Charlotte Sound and Tahiti, a sign of confidence in the work of the first two voyages. With new lands it was a different story and even barren and uninhabited islands such as Kerguelen were subjected to thorough cartographic scrutiny.

The visual record provides extraordinary evidence of the tenacity and endurance of the surveyors. On the coast that was the primary object of their voyage the navigators encountered every obstacle. The Russian charts of Müller and Stāhlin were as fanciful and deceptive as the mythical accounts of the Greek pilot De Fuca and the inaccurate ones of the Spaniard De Fonte. The weather on the northwest coast of America alternated with mists and storms impeding accurate sightings and astronomical observations. Reefs and tidal movements threatened the ships and their boats. In spite of this the charts and views provide a remarkable record with few glaring errors. Determining the longitude of Nootka Sound offers an example of the persistence of Cook and his colleagues. Poor weather meant observations of lunar distances were difficult. However, by taking around 600 observations and averaging the results, they were able to achieve a longitude very close to modern values.

The charts and views reveal subtle changes in style from those of the previous voyages. There are more coastal views than on the first and second voyages and the relief is more detailed. They are often more decorative or 'artistic'. The volume also shows the emergence of new chart-making talent. Few of the charts are actually by Cook himself: they are mostly in the form of the larger consolidations. The new draughtsmen were Henry Roberts, Edward Riou, Thomas Edgar, George Vancouver and William Bligh. Above all, it is the last who emerged from this voyage as the most distinguished of Cook's disciples. An unknown warrant officer when he joined the *Resolution*, he produced many of the large-scale charts which provided the basis for copies by his fellows. Tragically, many of his original manuscript charts were left on the *Bounty* after the mutiny and were presumably burned with her. However the record which remains, with so much in this superbly edited and definitive work, provides a remarkable testimony to a generation of eighteenth-century discoverers.

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Science in the Service of Empire: Joseph Banks, the British State and the Uses of Science in the Age of Revolution. By John Gascoigne. Cambridge University Press, Melbourne, 1998. 247 pp. Aus. price: \$49.95. ISBN 0-521-55069-6.

SIR JOSEPH BANKS, botanical explorer, autocratic President of the Royal Society, friend of the King, de facto science advisor to the British government, and 'Father and Founder of the Australian Colonies', appears in this volume as, first of all, an improving landowner. Banks' colonial policies are explained as improving agriculture and the landed interest writ large on the imperial stage; his effectiveness in linking science and government is placed in the context of an oligarchical government by landowners.

Public service was the duty of a landed gentleman but, rather than the usual parliamentary service of his class, Banks chose to devote himself to 'the Scientific Service of the Public' (p.22). Perhaps, John Gascoigne suggests, if Banks had not become President of the Royal Society he would have been tempted by the rewards of parliamentary office, but from 1778 the presidency of the Royal Society gave him social status, and his distance from party politics meant that his advice could be seen

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as independent. Gascoigne emphasizes the inadequacy of the formal structures of late eighteenth-century British government to meet its expanding responsibilities. Through informal channels of advice and consultation Banks filled many gaps in the areas of scientific and colonial policy and administration. Not until 1797, when Banks was made a Privy Councillor and appointed to the Privy Council Committee for Trade and Plantations, did he have any formal position in the system of government.

With great subtlety Gascoigne shows how the networks of the landowning oligarchy functioned. A dense network created from personal friendships, client-patron relationships, mutual interest in sheep-breeding and agricultural improvement, and joint activity in 'informal' institutions of government linked Banks to powerful men in government office. Lords of the Admiralty, members of the Privy Council Committee for Trade (which dealt with many colonial issues) and powerful members of the Board of Control (that is, control of the East India Company) were his associates. These men shared Banks' neomercantilist understanding of the relationship between trade and imperial power; consulted him on scientific matters; and were conduits by which proposals from Banks reached the councils of government.

Gascoigne shows how private institutions — including the Royal Society, the Royal Institution and the Society of Arts in scientific affairs, the African Society and the London Missionary Society in colonial affairs — were 'informal' institutions of the English state, filling the gaps in the formal bureaucracy. The same interests were represented, the same landed oligarchy was in control. Banks' old Eton school friend, Charles Jenkinson, Lord Hawkesbury, the first Earl of Liverpool, President of the Committee for Trade, became a vice-president of the Society of Arts in 1791. Banks himself persuaded Earl Spencer, first Lord of the Admiralty, fellow sheep-breeder and trustee of the British Museum, to serve as a proprietor of the Royal Institution at its founding in 1799, and tried to ensure that the Admiralty was always represented on the Council of the Royal Society. Through his personal networks and positions in formal and informal institutions of government, Banks linked improvement at home and abroad with scientific advice. For example, in 1801 he called on the resources of the Royal Institution to test Indian plants (received through contacts at the East India Company) that might be useful to the British tanning industry (which Banks was investigating as a member of the Committee for Trade).

Imperial botany was an extension of agricultural improvement at home. Banks, and his fellow neomercantilists, believed that colonies could be made productive by the same approaches to agricultural improvement that had enriched British landowners. On the national scene, Banks believed that the nation should be self-sufficient in food. He opposed free trade and argued that commercial policy should be subject to strategic interests. However, Banks was first of all a landowner, and although he wanted to restrict trade in corn, he was a lobbyist for free trade in wool — in the interests of landowning wool-producers — when local prices for heavy wools fell in the 1780s. On the international scene, Banks' colonial activity was driven by a policy of imperial self-sufficiency and naval strength: colonies which could produce raw materials not produced at home were desired. Thus Banks proposed the transfer of New Zealand hemp to New South Wales in the 1780s.

Many other themes developed in *Science in the Service of Empire* will also enrich the understanding of historians of empire, historians of government, and historians of science. Like Banks' networks, Gascoigne's argument is richly interconnected. This volume, which focuses on the political and government context of Banks' enterprises, overlaps with the companion volume, *Joseph Banks and the English Enlightenment: Useful Knowledge and Polite Culture*, Cambridge, 1994, which placed Banks in a cultural and intellectual context. The programme of agricultural improvement, both at home and in the colonies, is covered more fully in the earlier volume. Both volumes are beautifully produced with many illustrations. For the uninitiated, the multiple,

changing names of titled gentlemen, along with their numerous government positions, create confusions. Within the limits of literary prose Gascoigne indicates that Jenkinson, Secretary at War in 1780, who became Lord Hawkesbury and President of the Committee for Trade, is the same person as Lord Liverpool at the Committee for Trade in 1800. Perhaps more complex indexing or appendices listing names and positions would help but no easy solution has occurred to me. There are few errors but one which may confuse is the date at the top of p.124 where 1788 should be 1778.

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Quicksands: Foundational Histories in Australia and Aotearoa New Zealand. Edited by Klaus Neumann, Nicholas Thomas and Hilary Ericksen. University of New South Wales Press, Sydney, 1999. 281 pp. Aus. price: \$29.95. ISBN 0-86840-633-3.

APPROACHING the end of this century, few certainties remain within the discipline of history. The sure-footed confidence that prevailed in New Zealand and Australian historical writing well into the 1970s, sometimes beyond, seems now to be unremittingly eroded by doubt and indeterminacy. This aptly titled collection of essays is at once a sign, product of, and contribution to that process of destabilization, whereby the firm paths of the past are shown to be nowhere near as formidable as previously imagined. In both New Zealand and Australia, the editors contend, public anxiety over national identity has intensified recently in the face of the 'settler predicament': 'unsettlement brought about by settlement'. *Quicksands*, they emphasize, seeks neither to present nor *re*-present narratives of the nation but to venture along an entirely different course altogether — the book 'explores and questions fundamental narratives in both countries, and in doing so imagines alternative histories for the beginning of the new century'. To this end, the collection presents 12 essays, many of which are strongly interdisciplinary, from outstanding scholars including Deborah Bird Rose. Paul Carter, Judith Binney and Tim Rowse.

'Memories of Pasts to Come', the first of four parts of the book, is concerned principally with conceptions of time and the construction of narratives. Deborah Bird Rose, in a splendid opening chapter, observes the palindromic structure of the colonizer's time where the frontier — year zero — stands as the moment of disjunction between 'timeless land and historicised land'. Such a construction of time, she contends, inevitably portends the attainment of finality and closure not in the present but in the future, and in so doing effectively denies the possibility of resolution. A fundamental re-conceptualization is needed, Rose argues, 'expanding the present from a way station on the road to the future to the real domain of moral action'. Rose's concern with temporality is also evident in Paul Carter's essay, which reflects upon his participation in the design of a 'site narrative' for the Museum of Sydney, *Mythologies, Almanacs, Portents.* Carter describes the adventurous process of conceptualizing the chronology, of proffering new, impish, unexpected configurations of time and destabilizing assumptions through 'an act of reanimation'.

Other contributions in the book identify different bases for re-imagining foundational histories. Three essays, by Jonathan Lamb, Paul McHugh, and Julian Thomas, are unified in their concern to investigate settler baggage and its influence. Lamb addresses ideas of utopianism in New Zealand, arguing persuasively that utopian or millenarian attitudes to the land have proved to be strongest under conditions of