
The period covered by these nine essays corresponds roughly to the core and most expansive phase of the industrial revolution in Britain. The majority of previous studies of science in its context have emphasized economic factors in seeking to account for the importance of science in those years. But for all the insights that economic historians have generated, they have, as Inkster points out in his introductory essay, failed to forge direct causal links between science and the economy—
a failure unsurprising in view of the continuing uncertainty about the origins of the industrial revolution itself.

In place of the economic approach, Inkster argues that a social history of British scientific culture and institutions is more appropriate. Mechanics' Institutes, for example, 'may be seen as associational offshoots of a radical urban scientific culture or as a focus for cultural domination of one maturing class over another.' Part of this approach involves in turn the abandonment of wide generalizations, and the concentration instead upon particular contexts in which ideas serve particular social purposes. Patronage, career interests, local scientific societies, social mobility and similar issues come to the fore. The examination of specific provincial contexts raises questions about the relations of provincial to metropolitan science, at least in its social and cultural context.

Accordingly, there are three essays, by MacLeod, Hays and Weindling, on facets of metropolitan science. Next comes an essay by Shapin on Edinburgh and the diffusion of science in the 1830s, in which that city's double role as a 'provincial metropolis' is explored. Then come three studies, by Neve, Orange and Morrell respectively, of science in Bristol, Newcastle and the West Riding of Yorkshire. The last essay, by Durey, examines the relationship between 'medical elites, the general practitioner and patient power in Britain during the cholera epidemic of 1831-2'—an interesting final chapter whose justification in this volume is presumably the relative neglect in the other contributions of the medical profession.

I have difficulties with the volume overall, and with the 'strong' social approach to the history of science in general. There are provocative theses, useful insights and nuggets of real value in all these essays; but much of what Inkster has to say in his introduction is true of any group in society, which raises questions about the value of this approach to the history of science—what does it tell us about the science? Alternatively, if one accepts this approach, then what justification can there be for the history of science as a distinct discipline? Only in Durey's chapter is there any demonstrated connection between the actual content of a science and social factors, when local financial interests militate against the admission of the existence of cases of cholera, and the vulnerability of the medical profession to social pressures militated against the experimentation necessary for the validation and adoption of new therapies. The history of science needs to be more open to social and cultural issues than it has generally been; but to assume that social explanations suffice is either simplistic and wrong, or eliminates from the field of enquiry most of the interesting questions about the content of science.

The limitations of this approach do not, however, invalidate the insights that it can generate. MacLeod's examination of the reform movement in the Royal Society applies a general political model in place of the familiar one of professionalization, and makes a persuasive case for the interdependence of patronage, accommodation, political reform and changes within the Society.
Weindling and Neve both make the point that scientific institutions can be used conservatively, to defend status, and not merely offensively, by marginal groups out to change their status. Shapin gives a fascinating account of the phrenologist George Combe and his troubles with the Edinburgh Society for Aiding the General Diffusion of Science. Orange explores what may well turn out to be a widespread union between liberal Christianity or rational dissent and the advancement of science. And Morrell presents the ideals and documents the essential failure of the Geological and Polytechnic Society of Yorkshire to realize its utilitarian aims in mid-century.

There have been suggestions that the metaphors of centre and periphery, metropolis and province, can be useful in the study of the development of imperial and colonial science. But this volume does not display any overall interpretation or model whereby such metaphors can be transferred or applied. Indeed, the emphasis upon particular contexts precludes any such generalization. What does emerge is that even where the content of the science is of little interest, the external forms and context of that science may enhance our understanding of its nuturing society—a conclusion familiar to many readers of this journal.

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