

## Book Reviews

his statement "Whether Greek is compulsory or not, Latin cannot be omitted from a good education" would receive other than partial support. He would have mourned the eclipse of King James I's version of the Bible by modern translations.

This essay is of broad interest and can be recommended to all medical practitioners. It could be profitably entered into the already overcrowded undergraduate curriculum, agreeably displacing certain arbitrary, transient fashions in theories of education, including the Hydra of "multiple choice". Clear writing demands clear thinking. The more difficult the concept the more cautious, careful, and ordered the conclusion should be. In this sense, Allbutt's *Notes on the composition of scientific papers* is a good bench book, disposing of pomposity, inherited misconceptions, and nonsense. He would rather have one good, clean paper than five counterfeits, and there is a lesson in this for the research "industry" of today.

J. R. Heron  
North Staffordshire Royal Infirmary

HERVE BARREAU *et al.* (editors), *L'explication dans les sciences de la vie*, Paris, Centre National de la Recherche Scientifique, 1983, 8vo, pp. 258, Fr.90.00 (paperback).

This collection of essays explores whether modes of explanation other than physico-chemical reductionism can retain their relevance, while better accounting for both the uniqueness of the living and for biology's quest for scientific status. Of particular interest in Section 1 ('Molecular and Theoretical Biology') is René Thom's 'Dynamique globale et morphologie locale chez les êtres vivants'. It advocates a new paradigm—dynamic structuralism—as incompatible and superior to the currently dominant paradigm of molecular biology on the grounds that the new paradigm's mathematical formalism better accounts for the problem of the stability of biological form. Thom pleads for more theory while underestimating the scientific community's objections to his new paradigm, objections grounded in its lack of experimental control.

Section 2 ('Theoretical Biology and the Theory of Evolution') includes Jacques Roger's well-argued 'Biologie du fonctionnement et biologie de l'évolution' in which he develops Ernst Mayr's idea of an epistemological gap between "functional biology", i.e. experimental physiology and its later offshoots such as biochemistry, biophysics, and molecular biology; and "evolutionary biology" as epitomized in the synthetic theory of evolution. Essentially, Roger accepts Mayr's insistence on two types of biological causality and hence two types of biological epistemology: one associated with evolutionary theory which explains by telling history and the other associated with functional biology which explains processes by recourse to physico-chemical laws while decomposing the complexity of biological phenomena.

The collection concludes with Alexandre Petrovic's 'Types d'explication dans les sciences biomédicales et en médecine', a survey of medicine's dualist epistemology, oscillating between biomedical propositions grounded in criteria of truth and clinical procedures founded on criteria of effectiveness. He illustrates this survey with examples from surgery, endocrinal and cancer-related pathology, eventually discussing computer-based modelling techniques in modern medical decision-making.

Though the collection is useful in refocusing attention on the epistemological uniqueness of biomedical sciences, it falls short of explaining it. This limitation stems from the authors' confinement to neo-empiricist philosophy of science but also from their parallel entrapment in their own disciplinary ethos. Finally, the lack of familiarity with the relevant literature, in either French or English, of all but one author (J. Roger), further devalues the collection's potential use as a resource on biomedical explanation.

Phina Abir-Am  
Tel Aviv University

JOHN PARASCANDOLA and ELIZABETH KEENEY, *Sources in the history of American pharmacology*, Madison, Wis., American Institute of the History of Pharmacy, 1983, 4to, pp. 59, [no price stated] (paperback).

This publication is an offshoot of work which led to the publication of *Archival sources for the history of biochemistry and molecular biology* (Bearman and Edsall, 1980). It has three

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parts; an essay on the beginnings of American pharmacology; a bibliographic essay on the history of American pharmacology in academia, government, industry, and charitable foundations; and brief biographies of twenty-six prominent deceased American pharmacologists. The first part traces the evolution of pharmacology from primitive studies, through the work of Magendie and Bernard and the first specialist department at the University of Dorpat, to Schmiedeberg and his school in Strasbourg, at which John J. Abel received his MD. Abel's return to Ann Arbor and later to Johns Hopkins, his part in the founding of the American Society for Pharmacology and Experimental Therapeutics and the journal of the same name were the major events in the establishment of pharmacology in America.

This is an admirable source of information in a field where intimate knowledge is essential in order to predict what may be available or what is worth looking for. Apart from an occasional misprint, it shows all the signs of meticulous preparation and careful recording. The biographies are also most helpful in adding to the picture of an evolving subject. One could wish there were more of them, but any student of the subject will be grateful to Professor Parascandola and his colleagues for this valuable compilation.

M. Weatherall  
Oxford

NICOLAUS SALLMANN (editor), *Censorini de die natali liber*, Leipzig, Teubner, 1983, 8vo, pp. xxxviii, 106, illus., M.36.00.

Censorinus, fl. AD 238, is one of those unfortunate classical authors who are read only for the fragments they contain from earlier and greater writers. He is a prime source for the history of Latin metrics, and his *De die natali* is a mine of recondite information on all aspects of birth, from Hippocratic theories of conception to the casting of horoscopes. But a proper edition is a rare event, and Professor Sallmann must be thanked for giving us the first accessible text since 1889, especially when it comes with a long and valuable list of explanatory references, both ancient and modern.

All our evidence for Censorinus derives ultimately from a single, very old manuscript, now in the Cologne Cathedral library, no. 166, but the later manuscripts still require checking, for they provide valuable information about the state of this archetype before it became defaced by later rewriting. The introduction refers the reader to more manuscripts than have ever before been cited, although there is no mention of Tarrant's important article in *Antichthon*, 1980, 14: 177–184, which describes the reception of Censorinus in pre-renaissance Europe. This omission is venial, compared with Professor Sallmann's errors and mistakes in his description of the "British family" of manuscripts, British Library, Burney 124 (=B) and Wellcome Institute, 127 (=W). Both B and, in particular, W are written in a clear renaissance Italian hand, with few abbreviations and peculiarities. It is thus surprising, to say the least, that the text of W (which entered the Wellcome Library in 1931) is misread or misreported in more than seventy-seven places, and that a similar number of mistakes can be found in the report of B. The two manuscripts are far more closely related than would appear from the *apparatus criticus*, for they agree together in wrong readings on all but twenty-three occasions. In fifteen places W has the superior text, and the divergencies show that it cannot be, as Professor Sallmann suggests, a copy of B. On the other hand, B is better than W in eight places, and, although none of its readings is totally conclusive, they suggest that B was a twin of W rather than its copy. To find so many errors in the reporting of extremely legible manuscripts must cast doubt on the accuracy of the rest of the editorial work, and undermine the possibility of any sound conclusions being drawn from the material here put before the reader. All is not lost, however, for eyes more sharp and hands more accurate than Professor Sallmann's have already worked on the oldest and most reliable witnesses to the text, and, for most purposes, Censorinus' Latin remains unaffected by his blunders. Yet it is sad to see such a rare opportunity for a reliable edition so carelessly thrown away.

Vivian Nutton  
Wellcome Institute