

Bookreview: Harmon, Joseph E. and Gross, Alan G. (editors and commentators): The Scientific Literature: A Guided Tour. (Chicago: Chicago University Press, 2007), 312pp, ISBN:9780226316567 (paperback)

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Harmon, Joseph E. and Gross, Alan G. (editors and commentators): *The Scientific Literature: A Guided Tour*. (Chicago: Chicago University Press, 2007), 312pp, ISBN:9780226316567 (paperback).

This book provides an interesting overview of the scientific literature, from the inception of the scientific journals to the present. This guided tour was intended to provide the general reader an idea of the “written and visual expression of science over time in all its variety” (p.xviii). As such, it focuses almost exclusively on the scientific paper (as opposed to other forms of science writing, such as books), though it does include some excerpts from books written when books still had more influence in science. The authors/editors not only provide an impression of scientific literature, its history and how it developed, but they also comment on the rhetorical strategies employed by scientists in the scientific literature.

With their very broad aim of giving a tour of the various aspects of the scientific literature, Harmon and Gross include extracts of papers from the conception of the paper to today. Next to this historical overview, they include some of the famous and influential papers from the history of science as well as some less exceptional ones which otherwise rarely get analysed closely in history of science. Next to that, they also include papers that break the conventional rules of presentation and subject matter.

Because they did not want to focus on just the easily digestible passages of the scientific literature, Harmon and Gross had to find a very delicate balance between presenting as much of the original scientific works as they can, and giving enough commentary on the selected papers so that the text is still comprehensible to non-experts. A typical entry for one of the scientific papers in this book would be split half-and-half between lengthy extracts from the original paper, and extensive comments by the editors on the historical situation in which that paper appeared (as well as some explanations on the science if necessary), with some discussion on the rhetoric of the paper.

The first chapters focus on the very first English and French periodicals, and through the representations and explanations of large chunks of influential as well as more typical papers they manage to comment on some of the history of how the genre of “scientific paper” developed. They

then survey the later development of scientific journals outside England and France through the example of early German and American scientific literature, as well as the development of journals specialised in their disciplines.

The next chapters focus on analysing some selected classical and contemporary papers on their use of three non-textual elements of scientific papers such as equations and tables, and on the organisation of scientific papers, by focusing on the beginnings, middles and ends of selected mostly contemporary papers. They also examine the stylistic norms that have developed in the genre and then proceed with examples where those norms have been broken and where they have been involved in scientific controversies. The last chapter finally presents some of the “modern classics”, arranged by the type of scientific advance they represented.

Harmon and Gross describe how the idea for this book developed from an exhibition, and that origin is still somewhat evident in the feel of the book. An exhibition can’t dump a lot of explanatory text alongside the exhibits, so neither does the book have too much accompanying text – most of the space between the original article extracts is taken up with explanations of historical background and of the science involved. Because the excerpts and the accompanying explanations and analysis could both get quite lengthy, it was sometimes hard to keep track of whether I was reading the original, or the commentary.

I felt that the way the book ended by looking at selected modern classics, but without any review of the strands explored in the previous chapters, was a bit abrupt and left me wondering what the aim of the book was. Also, just as the book as a whole had no concluding section, so did none of the individual chapters, which all ended abruptly with whatever paper they happened to analyse last. This gave an undeserved impression that there is not much structure to the book, but more than that, made it actually quite hard to read at times.

I would have loved to see more explanations on the rhetoric of the scientific literature, which although it is there, is drowned out by the quite necessary scientific and historic details, and consequently there is no overall development of actual analysis of the surveyed literature. Maybe a concluding or a longer introductory chapter on the issues of the rhetoric of the scientific literature would have brought that element more into focus, especially since it is aimed at a general audience

who will not be familiar with rhetorical analyses of science.

What the book set out to do was to strike the very delicate balance between giving the reader a taste of the scientific literature and providing a commentary on it, and as such the balance they found worked very well for the most part. The innovative hybrid form of this book is reflected by Harmon and Gross not quite calling themselves authors, and not quite editors either: it is “edited with commentaries”. It has to be admitted that what I described as shortcomings of the book with respect to the lack of an accessible introduction to the rhetoric of science do not necessarily reflect the intentions of the authors who did not set out to write a coherent introduction to that topic, and therefore probably the book may even have done its job *too* well, as it whetted my appetite to read more.

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Evan Selinger and Robert P. Crease (eds.), *The Philosophy of Expertise* (New York: Columbia University Press, 2006). 432pp. ISBN 0231136447, \$53.50/£31.50 (hbk).

A book on the philosophy of expertise is overdue. This one collects fifteen previously published essays. It is hard to imagine a single academic reader who would encounter these in the course of normal subdisciplinary work: they represent a wide range of philosophical sub-specialties – epistemology, ethics, phenomenology, moral philosophy, and the philosophy of technology – but also law, varied approaches to the social study of science, and what one might best call humanistic social criticism. Some of the essays are lengthy and exacting – philosophy for philosophers; others are brief programmatic statements, and many lie somewhere between. All are accessible to a non-philosopher. Some are classics – Harry Collins’ and Rob Evans’ 2002 call for a third wave in science studies, Scott Brewer’s careful examination of the grounds lay-persons might have for accepting expert testimony in courts of law (1998), Stephen Turner’s historical-philosophical delineation of the multiple kinds of expertise that citizens confront and their implications for democracy (2001). In other cases, the authors – e.g. Hubert Dreyfus, Paul Feyerabend, Steve Fuller,

Peter Singer, Alvin Goldman, Don Ihde, and Edward Said – are well-known contributors to debates pertaining to aspects of expertise, though the selections presented do not adequately represent the richness of their positions (I cannot, however, suggest any alternatives of reasonable length).

The essays are divided into three sections: The first deals with the problem of trust, the second with the character of embodied expertise, and the third, ‘Contesting Expertise’, with power and expert elitism. The first section is the strongest, if the least convergent; the last, where many of the essays are brief and the authors are better represented elsewhere, is weakest. The essays in the second section are the most convergent, with Dreyfus’s phenomenological approach to expertise drawing most of the attention. It is here that the editors are most intimately involved; they are co-authors of one chapter, while Selinger and John Mix co-author another.

This matter of convergence is important. However welcome a volume on the philosophy of expertise, it remains unclear what should be its central questions – the laundry list the editors give (p. 4) seems both broader than the range of the chapters, and arbitrary. The term “expertise” remains variously understood; the works presented here were not written as contributions to any single well-recognized problem but are the products of erudite scholars in many tents who, for the most part, seem neither to be aware of one another nor to feel an obligation to be so – a complaint Said makes about his own area of literary studies. The editors are hesitant to impose an agenda. The result, however, is that the reader comes away with little sense of any clear-cut debates in a field, and much more with a sense of being as befuddled by the philosophical expositors of expertise as one is by the experts themselves.

Notwithstanding the variety, however, there is a commonality to the approaches taken in most of these chapters, but one that is also problematic. That is, expertise falls within the domain of knowledge. Accordingly, its philosophy is seen as an extension or adaptation of the philosophy of science to embrace odd kinds of knowledge (e.g. parenting, driving, or plumbing), or more orthodox kinds in odd contexts, e.g., serving as a witness in an adversarial legal system. That perspective is appropriate but incomplete, for it neglects the complementary problem of decision-making. That is, the epistemic problems outlined here may not be matched by corresponding problems of making