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MAGGIE MORT, Building the Trident Network: A Study of the Enrollment of People, Knowledge, and Machines. Inside Technology. Cambridge, MA and London: MIT Press, 2002. Pp. x+217. ISBN 0-262-13397-0. £22.50 (hardback).
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This book has more immediate relevance to the British context than its title may suggest. The author analyses the British Trident submarine and missile programme of the 1980s and 1990s as an important example of a socio-technical network and its development. That programme consisted of a construction project, carried out in Barrow-in-Furness at the southern tip of Cumbria, England, to build submarines that would carry Trident nuclear missiles. Although only four such submarines were built, their high cost and political vulnerability required the elaboration of a network of resources over two decades to enable, manage and justify their production.

In 1980 the Thatcher government took the decision to equip British nuclear submarines with the American-designed Trident missile. Vickers Shipbuilding and Engineering Ltd produced the submarines, with the last being completed in 1998. In the process, the Barrow-based firm was reshaped from a general engineering business into one specializing in the core activity of Ministry of Defence contracts. The technical and social choices led to a streamlining of company activities and to a consequent shaping of the workforce. The corresponding network was built up and then weakened over some twenty years, jettisoning both employees and machines in a process that Mort dubs ‘disenrollment’ (p. 11).

Rather than seeking classified information about the design and construction programme, the author’s sources of information include interviews with Barrow workers and content analysis of the local newspaper, which reflected and shaped opinion. While this might suggest a fairly standard approach based on economic history, the author frames the study in analytical terms that draw insights from perspectives of particular relevance to readers of the BJHS.

For example, the author adopts the approach pursued in Donald Mackenzie’s social constructivist study of missile accuracy, Inventing Accuracy (Cambridge, MA and London, 1990).

Mort uses her case study to extend Mackenzie’s claims about weapons systems, arguing that the production of the Trident submarines was by no means a natural and inevitable consequence of developing the missile. She further employs an actor-network approach and insights drawn from the sociology of scientific knowledge to demonstrate that the construction programme was problematic at every level, from the physical to the social–political. Mort also supports the view, developed in David Noble’s studies in the social history of technology, that the development of technologies cannot be understood as a Darwinian process of filtering out the unfit merely according to technicalThe book consequently sits comfortably within recent work in STS, and indeed complements previous studies very well. But Mort’s case study goes further; it makes an important link between STS and labour history, and in the process builds bridges with conventional economic and social history. Moreover, by discussing the disempowerment and disenfranchisement of workers, the author redresses what she identifies as the neglect of science and technology studies of networks

in decline, and the role of actors expelled from the network. The result is an ‘unheroic account’ (p. 22) that moves away from a fixation on the originators of socio-technical networks. The style of the book is lucid and yet dry, wide-ranging and yet detailed. The topics are chosen carefully to illustrate analytical perspectives rather than to recount a rich history. For example, while the Introduction mentions types of submarine and missile, little further description is given to orient the reader. On the other hand, a detailed discussion of design choices is provided in Chapter 3, where the Constant Speed Generator Drive serves as an example of a potentially profitable technology that was sacrificed in favour of the core business. The index is similarly sparse, omitting reference to a number of the names, events and concepts mentioned in passing. As a careful account of the expansion and contraction of a technological system discussed in the fertile context of science and technology studies, this book is well worth reading.

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