 3–8). The practical, laboratory-based need to know material, forms the second half of the book and is divided into two broad areas: palaeomagnetic and statistical analysis (chapters 9–13) and then on into aspects of the application of palaeomagnetism (chapters 14–16). It is, however, a much more successful and fulsome text than anything previously available, both because of the way it is written and due to the presence of three additional elements. The first is the use of colour both in diagrams and photographs throughout, which greatly clarifies things for the budding palaeomagnetist and simply adds to the high quality of the illustrations throughout. The second is the use of supportive software using the Python scripting language with many ready to use examples that relate directly to the examples in the book and can be downloaded from the companion website. While it is openly stated that getting 'Python' to work is tricky, and this it proves, it does mean that students will be able to make the calculations and analyses for themselves. The third support mechanism is the website itself with useful supportive material including errata, problem set solutions and updates and, indeed, the whole book is available online! The physical and statistical background to the subject is particularly well handled throughout, reflecting Lisa Tauxe's