

Book Reviews

This definitive history of helminthology concludes with portraits and short biographical sketches of the main authors cited. Were it not ungrateful to ask for more, one might have welcomed a few likenesses of the protagonists, the helminths, in addition to the guinea worm and victim on the cover. Dr Grove himself calls his book a “labour of love”. His readers might call it an invaluable work of reference and a celebration of intestinal worms, and join the author in the gratitude expressed to his wife and children for their “patience and forbearance”. They have been richly rewarded for any personal sacrifice if they are as pleased by the results as those with a professional interest in helminths.

Lise Wilkinson, Royal Postgraduate Medical School

PETER DEAR (ed.), *The literary structure of scientific argument: historical studies*, Philadelphia, University of Pennsylvania Press, 1991, pp. viii, 211, £27.50 (0-8122-8185-3).

Bruce Hunt’s exciting and readable reconstruction of battles fought by “physical mathematician” Oliver Heaviside in the rhetorical dimension of mathematical argumentation, and Lisa Rosner’s account of the constraints imposed on student experimentation by models for the presentation of experimental knowledge at Edinburgh University in the eighteenth century, did not deserve to be included in a collection of otherwise poor or pointless essays.

This is not to say that the two articles are interesting because of what they have to say about “the literary structure of scientific argument”. Hunt discusses the ascent of the ideology of pure, “rigorous” mathematics at Cambridge and the consequences for Heaviside who disagreed with the associated rhetoric (that pure deduction must characterize legitimate mathematical argument); Rosner discusses ways in which a particular method of medical instruction quite severely (but perhaps inadvertently) restricted the literary habits and values of students. There is no doubt that Hunt and Rosner are interested in scientific argument. But there is no reason to think that they are interested in its “literary structure”—whatever that means. Judging by two other articles (Thomas H. Broman’s “J. C. Reil and the ‘journalisation’ of physiology” and Peter Dear’s “Turning experience into science in the seventeenth century”), it means that in the history of science tearing language out of the situations of its usage is where the action still is.

Broman sets out to demonstrate that “there is a reasonably tight correspondence between the formal structures of written genres and their intellectual contents”, because “genres of writing and scientific theories develop together and become established in particular historical circumstances” (p. 17). Not only are the distinctions Broman relies upon (between scientific theories or ideas; the environments in which they are articulated; and the kinds of language or “genres” in which they are expressed), and their relations (the first appear as “responses” to changes in the second, and the third “mediate” between the first two), difficult to grasp (“genres link what is produced in the mind with the world in which those products find their space”, is nonsense)—the evidence he adduces for his thesis is very weak indeed. Dear’s understanding of the function of language leads to no lesser philosophical nonsense. “Thus”, he says as if there were an argument, “the meaning of an account of an experimental event. . . is provided by its implicit reference to a spatiotemporally defined region of clinking glassware or grooved pieces of wood being manipulated by a human agent”; and “the meaning of that spatiotemporal region itself. . . is conferred, reciprocally, by the account of an experimental event” (p. 136). Thus, you will notice, Dear ends up with two “meanings”, that of the account and that of the “spatiotemporal region”—whatever that means. (People who view language as essentially an instrument for achieving reference often saddle themselves with spatiotemporal regions.) Not that what it means really matters for Dear’s conclusion.

The articles by Broman and Dear are full of what is most annoying about this book, besides its aimlessness. It is the smug tone suggesting that the philosophical issues in the literary approach to scientific history are plain to everybody, can be dealt with summarily, and are ultimately dispensable. For ultimately the aim is to go to print.

Alexander Zahar, Wellcome Institute