



**BOOK REVIEW** 

## Jonathan R. Cole, Smoother Pebbles: Essays in the Sociology of Science

New York: Columbia University Press, 2024. Pp. 680. ISBN 978-0-231-21261-8. £35.00 (paperback).

Jaspreet Crowson 📵



University College London

Jonathan R. Cole, an American sociologist and leading figure from the Columbia Program of sociology of science, primarily focuses on two key threads in this book: the development of core questions in the sociology of science and how the processes in an institutionalized science affect science itself. Developing both theory and empirical studies in the sociology of science, his book is predominantly made up of a collection of essays that he has authored or co-authored that confront central questions in the sociology of science. Several key themes run through the book. These include questioning how scientists are rewarded for their work; whether the rewards are as a result of their academic merits or other factors affect the reward system in science; whether processes in science such as funding and peer review are fair; why opportunities for women in science have been limited; and how science has been impacted by questions of academic freedom in universities. In all these themes is a strong sense of understanding how the sociology of science has contributed to understanding scientific processes and their role in constructing knowledge, as well as a thorough investigation of processes that make up science in academia and an evaluation of how fair these processes are.

The book is divided into four parts. The first focuses on values and rewards in science and uses empirical data to question underlying assumptions about the rewards systems in science. For instance, Cole questions whether citation counts are an indicator of the quality of the research and what the implications of the admissions processes of elite universities are on the overall outcomes of the university. The second part focuses on freedom in science, questioning who has freedom and who is excluded from science by exploring the exclusion of women. Here Cole interrogates performance metrics (on which he notes men typically outperform women) and considers what such metrics do measure, and crucially what they miss, in order to highlight how women are overlooked and discriminated against in the processes of recognition in science. The third part examines consensus by investigating the peer review process, questioning how scientific fact, progress and consensus are constructed. Here Cole looks at consensus and dissensus of opinion in science by interrogating processes such as peer review to draw attention to a lack of consensus between scientists and how this lack of consensus is resolved, before highlighting that such processes have broader implications for knowledge creation in science as a whole. In the final part of this book, Cole addresses academic freedom by looking at the interplay between academia and politics to consider whether academic freedom truly exists in the modern university. Through his various essays in this section, Cole argues that academic freedom has been diminished as a result of political pressures and that this has broader

© The Author(s), 2024. Published by Cambridge University Press on behalf of British Society for the History of Science

implications for people's values, ethics and behaviour. In each of these sections, Cole addresses pivotal questions in the sociology of science centred around fairness, equality and values in scientific processes in order to problematize the hidden, subjective and political processes that underpin science.

The strengths of this book include the empirical rigour of Cole's case studies and the theoretical depth he manages to draw out in his analysis of his case studies. Cole's case studies are explained in great detail, and he has used them to interrogate the social mechanisms that feed into institutionalized science. His commentary and analysis keep his work relevant even though some dates back to the 1960s as he uses his case studies to look at these broader processes and problematize them. Another key strength of this book is that Cole asks questions that are fundamental to the sociology of science, writing about them in a clear and engaging manner.

Some limitations of Cole's book include the diversity of work that it covers and the lack of commentary on it. The format will suit someone who wants to read Cole's work, but Cole could have diversified some of the elements of his book, for instance by commenting on broader themes in the sociology of science or by drawing on literature by other academics. However, I appreciate that this may be outside the scope of the project that this book has set out to achieve. Additionally, Cole could have commented on broader themes throughout the sections with commentary or reflection chapters, which would have enhanced the reading experience. This would have allowed him to comment on the strengths and weaknesses of his research throughout the thematic segments and to comment on what future research in each of his research areas could look like.

Overall, I would recommend this book to people interested in understanding core questions in the sociology of science, as it balances a good overview of key questions with empirical rigour and depth of analysis. Cole's exploration of scientific communities, how processes such as peer review and funding structures shape knowledge, and the interplay between science and society allow for an interesting read that provokes the reader to think about fairness in science.