Review for Viewpoint 2013

William Bynum, A Little History of Science (London: Yale University Press, 2012). 228 pp. £14.99

Reading this unusual book has given me a strong sense of nostalgia and *déjà vu*. Born at the tail-end of the baby boom, my childhood reading included stacks of library books published between the postwar period and late 1960s. The graphic design and textual style of *A Little History of Science*, intentionally or not, evokes those times and attitudes. But it does so in a good way: this is a more balanced and inclusive account than the books that first nurtured my interest in science and its history.

The retro format is Spartan. There are no illustrations apart from stylized pen-and-ink chapter headings reminiscent of mid-century *Scientific American* and *New Yorker* magazines. The text is devoid of explanatory boxes inset in the margins. Even the price – very reasonable for a hardback – suggests an earlier time.

The content, though, deviates from a 1950s template. The book is aimed at young people without quite alluding to the fact (the closest it comes is on the dustcover, offering 'a volume for young and old to treasure together'. The age range is more difficult to gauge. The mentions of cartoons, trainers, Transformer toys, doctor's visits, Coca Cola cans and mobile phones sprinkled through the text hint at preteens, perhaps; references to solving problems in algebra and geometry suggest an adolescent readership. In any case, there is an absence of condescension and proselytising. The writing style is in the form of a gentle and accessible narrative, suitable for children to pick up on their own, or even to be shared or read to them by parents. There are enough 'hooks' to appeal to a curious person of any age.

There is a refreshing intermingling of questions and explanations that transcend modern categories. The book is notable in devoting considerable space – at least nine chapters – to topics in biology and medicine. The treatment of diabetes, for example, receives over a page and a half. There is also good coverage of chemistry, geology, palaeontology and anthropology. On the other hand, this is not a book that focuses on links with technology, society or culture. Chapter 28 ('Engines and Energy') focuses on the thermodynamics of Carnot, Joule and Kelvin, although the final chapters suggest the relevance of inventive skills such as penicillin production, genetic sequencing and digital communications via packet switching.

As summarised on the final page, the book seeks to show that 'science has been a product of that particular moment' (p. 256). It does this well but, perhaps unavoidably, turns attention away from the collaborative and evolutionary aspects of scientific knowledge. The forty chapters (of about 6 pages or 2500 words each) focus on key thinkers and ideas in roughly chronological order. There are a few rare hints of hero worship ('the father of medicine, chapter 4; 'giants of electromagnetism', p. 99; Bill Gates and Steve Jobs as 'modern scientific heroes', p. 253). The social nature of science is scarcely hinted by brief mentions of colleagues of Rutherford, the wartime development of nuclear weapons and computers, and attempts to patent the human genome.

On the whole, this is an appealing book designed for a well-defined audience. Its strength is its straightforward and consistent approach, which may well be an attractive alternative to internet browsing.

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