

Book Review Section

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Macleay Museum, University of Sydney,
Reading Heads & Ruling Passions—an exhibition on phrenology, March to November, 1995.

Scholarly offerings on the history of phrenology fall far short of the frequency with which this topic receives mention in the history of psychology literature and numerous related contexts. The published output of nineteenth century phrenologists is decidedly vast, and the 'Exhibition on Phrenology' last year at the University of Sydney's Macleay Museum drew extensively upon this. Virtually nothing has yet been published on phrenology in Australia, where the practice flourished until the mid-twentieth century, and the exhibition illustrated this long-term survival with a range of fascinating documents and artefacts.

R. M. Young in his *Mind, Brain and Adaptation in the Nineteenth Century* (OUP, 1970) provided a masterly analysis of the direct ties between Gall and the foundation of modern psychology, and was succeeded by some further investigation of phrenology in Britain. Kuhnian influence was slower to make itself felt in the social than in the physical sciences, and it was not until 1984 that Roger Cooter (*The Cultural Meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth-century Britain*, CUP) tried to account for the success of phrenological ideas across a broad spectrum of Victorian society. A detailed examination of the content of the writings of the myriad of minor figures who contributed to the very extensive phrenological literature of the nineteenth century has yet to be made. *Reading Heads & Ruling Passions* gave a good idea of the potential scope of such an investigation.

The Macleay Museum is noted for its enterprising and varied occasional displays, and that tradition was worthily maintained

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here. Although by the nature of the Museum's foundation anthropological themes have been well represented in standing and short-term displays, psychological ones have not been taken up since 1980, when a psycho-acoustics section was included in an exhibition mounted in conjunction with the Tenth International Congress on Acoustics. Like *Hear Here, Ruling Heads & Ruling Passions* grew from an interaction between members of the museum and the academic staff. In 1993 Michael Shortland of the Unit for the History and Philosophy of Science persuaded the university's Fisher Library to purchase for its Rare Books section a collection of a hundred and one items of nineteenth-century phrenological literature being advertised by a London dealer. In 1994 a half dozen or so of his second-year students were inspired to base their research projects around Fisher's thus augmented holdings on phrenology and to explore, as well, the situation of phrenology in Australia. On the Museum staff, Julian Holland realised the possibility of drawing together the sets of library materials and those uncovered by the students and created an exhibition examining the European and British origins of phrenology and its expansion to North America and Australia.

Arranged down the centre of the Macleay's gallery in three of its new and several of its old showcases and on the backs of old wooden cabinets, the exhibits ranged from a wonderful set of early books, phrenological busts, death masks and craniometric calipers, to practitioners' charts and head readings of numerous individuals. A number of libraries besides Fisher—the Justice and Police Museum, the University's Psychology Museum and several private individuals—made loans. The stage was set by a large reproduction of a Henry Aiken cartoon, *Calves' Heads and Brains; or a Phrenological Lecture* (1826), wherein the lecturer is depicted against a background of caricatures of Abstraction, Suspicion and Prying, and of 'phrenological hats' adapted to every conceivable cranial protuberance. The first section of the display conveyed the usual basic information about Gall's organology, Spurzheim's phrenology, and the Scottish notary George Combe's popularizing of the latter's work. (The energetic endeavours of George's medical brother, Andrew, oddly were overlooked.) The focal points here were excerpts from contemporary pamphlets and periodicals, and original copies of works by Spurzheim and Combe. The attitudes of lesser supporters and critics of the system were



Robert White, an early 20th-century phrenologist in New South Wales—photograph courtesy James White.

illustrated by a selection of their books and pamphlets, while a case each was devoted to later nineteenth- and twentieth-century phrenological books and journals. The American cases showed the importation of phrenological ideas to the United States, and their subsequent modifications. This section paid especial attention to the popular dissemination of phrenological teachings in that country, featuring writings by Lorenzo and Orson Fowler on themes of matrimonial and sexual guidance. Varieties of scepticism were represented by Thomas Sewell, Professor of Anatomy and Physiology at Washington's Columbian College, commenting on the faulty scientific evidence, and by the writer Mark Twain who, on the basis of inconsistent character readings of himself delivered on two separate visits to one of the Fowler brothers, concluded not just that the practitioner was a charlatan but that the whole system was fraudulent.

The Australian section was the most varied of the three, a consequence perhaps of the local accessibility of the material, the enthusiasm of the student researchers, and the longevity of phrenology in this country. Most readers probably know that transported criminals held a special interest for phrenologists—their skulls were quite readily made available for post-mortem examination, many being in fact transported back to Britain for that purpose—and early Australians were concerned as to whether the type of person being sent to make up the new society had enduring undesirable mental characteristics. But does the general reader know that there was a call in Australia (in the event unproductive) as early as 1825, to found a local phrenological society? (A detailed prospectus was reproduced in the display.) Or that death masks were made of notorious bushrangers such as Captain Moonlite and Thomas Rogan (hanged in 1880), to preserve phrenological evidence of their criminal natures? Or that a flourishing vocational guidance and personnel advisory service was run in Sydney in the 1930s and 1940s by a practising phrenologist, Haigwood Masters? Masters' Character Analysis Chart was on display, as well as his splendid Art Deco bust from the early 'forties. Made of plaster covered with tarnished gilt, this delineated several areas unknown to Spurzheim: Engrossment (located in the dip above the chin), Human Interest, Active Loyalty and Dominance (three divisions at the front of the nose), Taste for Food, Taste for Liquids and others. Masters was not alone at the time—ten or so individual

protocols by other practitioners were included. Investigation is certainly suggested as to how phrenology could have continued to flourish at this time in Sydney, which was certainly, until at least the late 'forties, the heartland of modern psychology in Australia. Sydney saw the foundation of the first academic department of psychology (at the University of Sydney in 1921) and of the first scholarly and professional bodies (the Australasian Association of Psychology and Philosophy in 1923, and the Australian Oversea Branch of the British Psychological Society in 1944). Most curiously, it also saw the foundation in 1927 of the particularly vigorous Australian Institute of Industrial Psychology, under the sponsorship of the Chamber of Manufactures of New South Wales. Like Masters, the Institute devoted its major energies to vocational guidance and personnel selection for individuals and private enterprise, but unlike him constructing its own test battery on guidelines whose rationale certainly had nothing to do with contours of the skull.

The tone sustained throughout the display was one of gentle amusement, though the seriousness with which contemporaries advocated phrenological doctrine was by no means downplayed. No statement was made attempting to resolve such incongruity; the exhibition's particular strength lay in the scope of the locally available materials it revealed. Perhaps surprisingly, in view of the Macleay milieu, neither was there any analysis of the relationship between anthropometry, craniometry and phrenology, and between all of these and intelligence testing; all four movements overlapped in early twentieth century Australia. Stephen Jay Gould's *The Mismeasure of Man* (1981) did not exert its usual potent influence here.

The exhibition attracted more than the usual share of university attention. Julian Holland is to be congratulated for the painstaking care taken in locating and displaying the exhibits. The documentation of sources and captioning of items were informative and lively. In terms of what was to hand, Holland was certainly fortunate, but judgment must have played a part, and the final result showed a nice balance between the literary and the artefactual. As an exhibition, *Reading Heads & Ruling Passions* was undoubtedly a great success. As an exercise in the history of science, its contribution in drawing attention to the capacity of phrenology to maintain an Australian presence and regard until the middle of this century is noteworthy; in the world of collections, it

effectively highlighted the impressiveness of the Fisher Library's holdings in phrenology. It is doubtful whether one can ask much more of a single, small and low-budget museum exercise than this.

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Jan Todd, *Colonial Technology: Science and the Transfer of Innovation to Australia*. Cambridge: Cambridge University Press, 1995. xii + 300 pp., illus., \$49.95.

Jan Todd hopes that her book will appeal to two types of reader—the one seeking a good story about Australia's history and the other looking for wider lessons on science and technology. Like the case studies she presents, however, real life is so much more complicated than the models we try to force upon it, and any reader of the book is likely to be charmed by the personal tales, inspired by the nationalism, informed by her sources, and challenged by the questions she raises.

Australia's nineteenth-century dependency is dissected by Dr Todd under three headings—economic, scientific and technological—which have more kin with Inkster's studies of psychological dependence and sense of national identity than with the temporal models of Basalla or MacLeod. They are examined in the opening chapters of the book, and raised again for reflection following the bulk of the text, which comprises two case studies—inoculation of sheep against anthrax, using the vaccines of the Pasteur Institute and those of local scientific entrepreneurs, and the extraction of gold from its ores by means of dilute cyanide solutions.

Although the case studies are presented in detail, much is consigned to forty pages of notes and references that are easily accessible because of the publisher's thoughtfulness in keying the notes to page numbers of the main text. This frees the reader to enjoy some fine prose, which includes pertinent quotations from trade journals and legal documents, and subtle irony. Thus, following comment on professional acceptance of the equivalence of the economic problem and the chemical solution (no pun intended, but it *was* cyanide), she observes that 'to uneducated miners . . . the connection would not only be "uncanny", they would be lucky to even hear of it'.

It wasn't only the miners who were uneducated, in the broad sense, since Todd makes

it clear that the uneven protection achieved by Pasteur two-dose vaccines was in part due to the Institute's insistence on preparing them in Sydney, from where they were sent up-country. Summer temperatures in Australia weakened the vaccine in ways the cooler northern hemisphere summers never had, and better results were achieved by a local group operating from Narrandera, near the southern end of the anthrax belt. The Australians, John McGarvie Smith and John Alexander Gunn, went on to make further innovations, including the development of a single-dose, spore-based vaccine with which they led the world for a decade.

In the case of cyanide extraction of gold, science and technology were intertwined with government desire to promote industries and with intellectual property battles that were international in scope but which, because of separate colonial jurisdictions, were fought out in several southern hemisphere venues. The first Australian cyaniding works was built at Ravenswood, between Charters Towers and Townsville, in the late 1880s. The personal nature of technology transfer was emphasised by the fact that, before the operators arrived, the necessary chemistry had been explained to Ravenswood folk by a visitor from the Ballarat School of Mines and a local MP who had research experience gained at the Royal School of Mines in London. The Glasgow principals had dispatched Peter and Duncan McIntyre to establish and manage their Ravenswood plant as a demonstration centre for treatment of sulphidic ores. Some authenticating detail provided by Todd shows the difficulties that visitors could experience in visiting such a centre, for while a miner from Charters Towers could make the round trip in less than 48 hours, George Swan Fowler, a partner in the cyanide syndicate, took nine days to travel from his office in Adelaide but 'still beat the post which took eleven days'.

Although the technologies were of overseas origin, their elaboration and further development in Australia allows Todd to title her final section 'discarding certain dependency argument myths' and force home the point that 'far from being passive victims of British manipulation and exploitation, local producers were prepared to engage in intense struggles for control of the technology they imported'; and to win.

The involvement of scientific institutions with industrial technology was weak, but government science played an important role—in the cases presented, through

agriculture and mining departments, respectively. Colonial science and informal networks provided what Todd terms an 'intellectual bridge' over the void that separated science and industry, a phrase that is also interpreted as meaning that scientists provided a bridge to the 'intellectual, methodological and cultural traditions from which they originated', even as they struggled to stay in touch themselves. Instances of privately-funded development stood alongside corporate development laboratories, schools of mines and mechanics institutes, and branches of government. Most of the few university chemists and veterinarians, at least, became involved as consultants to industry and were able to incorporate relevant material into local curricula.

The writing about Australian science of the nineteenth century, and the attempts to test against it the models of intellectual diffusion and dependency, have been based on case studies of observational sciences such as astronomy, meteorology, and field botany and zoology. With the exception of geology, however, the scientific disciplines which drew on and were drawn upon by technology had more to do with chemistry, metallurgy, and microbiology (as we would now term it), for which new intellectual models need to be derived.

This, then, is an important book by an author who followed her BSc with a doctorate in economic history and now works as a professional historian. Parts of the work, which grew out of her thesis, have appeared in *Prometheus* and *Annals of Science*, but presented in full it makes a nicely integrated study. The author's diligence in working from original sources will alert other historians to their existence, and her analyses of anthrax and cyanide will provide models for historians wishing to explore other regions of the science-technology boundary.

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William Eisler, *The Furthest Shore: Images of Terra Australis from the Middle Ages to Captain Cook*. Cambridge: Cambridge University Press, 1995. xii + 180pp., illus., \$49.95.

There is an enduring interest in the theoretical conceptions that Europeans entertained from Classical times of the supposed Terra Australis, in their attempts in

Early Modern times to discover it, and in the yearnings by which they invested this imaginary entity with meanings which any physical actuality could never have validated.

From our vantage point, we may with some justification wonder how it was that sensible, learned people were able to maintain belief in something for which there was ever only flimsy, dubious justification; for example, even after Cook on his first voyage had practically abolished the mythic continent from the southern Pacific Ocean, Alexander Dalrymple, the most knowledgeable cartographer of his age, continued to argue for its discovery.

Still, out of dreaming came authentic discovery. Anyone who compares Mercator's 1569 and Ortelius' 1570 world maps with Henry Roberts' 1784 chart of the world after Cook's voyages will recognise that the mind has moved from a pre-modern to an essentially modern conception where geography is concerned. And increasingly in this century, scholars have linked this manifestation of that massive transformation in Europe's world view with others: with the role of the emergent Royal Society of London in persuading travellers and explorers to observe natural phenomena and human cultures in detail and to report their observations in plain, precise language; with the growth of scientific navigation, which culminated (during Cook's second voyage) in the use of the chronometer to determine longitude accurately; with the development of visual recording as an important aid to scientific description; and with, on the one hand, the growth of an understanding that the natural and human worlds form wholes that cannot be comprehended entirely from the sum of parts, and on the other, the emergence of the modern scientific disciplines, beginning with Linnaeus' influence on botany, then followed by zoology, chemistry, geology, mineralogy and ethnography.

In *The Furthest Shore*, William Eisler pursues three not altogether compatible objectives. The first is the delineation of 'the iconography of the southern world . . . from the Middle Ages to the first voyage of Captain James Cook (1768-71)'. The second is the provision of a comprehensive overview of the interconnection between exploration, scientific investigation and visual recording in these centuries. The third is intended to arise from the achievement of the first and the second, and is to dispute Bernard Smith's argument (in *European Vision and the South Pacific, 1768-1850*) that a

distinctive conjunction between science, exploration and art emerged in the second half of the eighteenth century and gave rise to a particular genre of landscape depiction (the 'typical') that marked the representation of things Australian in the first half of the nineteenth century.

In my view, Eisler's elaboration of each of these purposes is deeply flawed. Drawing on the iconographic representations of cultures, animals and plants on the Dieppe maps, on Quirós' description of the Southern Continent in his famous memorials on the first Dutch descriptions of New Holland, and on the (truncated) records of Tasman's 1642 voyage, he argues that Terra Australis was from the middle of the sixteenth century the repository of both those types of primitivism—'hard' and 'soft', or hellish and paradisaical—that Smith identified in the records of the explorations of the second half of the eighteenth century (e.g. the Patagonians or Aborigines as against the Tahitians). New Holland, Eisler maintains, was a desolate place inhabited by barbarians. New Zealand and the Maori were of the same sort.

The Terra Australis of Quirós' description, however, was a green and pleasant place, melodious with birds and replete with foods. And at Tonga, its seventeenth-century diminutive according to Eisler, the Dutch found a peaceful people who welcomed strangers, feeding them with 'Sweet milk and cream . . . fresh fish, all sorts of fruits which may be obtained there in quantity'. All this being so, there is nothing in the iconography of Terra Australis (or, more generally, the lands of the southern hemisphere) from c.1500 to c.1800, Eisler claims, to justify our drawing a fundamental distinction between early and late representations, on the basis of a supposed qualitatively different reporting by the great eighteenth-century expeditions. Rather, from at least one hundred and fifty years earlier, 'the image of the extensive, vaguely defined region designated as "Terra Australis/Southland" [developed] along the lines of a bipolarity: bountiful and welcoming at one extreme, bleak and savage at the other'.

There are two distinct problems with this formulation. First, long ago (in *The Exploration of the Pacific*) J.C. Beaglehole offered an important insight when he argued that 'the mind of Quirós, at the beginning of the seventeenth century, moved in a different and an older world from that of his disillusioned masters. The modern age was being born—an age, in discovery, of solidity, without the wild recklessness, the

cultivation of forlorn hopes, which had made Spain great'. To the possibility of such a division, Eisler attends only very briefly.

Next, there are the related problems of whether such images were generally accessible, and of how, if they were, they were transmitted in culture. Eisler asserts that Quirós' 'vision of the southern world would inspire generations of European writers and explorers'. It is true that Quirós' eighth memorial was published in many of the vernacular European languages. However, it is difficult to identify it as having been influential in the formulation of such subsequent utopian musings set in the unknown southern hemisphere as those of Denis Vairasse (1675) and Gabriel de Foigny (1676)—which in turn had very little if anything to do with Wallis', Cook's and Banks' descriptions of Tahiti as conveyed by Hawkesworth, or with Bougainville's.

As part of his argument, Eisler claims that Le Maire's and Tasman's descriptions of the Tongan islands originated in Quirós' 'utopian vision of Terra Australis'. But he offers no explicit evidence of such a cultural transmission.

Eisler's second hypothesis is that art was brought to the service of scientific observation well before the mid-eighteenth century:

. . . the association of art, science, exploration, and the 'typical' landscape . . . had made their appearance at a much earlier date. They were products of the Renaissance, not the Enlightenment. . . The efforts of artists and scientists to describe and depict hitherto unknown species and human types were undertaken on a global scale well before the time of Cook.

To an extent Eisler makes this point successfully (even if one might dispute that Europeans were capable or in the habit of conceiving of the world globally before at least the middle of the eighteenth century). Even then, to do so he has to cite manifestations that were only tangentially relevant, if at all, to the history of Terra Australis in the European imagination; for example, the sixteenth-century work of Francisco Hernández, who produced fifteen volumes of descriptions and illustrations of the fauna and flora of Mexico; John White's drawings deriving from the Roanoke venture; the recording activities of Johan Maurits in Brazil; the collecting activities of Nicolaas Witsen, the strikingly versatile director of the Dutch East India Company.

Eisler's account of these people's activities *does* contribute to our understanding of the origin and progress of European scientific collection and description. But whether they are enough to justify his claim that there was a fundamental continuity from the sixteenth into the eighteenth centuries is another matter. On this point, too, Eisler fails to address the problems of cultural awareness and transmission. The Dieppe maps, with their ethnographic, zoological and botanical illustrations, were locked away in libraries and private collections for hundreds of years. Hernández' volumes were lost in the Escorial blaze in 1671. Only a privileged few saw Maurits' collections and the work of his artists. Only a truncated version of Tasman's journal of his first voyage was published, decades later; and only a map offers a substantial record of his second voyage. Also, as Eisler himself concedes, 'in the second half of the seventeenth century the image of the Southland in the Netherlands was to a great extent housed within the private collection of one man [Witsen]. Witsen's collections were dispersed after his death, and the drawings of the western Australian coastline which he commissioned 'lost' until 1970. Significantly, Eisler ignores Witsen's well-known comment to a friend that 'You asked for information about Asia; but no, our people there are not interested in science, only in money'.

At times Eisler tries to put a pontoon bridge over such cultural straits, as when he says that 'it is intriguing to speculate as to the possibility of exchanges between Nicolaas Witsen and Dampier's circle concerning the Southland', only to have to continue lamely, 'Whether Dampier himself was aware of Witsen's publications is perhaps questionable, as no English translation of Witsen's works exists. Certainly, Witsen would have been capable of reading the accounts of Dampier's voyages, which undoubtedly would have interested him'.

Eisler also points out that Linnaeus made use of Dutch natural history collections when framing his binominal system of classification. However, we may still wonder whether the emergence of this system did not provide an essential tool, allowing scientists to begin properly to come to terms with the intricacy and diversity of the world; and whether, therefore, it constitutes a Great Divide between the eighteenth and earlier centuries.

Given that Eisler does not succeed in the execution of his first and second purposes, he

must fail with that of his third. Fundamentally, he wishes to gainsay Bernard Smith's view that 'the "floating laboratories" of the eighteenth century brought about a new image of nature and man, whereas the interiors of the continents remained unknown', and that 'the hypothesis that the scientific illustrations created on Cook's voyages brought about a new emphasis on naturalism in the visual arts'. The problem with this argument is, on the one hand, that so much of the evidence Eisler wishes to adduce in its support was either lost or formed no public tradition; while, on the other, there is superabundant evidence that, with their results very widely publicized, the great voyages of exploration of the second half of the eighteenth century *did* give rise to new insights into nature and human society and *did* influence artistic practice.

Despite some valuable new details, then, and for all its handsome illustrations, this is a disappointing study, one faulty in its hypotheses, thin in its analysis, and with some important premises left unexamined.

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John Dargavel, *Fashioning Australia's Forests*. Melbourne: Oxford University Press, 1995. xvi + 312 pp., illus., \$39.95 pb.

Studies of environmental political issues often focus on either the protest movement or the elected political leaders, but seldom on their advisers. Bureaucratic activities and responses are an important component of any history of conservation, especially a history of forests and forestry. Historians have generally been slow to take up the challenge of writing about bureaucracies, as Hugh Stretton pointed out in his review of Ken Inglis' history of the Australian Broadcasting Commission. Stretton challenged researchers to follow the lead given by Inglis to move away from 'structural guesses' in writing about bureaucracies and towards detailed study of the subject. Historical geographers have provided some leadership in this area, especially in relation to land-management and conservation bureaucracies (see, for example, J.M. Powell (1976, 1988, 1991) and Ray Wright (1989)). The literature shows the advantage of paying serious attention to bureaucratic systems, both governmental and industrial. The functioning of such systems frequently shapes the way environmental issues are

disputed. Industry and the forest services also contribute different sorts of scientific dimensions to forest contests from those considered by politicians and protestors alone. For historians of science, these sectors cannot be overlooked.

John Dargavel brings an economic historian's eye to forest contests. *Fashioning Australia's Forests* is more ambitious than a history of Australian forestry and forest industries, and his excellent knowledge in this area ensures that government bureaucracies and forest industries (and their particular scientific approaches to Australian forests) are not left out of the complex story of environmental and counter-environmental protest.

Dargavel is a well-published historian of Australian forests and forestry, whose work has until now appeared mostly in journals and technical publications for specialist audiences. *Fashioning Australia's Forests* is written for the general reader, and Oxford University Press makes this clear from its attractive design. The book is well-illustrated and rich in figures and tables useful to students of environmental management, scholars and activists (both environmental and industrial). It is a statement about the maturity of Australian environmental concerns that such a book is judged by a leading publisher to be of value to a general audience. Dargavel acknowledges the high level of public interest as one of Australia's strengths in the search for a 'road to sustainable development', and sees his book as an important contribution to the active and continuing debate about forests. He has generally successfully modified his fairly technical writing style to accommodate the general reader. A few key terms such as 'kraft pulp' and 'furnish' could have been better explained: perhaps the second edition could have a glossary for readers unfamiliar with industrial processes.

Fashioning Australia's Forests focuses on the 1970s and 1980s but comes right up to the present, including a useful analysis of the 1994-95 debates about the renewal of woodchip export licences. The scholarly credentials of the book will, however, ensure that it does not 'date' quickly. The book is structured in three major parts, preceded by an introduction and followed by a conclusion. The first major section deals with the historical shaping of the forests in the era from the 1850s to the 1960s ('fashioning'), the second with the changing face of both forest industries and ecological consciousness in the 1970s and 1980s ('changing'), and the

final section with environmental and counter-environmental protest ('contesting'). Within each section, chapters take up the story of the forests from different perspectives: nation, industry and recreation all make demands on forests, but the historical context of the demands, and the philosophical positions of the protagonists, vary enormously. Dargavel strives to present these in a balanced way, and gradually builds for his readers a sense of the enormous complexity of the 'sustainable development' process. His economic framework tends to marginalize the 'ecocentric' (or non-human centred) perspective on forests, but he does try to represent this position before finally dismissing it with the comment: 'This does not seem an age for revolution'. Dargavel himself remains firmly committed to the pragmatic approach to environmental management encapsulated by 'sustainable development', but he is not naive about the complexity of this process.

One of the outstanding chapters is entitled 'Forests for Japan'. It commences with a succinct history of Japanese markets and forests and contains an analysis of the increasing *per capita* consumption of paper in Japan throughout the twentieth century. The workings of the giant multi-national trading companies, the *sogo shosha*, who organise trade and negotiate raw materials from around the world, is clear and very helpful to Australians trying to understand local woodchip debates. The chapter also provides useful historical background to the big joint Japanese-Australian woodchip ventures at Eden (NSW), Manjimup (WA) and three locations in Tasmania.

Dargavel's analysis of Japanese industry is one of several excellent chapters on forest industries. His narrative for 'big business' begins with Chapter 2, which deals with the historical origins of the big Australian forest industries and their division of the several value-adding options that effectively gave each a specialist monopoly: newsprint was the specialty of ANM, APM took packaging, and APPM fine paper. Forest concessions for each of these purposes were separate, in various states. The chapter also describes later diversification and change in the structure of the industry. The industry's defence of its historic 'continuing rights' in native forests is the subject of a later chapter, and the author handles the counter-environmental protest movement with sensitivity.

Dargavel writes with compassion and concern of the social effects of industrial

change and environmental protest on small timber communities. His analysis provides an 'economic overview' of collective groups: loggers, foresters and mill-workers, rather than personal stories of individuals. I found Ian Watson's *Fighting over the Forests* more compelling reading on this subject, enriched as it was by oral testimony of the protagonists. Dargavel, however, aims to cover a national picture over a broad time frame, which limits the space he can spare to showcase 'cameo' voices from particular contests. Both Dargavel and Watson write of the enmity between timber workers and greenies, but neither really engages with the recent and genuine efforts by the environmental movement to address the issue of environmental justice. Tricia Caswell, immediate past Executive Director of the Australian Conservation Foundation, has been a notable campaigner in this field, combining her skills as a union and environmental advocate.

Dargavel's firm commitment to engaging with the process of sustainable development is both a strength and weakness of *Fashioning Australia's Forests*. He is alert to the limitations of the consensus decision-making process, recognising that, while a participatory democracy is ideologically acceptable, the practicalities of sifting through 'copious recommendations' can result in political 'momentum wast[ing] away'. He feels that 'questions concerning the nature of representative and participative democracy and the rights of unborn generations and non-human species' are 'beyond the scope of this book'. Yet his book provides a very real contribution to the search for a 'better' way to manage forests, because of his assured handling of two of the very big players in forest contests: the forest industries and the forest bureaucracies. Until forest contests are recognised as more than a simple case of 'greenies versus jobs', more than just the ideological versus the economic, there is little hope for mutual understanding between the groups struggling over Australia's forests.

References

- J.M. Powell, *Environmental Management in Australia 1788-1914* (Melbourne, 1976).
- J.M. Powell, *An Historical Geography of Modern Australia: The Restive Fringe* (Cambridge, 1988).
- J.M. Powell, *Plains of Promise, Rivers of Destiny: Water Management and the Development of Queensland 1824-1990* (Brisbane, 1991).
- H. Stretton, 'ABC: Just the beginning. Why Australia needs more books like Inglis's history.' *Age Monthly Review*, 3(9) (1984), 14-15.
- I. Watson, *Fighting over the Forests* (Sydney, 1990).
- R. Wright, *The Bureaucrats' Domain: Space and the Public Interest in Victoria 1836-84* (Melbourne, 1989).

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Jamie Kirkpatrick, *A Continent Transformed: Human Impact on the Natural Vegetation of Australia*. Melbourne: Oxford University Press, 1994. x + 133 pp., illus., \$18.95 pb.

Stephen Dovers (ed.), *Australian Environmental History: Essays and Cases*. Melbourne: Oxford University Press, 1994. vi + 280 pp., illus., \$26.95 pb.

One of the problems facing teachers of introductory environmental courses at Australian universities is the absence of appropriate texts. Recently there has been a recognition of the need to supply books for this market: *A Continent Transformed* and *Australian Environmental History* are two such books. Both texts examine a number of common themes, including environmental change, human impact on ecological systems, and the necessity of scientific ecological management.

A Continent Transformed is a worthy book for both the lay person and the high school or first-year university student. Readers will find it enjoyable, informative and easy to read; it is a book that deserves to sell well. It begins with a suitably simple review of basic ecological concepts, especially those useful in understanding species distribution and richness, community structure, and the processes which cause them to change. The explanation of the concepts regarding niche and range is well handled.

From here, the reader is presented with an interesting overview of the main events which have influenced the evolution of the abiotic and biotic environment of Australia over the last 45 million years. The discussion of the period from the break-up of Gondwana to Aboriginal human settlement is rushed and is dealt with in only a page. This is not a serious problem, however, given the book's focus on human-generated change, but it does undermine the book's utility as a stand-alone text. In contrast, the review of Aboriginal habitation and impact in Chapter

3 is excellent, given the target audience. It challenges both the myth that Aboriginal culture is always in harmony with nature, and the popular racist or Euro-centric notion of a pristine Australian environment, free of human impact, before European settlement. It explains that humans have altered Australia and, in turn, have adapted to these changes, long before the arrival of the First Fleet.

Kirkpatrick also challenges the popularly accepted date of Aboriginal settlement. He reviews evidence which suggests that humans may have arrived first as early as 120 thousand years ago. The evidence comes not from artefacts or human remains but from fossil data that indicate some kind of dramatic change, involving fire and species extinctions, from this time on. Such disturbances have been correlated with human migrations elsewhere. While this evidence is well known among palæobiologists and ecologists, it is not known among the general community. The inclusion of this data sensibly reinforces his argument regarding the cultural nature of Australian ecosystems and environmental processes.

The book proceeds from here to sketch out the general effects of European exploitation on Australia's terrestrial ecosystems. It describes the changes wrought by agriculture, logging, urban spread, the interruption of the Aboriginal use of fire, and the impact of rabbits and other introduced species. The main aim is to show both the extent of, and the reasons for, the degradation of the Australian continent since European settlement, and overall the book succeeds, despite its minimal length.

Kirkpatrick argues that sustainable management and exploitation of Australia's environment is possible. Success is dependent on the continued collection of sound scientific data and an improved understanding of the continent's unique biophysical and ecological processes. In addition, we need to appreciate both the ancient and modern role of humans in shaping and structuring Australia's terrestrial systems and species. This is an important insight: the pre-European environment was a product of human action. Thus, the health and survival of Australia's ecosystems and species are dependent on careful management and use, which, in turn, has important implications for conservation policy. Ecologically significant areas must be actively managed if their qualities are to be preserved.

The second book, *Australian Environmental History*, has three main objectives: to

champion and argue the case for 'environmental history', to outline the basis of a methodology for environmental history, and to provide a number of examples of how environmental history should be practised. Unfortunately, the degree to which it succeeds is questionable.

For Dovers, there are three principles that define environmental history, while distinguishing it from conventional history and historical geography: explaining landscape, explaining complexity, and explaining contexts. However, the degree to which these features separate it from historical geography is not convincingly argued.

The reliance on and use of 'landscape' as a major organizing principle undermines the claim that this book is promoting something new or novel. This somewhat antiquated notion does not sit well with modern ecological thinking about environmental issues and processes. The term 'landscape' fails to embrace the richness and analytical power of ecosystems or biophysical processes and structures. It is hard to see what relevance 'explaining landscape' has for Bowen's chapter on the Great Barrier Reef. Could it be that landscape means biophysical environment? Dovers, and many of the other contributors, are clearly influenced by, and used to operating within, the geography paradigm.

There can be little argument with the need to explain complexity and context. However, these objectives are not novel and are shared by history and historical geography, not to mention political economy and other social science disciplines. There is no doubt that modern humans face a number of interlocking and pervasive environmental crises, at local, regional and global levels. An integral part of finding workable solutions to these multiple crises is understanding the processes by which they arise. Solutions also demand integrated historical and scientific knowledge about biophysical processes, the inter-relationships between biophysical and human systems, the processes which define and structure human systems, what processes and structures within human systems are responsible for these modern problems, and which of these are inhibiting the adoption of sustainable practices. With respect to the latter, we need to know how these human processes and structures maintain and reproduce themselves. Such concerns go beyond notions of 'explaining landscape', but do embrace complexity and context. Surely these integrated insights should be the aim of environmental history.

The weak theoretical and methodological basis of the book robs it of coherence, making it merely a collection of essays and case studies of varying quality and relevance. This is a shame. However, the reader should not be put off by the book's failings, as it contains much material useful for teaching environmental studies at the undergraduate level.

The best chapter in the book is Stephen Morton's paper on the response of indigenous mammals to European settlement. This is an edited version of his 1990 paper in the *Proceedings of the Ecological Society of Australia*. Morton successfully integrates an understanding of ecological/biological processes with history to explain the patterns of response of Australian mammals to European settlement. It is a fine example of how careful interdisciplinary research can be both relevant and accessible. Other highlights are the chapters by John Dargavel (on the history of forestry in Australia), Ruth Lawrence (on the Bogong High Plains in Victoria), and James Bowen (on the history of the Great Barrier Reef and its management). These are solid historical pieces which integrate analyses of human processes and structures with environmental themes. Kevin Frawley's chapter on the evolution of modern environmentalism is also sound and useful.

The publication of these two books must be applauded. Undergraduate teaching of environmental studies in this country suffers from a lack of material written about Australia, by Australians, for Australians. Recently there has been an increase in the publication of works of this type—a welcome trend. These two texts represent an important contribution to the development of an Australian-centred environmental studies. In their own way, both will stimulate debate and increase the resources available for educating future environmentalists.

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Elizabeth Lawson, *The Natural Art of Louisa Atkinson*. Sydney: State Library of New South Wales Press, 1995. 143 pp., illus., \$39.95 pb.

This is a delightful book, that gives the reader an insight into early Australian life as well as the talent of Louisa Atkinson. Born in New South Wales in 1834 to English

parents, Charlotte and James Atkinson, Louisa had two sisters and one brother. Her father created a model farm, 'Oldbury', in the Southern Highlands of New South Wales, but following his death only a few weeks after Louisa's birth, Oldbury estate and the family fell into disarray. Tragic times continued when, in 1839, the family was forced to flee from the violence of an alcoholic stepfather, Charlotte's second husband George Barton, her farm superintendent whom she married in 1836.

Louisa showed great promise from an early age as a naturalist and artist and was encouraged by her mother, who was in her own right a talented artist, having received lessons in London from John Glover before emigrating (although her sketchbooks show that her work was more visibly 'English'). Charlotte taught her four children to paint, and she could not have failed to recognise the talent of Louisa, whose work showed greater depth and versatility than either her mother's or that of the other members of the family. Seeking a broader education for her children, Charlotte Barton rented houses in Double Bay, Darlinghurst and Woolloomooloo, before returning to Oldbury in 1846.

Louisa showed a discipline for self-education and training well beyond her years, teaching herself sketching, botany and writing. She also studied languages and methodology, undertook field work, collecting, mounting and record-making, and learnt the Linnaean system of plant taxonomy. Not usual for a woman, she also demonstrated a proficiency in taxidermy. She began publishing in the *Illustrated Sydney News* in 1853 when only nineteen years of age.

However, 1854 brought further tragedy to the family when Louisa's favourite sister Emily died in childbirth, and eight months later the baby Henry Warren died also. Always frail, having inherited her father's weak heart and suffering tuberculosis, Louisa's health worsened with these crises, but it improved when she and Charlotte moved into their new home, 'Fernhurst', which was built for them at Kurrajong Heights.

Here Louisa entered into one of the most productive and active periods of her short life, appreciating the environs of Fernhurst and the animal and bird life as well as an abundance of flowers and insects. Sketching and writing seemed to belong together for Louisa, and she would both write about and illustrate her field excursions. Having a great passion for ferns and fern gullies, she showed great concern for the destruction of

the forests and their animal life. From the works that survive, it is apparent that Louisa's bird paintings form the most important part of her output, and we are given the distinct impression that possums were among her favourite animals.

Louisa was devoted to the care and happiness of her mother, having been advised by Charlotte against marriage because of her weak heart. However, when aged 69, her mother suffered spine damage and broken bones, and Louisa wore herself out nursing and lifting her. They were forced to sell Fernhurst and returned to live at Oldbury with James, her brother; here Charlotte died in 1867.

In March 1869, Louisa married botanist James Calvert of Cavan station near Yass, where they enjoyed shared field work and writing. In 1872, when Louisa was 38 years old, she gave birth to a daughter, Louise Snowden Annei Calvert, but just eighteen days later, with the shock of seeing her husband's horse return home riderless, she appears to have suffered a severe heart attack and died.

Dr Elizabeth Lawson has produced a wonderful account of the life of Louisa Atkinson. She vividly conveys the enthusiasm Louisa had for her work and the great joy she took in it: Louisa, the botanical artist, novelist, natural historian, skilled taxidermist and journalist, who in a very short life achieved so much.

What a tragedy that so many of her works and collections have been lost, possibly incinerated by the family after the accidental death of her brother in 1887. We can only mourn the loss, but Elizabeth Lawson has skilfully researched and produced a book worthy of this gifted and talented nineteenth-century Australian woman, whose personality was charismatic and whose life and work transcended ill-health to affirm an untiring enthusiasm and talent.

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Phillip Law, *The Antarctic Voyage of HMAS Wyatt Earp*. Sydney: Allen & Unwin, 1995. xi + 152pp., illus., \$29.95.

I found this book easy to read in bed and whilst sitting up on an aeroplane. In fact, it would be easy to read anywhere, as it is as much an adventure story as a scientific and historical record. And there are a generous number of accessories—maps, diagrams,

photographs and appendices. There is, for example, an appendix on the Beaufort Scale of wind strengths, complete with notes on the speeds of sailing ships, because the *Wyatt Earp* carried sails. This sort of detail adds to the book's interest.

So far, I have only dipped a toe in Antarctic waters (quite literally, when I put my foot through thin sea ice at Mawson Station) but, even so, it is fascinating to discover how much some things have changed since ANARE began and how much other things have stayed the same.

The first chapter deals with the background to the first ANARE expeditions. The original motivation is revealed as political, and that has not changed. Sir Douglas Mawson's role in persuading the government to support scientific work in Antarctica is described: briefly, Dr Herbert Evatt, Minister for External Affairs, convened an inter-departmental committee meeting in December 1946 at which Mawson stressed that any expedition should carry out as much scientific research as possible.

Following the first meeting of the Executive Committee on Exploration and Exploitation, held on 4 January 1947, Group Captain Stuart Campbell (RAAF ret'd) was appointed to act as Chief Executive Officer of the expedition. If this book had been a novel, then Campbell would have been the villain. He seems to have got everything wrong; he fell off the ship, for example, as it was steaming towards Melbourne, an event both described and pictured.

Parts of the contemporary record could indeed have come straight out of one of Neville Shute's novels. Page 12, for example, carries a reproduction of an article from the *Sun* newspaper of 1 November 1947, with photographs of some of the expeditioners' wives. One is pictured in her flat in Toorak and is described as 'An attractive brunette Mrs B has been an air hostess for four years'. Well, there's a change; not many expeditioners these days can expect to come back to a pretty air hostess in a smart flat in Toorak!

Chapter 2 is a description of the ship, and is well illustrated with a fine cut-away drawing and plans of the laboratory and its fittings. Something of the graphic and accurate style of the writing can be illustrated by two quotations from page 28:

The ship's toilets discharged straight into the ocean from the side of the ship. The officers' toilet had a defective non-return valve and, when the ship rolled

(as she did most of the time) and the outlet port dipped beneath the waves, sea water fountained up through the toilet bowl, regurgitating the contents in a disgusting fashion. It was nicknamed 'the splutterer'.

She [the *Wyatt Earp*] was the stiffest ship I have ever known, with a period [for a double roll] of 4 1/2 seconds. This was reassuring in one sense, for she was unlikely to capsize, but the angular accelerations generated as she moved through 100 degrees or more and back again in 4 1/2 seconds had to be experienced to be believed. In a heavy sea, objects not securely fastened would be hurled horizontally against the bulkheads.

Chapter 3, entitled 'Cosmic Rays', describes tests of the cosmic-ray apparatus carried out in the Victorian Alps. There is more about skiing than science, but then the people involved were practising for an expedition and it was the field work that was to be important. A map of the area would have been useful here for readers who are not familiar with the geography of Victoria.

Chapter 4 describes the voyage from Port Adelaide to Hobart. Conditions were primitive, the seas were rough, and life in an accelerating frame-of-reference is described vividly. In Chapter 5 the ship departs for Antarctic waters, but it has trouble with the engines and so changes course and heads for Melbourne. Chapter 6 sees Phillip Law back on dry land, attending more meetings in Canberra and disconcerted to find that Campbell is to join the ship.

In Chapters 7 through 11 the *Wyatt Earp* arrives and works in Antarctic waters. A running survey of the Balleny Islands is carried out and a landing is made on Macquarie Island. Oceanographic observations, meteorological observations, and the operation and maintenance of the cosmic-ray apparatus are described. The scientific work was carried out in the teeth of severe difficulties. There was a shortage of fresh water and a ration of one pint per person per day. There was damage to the apparatus during rough weather. There was indifference and some hostility towards the scientists and their work from the non-scientists on board. Most of the problems were overcome. Not surprisingly, no great discoveries were made, but the details of life and work on board are faithfully and fascinatingly recorded. Finally, in Chapter 11, the *Wyatt Earp* returns to Melbourne through the roughest seas of the voyage.

Chapter 12, 'After the Wyatt Earp', reveals how, some forty years after the event, the full extent of Campbell's skulduggery came to light. Documents are reproduced which show that Campbell went to extreme and devious lengths to try to prevent Phillip Law's continuing employment with the Antarctic Division. What were Campbell's motives for trying to keep such a good man down? You will have to read the book and make up your own mind, but Campbell was a non-scientist, whose only interests in Antarctica were political and territorial. Could it be that he thought science was a waste of public money?

On page 88 there is a quote from one of Mawson's Antarctic diaries: 'We [Mawson and his Captain, John King Davis] had a long talk about the scientific staff and water. He rightly contends that Campbell is dirtier than he need be'. Some things never change; I always guessed that the money supply was restricted by the great unwashed!

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Ian Jack and Aedeon Cremin, *Australia's Age of Iron: History and Archaeology*. Melbourne: Oxford University Press in association with Sydney University Press, 1994. xiv + 175 pp., illus., \$39.95 pb.

This book is an examination of the physical and documentary evidence of individual iron smelting companies in nineteenth-century Australia. While the 'Age of Iron' announced in the title is never specifically defined, it can be inferred from the book's contents. Generally it refers to the Industrial Revolution and more specifically to the period from 1848 to 1884 when a series of small companies experimented with smelting local ores. Eight case studies are presented, three from New South Wales, three from Tasmania, and one each from South Australia and Victoria.

Structurally the chapters in the book constitute two sections that do not necessarily make a convincing whole. The first section consists of five chapters covering seven case studies; the second section consists of three chapters devoted to smelting in Lithgow. If the 'Age of Iron' is characterised by small, independent producers using nineteenth-century technology, as the authors seem to infer in the first seven examples, then the inclusion of the Sandford/Hoskin works in Lithgow needs more explanation than is provided. Chronologically these works belong

in the twentieth century, operating between 1906-1928. The large scale of the works and the organization of their corporate structures also seem to have more in common with the twentieth century than with the models discussed elsewhere in the book.

The sense of place conveyed in each instance is strong. Vivid descriptions of both the industrial remains and their topographic setting engender a desire to see for oneself. The ruins of the Ilfracombe smelter in Tasmania are 'the most compellingly instructive survival of a mid-nineteenth-century-style blast furnace in Australia', and their poignancy has also been captured in a description of the site of the manager's house, where the aspirations of the company are evoked by two hawthorn hedges and a scattering of daffodils. At Bogolong in NSW, the 'dourer' remains have their own grandeur, including the furnace still standing to its original height. Technical descriptions are equally enticing, including the intricate system of channels dug into the bedrock at Mittagong. In each case, the way in which the smelter operated is clearly conveyed and situated within an integrated system, including all the aspects of the industrial complex. Documentary evidence and physical evidence are equally important in elucidating the story of each smelter. At Mittagong, surviving company diaries are able to explain the otherwise puzzling use of an underground channel for the blast main, while at Bogolong partially exploded fire-bricks still lining the hearth indicate that, despite official reports stating that the bricks had been replaced after the first failed smelt, the subsequent closure of the furnace was likely due to technical failure rather than to the reported desire to seek new capital.

Lithgow is discussed in three chapters that cover the business of iron and steel production as much as the technological aspects. The history of smelting in Lithgow and of William Sandford and Charles Hoskins, the two men most responsible, is explored in the first two chapters. This provides context for the description of the plant and the surviving remains that is presented in the third chapter. The first plant, built by Hoskins in 1906, was in the tradition of nineteenth-century industrial palaces, while changes implemented in later years by Hoskins were the precursors to the fully modern complex he developed at Port Kembla in the 1920s, just prior to closing the Lithgow works.

The text is well illustrated throughout. Nineteenth-century maps and illustrations are combined with recent photographs and maps prepared by the authors to provide a full visual record of the sites. At times the text and illustrations could have been better integrated; for example, a key 1877 map used to interpret the remains at Lal Lal has not been included in the book. However, the illustrations are reproduced well and are an important part of the whole.

The book is intended for a general audience as well as for use by teachers and technical experts, and it achieves all these aims nicely. The industrial novice is painlessly introduced to complex technology by means of diagrams, clear explanations and a glossary of terms. Those with experience and knowledge of the industry are rewarded by the wealth of detail on each site and the careful explication of its successes and failures. The past is made more immediate for all readers by the occasional reminders of conditions on site while the smelters were operating, such as the heat of the blast felt by workers dumping loads of flux, ore and fuel.

The authors contend that colonial trade was encouraged by a period of high import prices during the 1870s. However, technical problems and the desire to locate near sources of flux, ore and fuel rather than near markets and transport facilities meant that no Australian suppliers were able to remain competitive once prices fell. It was only government bonuses and a secure government market that eventually enabled Lithgow to endure. The authors reiterate the archaeological dictum that failed experiments generally leave better and more informative remains than do successful ones, and this is amply demonstrated and exploited here in a rewarding study that is a valuable contribution to the literature on Australian history and industrial archaeology.

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Beyond the Black Stump: Proceedings of the Second National Nursing History Conference, September 1995. Canberra: Royal College of Nursing Australia, 1995. \$20 pb.

Nursing history has become a new subject of historical inquiry largely through the efforts of academic staff in schools of nursing eager to enter debates about their own profession in a scholarly context. *Beyond the Black*

Stump is indicative of this quest to enter the humanities rather than the social sciences (history rather than sociology, where discussion about nursing has 'traditionally' taken place), and reflects efforts by nursing academics and others to provide critiques of the practice and theory of nursing in the colonial setting.

Beyond the Black Stump looks to have been an interesting conference. Papers ranged from histories of rural or 'bush' nursing and early midwifery practices to individual 'pioneer' nurses and their contribution to the Australian nursing scene. The efforts of the conference organizers to discuss the writing of history in the form of history workshops—to theorize the practice of telling stories about nursing in Australia's past—is evident in the programme that accompanies the collection of papers. However, as a publication this collection lacks the final polish needed to attract a significant or wider audience. The papers do not appear to have been edited to any degree and are presented here much as they were given, I imagine, at the conference itself. This is an important point in the light of the need to make the enterprise of nursing history part of the social history being written in Australia today, for the many themes found here are also being developed in other areas of historical inquiry—such as the histories of women and indigenous populations, labour history, medical history and so on. These papers are therefore particularly worthy of publication and comment. Indeed, a publication like this could be taken further; and given that this was only the second national nursing history conference, the impetus to do so may not be far away.

In her keynote address, 'Women, Colonialism, Birth: Black Stumps of Australian History', historian Ann McGrath makes these links between nursing history and Australian historical studies, particularly women's history:

Nursing history seems to be an area which contains a wealth of women's knowledge and experience; not only regarding the history of work, the history of medicine but also pertaining to family history, to children's history . . . to the story of Australian frontiers, to the history of colonialism, to the history of exchanges between Aboriginal and white Australians and to the history of our national imaginings.

McGrath outlines the role of nursing for white women in the history of colonialism, speaking of its centrality to questions of the oppression of Aborigines, the white relationship to the land and the 'outback', and offers the suggestion that 'crucial parts of our history, like the changing experience and rituals of childbirth and early mothering, still remain beyond the black stump'. As an historian invited to set the frame of reference at this conference, McGrath makes a convincing and interesting argument for the importance of nursing to Australian historical inquiry.

Other papers indicate that they indeed found inspiration from some of these broader themes. Most papers shy away from 'hospital history', once a genre which, while its writers often ignored nursing staff, offered information about nurse training and work. These are investigations of nursing practices, with an emphasis on experience. The words and voices of individuals and their own stories of nursing are presented in a number of these papers, indicating another trend towards an oral history of nursing.

Further papers deal with the question of nursing Aborigines in rural areas, an important reminder of the patient, so often omitted from medical histories. Jeanette Klotz's paper, 'The Role and Function of Remote Area Nurses at Birdsville 1923—1925', explores the tensions inherent in nursing the Aboriginal population, given that the health system was at odds with the culture of the patient and was 'paternalistic' towards it. Klotz's paper teaches that more research on this relationship needs to be carried out; her conclusions, while not surprising, reveal hidden and shameful stories about the history of Aboriginal health. 'No attempt was made . . . to make [the health] service culturally safe, sensitive or acceptable for the Aboriginal community', she writes, and '[t]here is little evidence to suggest that much thought was given to the social circumstances of the Aboriginal population which contributed to ill health'. As Klotz points out, it is difficult to find out more about the Aboriginal patient because Aborigines were not included in population statistics. These are not only 'problems' for historians but ideas that require historical investigation, and Graeme Curry theorizes about the telling of the Aboriginal story of nursing, among other aspects of nursing history, in his paper.

Also of interest are the papers which open up areas of Australian history for re-examination through the lens of the nursing

historian. Judith Barber's 'A Gentle Hand on the Tiller?: Nurses' Lives of the 1930s' investigates the Depression and the between-the-wars period in Australia, a time when the meanings of work were changing for women. What kind of career was nursing for women, and which women were eligible candidates for nurse training in this period? In asking these questions, Barber attempts to reflect upon the context of this particular career for women inside the 'total institution'. Annette Summers places the law under investigation in her paper on the South Australian Nurses' Registration Act of 1920. Particularly concerned to examine the effect of this Act upon community midwives in rural areas of the state, Summers contributes to another strand of present historiography with her interest in legislation and its impact upon women workers.

Situated within the burgeoning field of nursing history, the individual papers in *Beyond the Black Stump* are of considerable value, and they also make significant contributions to Australian history more generally. The conference also clearly made an attempt to bridge the gap between these studies through its topical themes and its emphasis on historical method. The publication format itself deserves more attention—some editing would also be prudent—so that these historians reach the audience imagined by the conference and the wider nursing academic body.

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