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Book Review

Case studies: 100 years behind the scenes at the Science Museum

Science for the Nation: Perspectives on the History of the Science Museum edited by Peter J.T. Morris, Palgrave Macmillan, 2010. 392 pp., Hardback £65.00 ISBN 9780230230095

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Why does London have a museum of 'science', and why does it show what it does? The logic of publicly displaying the material culture of science might appear self-evident today, given the enormous success of the Science Museum, but a century ago the need for such an institution, and the aims and purposes to which it should work, were far from obvious. Taking the centenary of the Museum's foundation as an independent institution as an apposite moment to look back, Peter Morris's collected volume, *Science for the Nation: Perspectives on the History of the Science Museum*, seeks to uncover the Museum's contested past, and in so doing to explain why and how it exists in the form it does today.

Written predominantly by current curators of the Museum, *Science for the Nation* is first and foremost an academic institutional history. The essays are heavily footnoted and well-illustrated, and the volume is indexed, contains 16 colour plates, and is prohibitively expensive. As a contribution to museum studies, the book's principal claim to novelty is its historical approach to the Museum's back-of-house work. In contrast to ethnographic and front-of-house studies which concern themselves with contemporary museum practice, *Science for the Nation* addresses the sociology of curatorship and Museum stewardship from an historical perspective, exploring how knowledge is produced within a national institution and exposing the political and ideological imperatives, and meaning, behind past Museum work.

The book's 13 chapters are split into three broad themes: the chronological history of the Museum; the changing nature of its exhibitions and the development of its collections. By Morris's own admission the book is not a comprehensive narrative history, and the nature of an invited volume dictates that the overall story feels, at times, a little imbalanced. Certain authors have considerable space to address very specific subjects, such as Nicholas Wyatt's chapter on the Science Museum Library, or Thad Parsons' on 'The Science Museum and the Second World War', whereas other authors have tackled much broader areas, such as Scott Anthony's chapter on the Museum from 1950 to 1983. What ties the collection together is the skill and enthusiasm each author shows for the topic they address, and the volume's strength lies in the diversity of subjects tackled and questions raised.

The book opens strongly with Robert Bud's exploration of the politics behind the establishment of the Museum as an independent institution. We should not, Bud suggests, take for granted the advent of a 'science' museum as an inevitable by-product of the late nineteenth-century reforms to the South Kensington Museum that also gave rise to the V&A. The very title 'Science Museum' is a 'brand' that speaks of the 'polemical message' of a small group of South Kensington 'scientific evangelists', led by Norman Lockyer. These men, as part of a wide-ranging struggle for the cultural legitimacy and authority of their discipline, worked tirelessly to impose their very particular vision on the proposed museum, based on a 'new creed of "pure and applied science"'. In contrast to Prince Albert's original vision that the South Kensington site should, like the Great Exhibition of 1851, promote the 'industrial pursuits of all nations', Lockyer and his colleagues remodelled the scientific and technological collections to promote the importance of 'scientific principles'. Technology was necessarily subsumed within this model as a useful end product, rebranded as 'applied science' and displayed without reference to its commercial significance. The central tropes of the Great Exhibition – industry, invention, technology – had, by 1909, been deliberately displaced. In their place was a new creed of collection and display based on the concepts of knowledge, discovery and a set of ideas, laid out in an historical series and embodied by scientific instruments.

This evolutionary model for scientific knowledge relied on a strict order for the collection. Instruments were displayed in series and acquisitions made in terms of 'gaps' in the chain of discovery. Yet visitors may well be struck by how different the modern Science Museum is from this founding creed. One of the Museum's great charms, I have always felt, is the *disorder* of its layout. The Museum's quintessential compilation of historic scientific instruments, the George III collection, adjoins the children's exploratorium, 'Launch Pad'; one of the newest exhibitions, 'Plasticity', shares a room with one of the oldest, on the history of agriculture. It is precisely this disorder that is explained so well by the chronological history that follows Bud's chapter. Tom Scheinfeldt, tackling the Museum's inter-war history, shows that fundamental problems of accommodation and affairs of state interfered with the Museum's ambitious plans from the start. Development of the Museum building was greatly delayed by the First World War, and between 1924 and 1935 it was forced to

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house the Imperial War Museum, a juxtaposition that, Scheinfeldt argues, dramatically altered its direction, motivating it to take up 'the mantle of peace museum'. David Rooney's chapter on the 'Temporality of Space' expands on these themes, asking how much the Museum's galleries are the 'result of explicit plans . . . and how much have they been shaped by external forces?' Through case studies, Rooney persuasively shows the contingency of successive Museum plans, with '[f]unction reforming form, perpetually'.

Politics and the demands of being a national institution have influenced the Museum just as significantly, as Peter Morris's in-depth analysis of the Museum's temporary exhibitions exposes. From elucidating the complex science behind the new medium of television in 1937, to hosting Shell Oil's 'The Story of Oil' in 1947, to supporting the Gas Council's switch to Natural Gas in 1971, the Museum has constantly faced shifting, contingent factors that have resulted in numerous different styles of display, with many different purposes and messages. The picture one gains is of a highly versatile, open-minded museum, both proactive and reactive to the scientific concerns of the day, as well as the internal pressures of space and curatorial demands.

Although *Science for the Nation's* target audience may be relatively limited, the Science Museum deserves credit for publishing a book that contributes to the study of museology, history of collections and the material culture of science. For students of these disciplines, the volume poses numerous questions and presents avenues for further study. For example, Anna Bunney's engaging chapter on the 'Children's Gallery' (opened in 1931) argues that the Museum's efforts to 'segregate' the rising number of child visitors resulted in displays that were 'centred upon contextualisation in the real world' and that, consequently, it was through this gallery that 'realism and history were adopted in Science Museum displays'. How, then, did we get from this model of child-oriented display – in which history and context were used to humanise science and make it more understandable – to the model that superseded it, an 'exploratorium' style of display that is radically *decontextualised*? And what does this tell us about changes in the way museums interpret their responsibility as educators?

On a more general level, many of the chapters in *Science for the Nation* provide insight into, and pose questions about, enduring problems faced by most science collections for most of their history: science versus technology; specialist audiences versus the mass public; past science versus future and history versus science communication. In his thoughtful and reflective chapter on the Museum since 1983, Timothy Boon ends with an appeal for a 'new synthesis' between these often separated strands. This is no doubt an admirable idea, but if there is one thing this book teaches us, it is that the Museum's curators of the future will have to face and overcome numerous unforeseen challenges to achieve this goal.

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Book Review

Putting science into words

Never Pure: Historical Studies of Science as if It Was Produced by People with Bodies, Situated in Time, Space, Culture, and Society, and Struggling for Credibility and Authority by Steven Shapin, The John Hopkins University Press, 2010. 568 pp., Price: $30.00, ISBN 978-0-8018r-r9421-3

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Steven Shapin's latest publication beautifully showcases his methodology in the history of science, both through the essays included and in the explanatory framework in which he places them. The collection pulls together work previously published between 1987 and 2007, with an introduction and section headings which consider the development of the history of science as a discipline and Shapin's own, highly influential, role within that. He brings the same tools to bear on his own work that he usually implements on seventeenth-century England.

In the introductory chapter, Shapin outlines his understanding of what his work has achieved in the history of science. This he describes as 'lowering the tone' – moving the main object of study from hagiography of the great scientific names onto a 'heterogeneous, historically situated, embodied and thoroughly human set of practices' (p. 14). He emphasises people within their social and cultural surroundings, both as objects of study for the history of science, and as practitioners of that study, linking developments in the history of science to twentieth-century changes in the status of scientists. The essays that follow are framed into six sections, which each showcase a new avenue in the history of science, down which he has trodden, and pull together a heterogeneous body of work to highlight connecting intellectual strands.

Part One discusses 'Methods and Maxims', the move to acknowledge the objects of the history of science as neither special nor 'sacred'. Chapters deal with the difference between modern and early-modern understandings of credibility; the question of whether it is 'anti-scientific' to claim that scientific truth is not absolute; and the

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