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Reviews

Compiled by Sara Maroske

Royal Botanic Gardens Melbourne/Fenner School of Environment and Society, Australian National University. Email: saramaroske@optusnet.com.au

Juliet Flesch: *Life's Logic: 150 Years of Physiology at the University of Melbourne.* Australian Scholarly Publishing: North Melbourne, 2012. 280 + xii pp., illus., ISBN: 9781921875694 (HB), AUD $49.95.

Institutional histories are curious beasts. Some are serpentine, tracing the sinuous journeys of key actors or research threads. Others resemble hydras, the institution forming a unifying corpus from which so many heads bob and weave. Yet others recall annelids: short segments conjoined in a regular sequence from start to finish.

Life's Logic fits the latter pattern. Following Melbourne University's Department of Physiology from 1862, it complements *Humanity's Mirror* (2007), Ross Jones' insightful and empathetic portrayal of the Department of Anatomy. These 'twins' even share identical physical dimensions—a rare feat of consistency. Whilst Jones argued that his account was best served by concluding around 1970—on the vestiges of institutional memory—Juliet Flesch follows Physiology through to 2012. Readers must therefore beware the presentism and politics inherent in accounts of still-active careers.

The segmental approach offers merits and demerits. Striving to evince 'a genuine feeling for what the Department was doing at any given time', Flesch gives voice not just to headline scientists, but teachers, technicians and support staff. Numerous one or two page portraits emerge from staff files, minutes, obituaries, recollections and—for more recent figures—résumés. This approach evokes as individuals the cleaners, administrators, demonstrators and especially the technical staff central to this highly instrumented discipline. Thus we sympathise with William Henderson, resident porter 1864–79, whose lodge beside the medical school not only housed his family of eleven—and the animals required for 'demonstrations'—but sat atop a cesspool. Likewise a father-son team of instrument technicians who entered the Department in 1967. In 1978, Gus Chlebowczyk was urged to delay his retirement; in 2008, Charles' 41 years of service was rewarded with redundancy. As the 'glue' binding any institution together, it is right that such characters be woven throughout its history.

Such generosity comes at a cost, however. Writ large are the early professors well known to local histories: George Halford, Charles Martin, Roy 'Pansy' Wright. William Osborne receives a welcome portrait, yet short-lived biochemist Arthur Rothera garners as many pages as later long-term head of department, Stephen Harrap. Too often, each scientist's ration of pages comprises a *curriculum vitae* spanning their entire career. For some, this is simply insufficient to discern their merit, let alone their practices or intellectual trajectories. Moreover, the impact of individual researchers upon the Department—or of the Department upon them—frequently cannot be discerned. This is a significant problem for an institutional history claiming to be 'above all, an account of scientific discoveries and the people who made them'.

A further difficulty with the annelidan structure is its paucity of overarching themes or narrative foci. Most chapters comprise a parade of character sketches, permitting glimpses of investigations but never capturing the whole. There is little sense of major research streams or physiological fads, let alone the Department's integration into the university or the wider gamut of biomedical science. This confusion betrays a core lacuna: the definition of physiology itself. Opening with a lucid but brief explanation by Pansy, the text rarely revisits the discipline's epistemological core. Physiology has proved remarkably resilient over 150 years, surviving cleavage from anatomy, histology, biochemistry and pharmacology. But what criteria defined

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such bifurcations? Furthermore, how did the Physiology Department remain intact despite its intermittent intersections with zoology, agricultural science, physiotherapy, pharmacy, genetics and epidemiology? Historians interrogating Australian anatomy departments—notably Jones and Helen MacDonald—have admirably defined and located their subject within its intellectual, institutional and social plexus. *Life's Logic*, unfortunately, does not.

The text, however, is not bereft of science. Intimations of the Department's shifting research priorities appear in each chapter and are précised in the conclusion. Post-war topics and programmes emerge from the appendix listing the Department's PhD and DSc theses; garnering as many doctorates as the 1980s and 2000s combined, the 1990s emerges as a postgraduate high-water mark. But what were these students and clinicians *doing*? There are snippets detailing particular devices or technical innovations, but the tools of physiology—apparatus, preparations and instrumentation—are rarely explicated. Likewise, given their centrality from the discipline's very beginnings, animals are largely absent—notwithstanding 'Drooler' the sheep and an echidna Houdini. There is a rather bright insistence on modern-day animal welfare standards, but barely a nod to 'unacceptable past practices'. Yet Victoria was second only to the United Kingdom in legislatively regulating experimentation upon living animals: in 1883 the first scientist beyond Britain to be granted a Vivisection Licence was Melbourne University's Professor of Physiology: George Halford. Unsurprisingly, the list of experimental animals used by the Department over 1913–42 (MHM02007 in the University's Medical History Museum) makes for doleful reading. It certainly paints Physiology's pioneering use of computers for analysing, modelling and teaching as welcome innovations indeed.

A strength of *Life's Logic* is its insistence on elaborating the multivariate roles played by women in Physiology, whilst ruing that its first female professor—Lea Delbridge—was appointed only in 2011. The text conveys a strong sense of the places and procedures that embodied the Department, plus the benefactors and countless grants that ensured its ongoing viability. While neatly produced and well edited, with only a handful of typographical slips, dates for the many photographs would have been welcome. As a source for accessing those who made up Melbourne University's Department of Physiology, *Life's Logic* is a sound and human starting point. As an explanation of its essence—or its function—a very different physiological investigation is wanted.

Peter Hobbins
Department of History
University of Sydney, New South Wales

Noelene Bloomfield: *Almost a French Australia: French-British Rivalry in the Southern Oceans.* Halstead Press: Sydney, 2012. 190 pp., ISBN: 978 1 920831950, AUD $49.95.

Debate over the ambitions and achievements of rival French and British expeditions in the Pacific, and particularly Australia, has preoccupied academics for decades. Were the French expeditions scouting parties (secret or otherwise) with colonial intent, or were they genuinely motivated by goals of scientific discovery? How we interpret their intentions naturally influences how we define their success. The British self-evidently succeeded in colonisation, while the French more obviously hold the title for scientific achievements.

The title, and subtitle, of Noelene Bloomfield's new book reflect those longstanding preoccupations. And yet the text itself leaves me with the sense that the ambitions and achievements of the voyages, and any rivalry with Britain, are of far less interest than the journeys themselves and the characters who embarked on them. Whatever the scientific, cartographic or territorial ambitions of the French voyagers, their richest legacy is undoubtedly an unparalleled narrative of early European exploration in the region. Bloomfield draws on these vibrant and detailed French accounts to great effect.

Bloomfield comprehensively encompasses all the expeditions and claims on Australian territory—from Duquesne-Guitton's observations on Swan River in 1687 through to Dumont d'Urville's final assault on Antarctica from Hobart in 1837—including many minor voyages frequent neglected in the literature. The inclusion of whaling and sealing activities under the ambit of exploration and colonisation is particularly refreshing, as is the discussion of

commercial and missionary expansion. This impressive breadth, however, does come at some cost to depth and the text can only touch briefly on the major events and achievements of each voyage. This feature may make the book more attractive to the generalist, and yet the specialist too will find the summarised overview of so many voyages a useful resource. Far from being a dry chronology, Bloomfield liberally illuminates her text with colourful events, illustrating the hardships and pleasures of exploration. The reader cannot fail to retain a vivid mental image of Jacques Arago defusing tensions with the indigenous residents of Shark Bay by inviting them to join in a folk dance accompanied by castanets. Hyacinthe Bougainville's discovery of an Iroquois half-brother in North America, the product of his father Louis's explorations more than 50 years earlier, conjures up as many romantic clichés as Bougainville senior's descriptions of Tahiti did themselves.

Bloomfield's text is also generously interspersed by numerous colour photographs of the regions being described which, far from seeming anachronistic, greatly add to the sense of place and natural beauty described in the text and complementing the historical images also used. Similarly, her excellent use of maps provides a quick visual aid to the voyages certain to be greatly appreciated by the general and scholarly reader alike. The author's experience in exhibitions has presumably benefited the visual design of this text. The book is well organized, easy to read and well serviced by the index, sub-headings and referencing.

Bloomfield duly notes the colonial intentions of each French explorer or official, balancing their failure to colonise Australia against the cartographic legacy of French placenames that feature on the book's endpapers. But the questions raised in the book's title are perhaps best answered by the introduction contributed by Alan Bloomfield. This strategic analysis of the role of the French expeditions and their varying ambitions synthesises the diverse goals of territory, discovery, science and colonisation into a singular concept of national glory or prestige, providing a persuasive explanation for how the apparently disparate and polarised activities might all, in fact, be manifestations of the one strategic imperial goal. This introduction alone makes the book worthwhile for scholars of the field, while the engaging yet comprehensive and well referenced main text makes the entire book an attractive addition to bookshelves and coffee tables alike.

Danielle Clode
Department of English and Creative Writing
Flinders University, Adelaide

Sarah Ferber & Sally Wilde (eds): *The Body Divided: Human Beings and Human 'Material' in Modern Medical History*. Ashgate, 2011. 264 pp., ISBN: 978-0-7546-6834-3, £65.00.

In assembling the essays that constitute this book, its editors have sought to throw light on how, over the past 200 years or so, 'humans have made use of other people's bodies in and through medicine', and to show what such uses, and the debates they aroused, may reveal about changing ideas of 'social consensus, individual identity, the nature of the sacred, and the role of language and the imagination'. Drawing together the work of historians, scientists, social scientists and literary scholars, on topics ranging from body-snatching to organ transplants, Ferber and Wilde have produced an absorbing study of the issues and attitudes surrounding medical uses of the human body.

In 'A Body Buried is a Body Wasted', Helen MacDonald explores the concept of waste in relation to 'the Spoils of Human Dissection' in nineteenth-century England. After the passing of the Anatomy Act of 1832, good anatomical subjects and specimens could be regarded as 'wasted to science' if not made available for dissection or preservation, but dissection itself also created 'waste material' which had somehow to be disposed of in accordance with an Act that prescribed decent burial of a 'body'. MacDonald presents an illuminating study of the various ploys resorted to in securing corpses for dissection, and of the efforts of anatomy inspectors to prevent the grisly mishandling of bodily remains, lest it bring the Act into disrepute or even lead to its repeal.

Three more essays on dissection deal mainly with its practice in colonial Victoria. In 'Cadavers and the Social Dimension of Dissection', Ross L. Jones presents a perceptive case study of problems in the supply of bodies for teaching purposes, showing how the

study of anatomy tended to reinforce the social status of the medical profession, and finding in the University of Melbourne student journal, *Speculum*, evidence of a sense of social, even biological, superiority to the 'underclass' that furnished corpses for dissection. Victoria's 1862 Anatomy Act was based on the British one; but, in the absence of a workhouse system, cadavers came mostly from the Melbourne Hospital and the Immigrants' Home.

Susan K. Martin's 'Dissection, Anatomy Acts and the Appropriation of Bodies in Nineteenth-Century Australia' gives welcome attention to the religious belief in bodily resurrection rather overlooked by MacDonald. Martin's combining of Aboriginal and non-Aboriginal subjects in the one discussion is at times awkward, since the former were usually drawn from different sources and usually for anthropological rather than medical purposes. But her examination of the dispute over who 'owned' a hanged murderer's brain, and of the Melbourne Benevolent Asylum's long-standing opposition to providing anatomical subjects affords valuable insights on the issues raised by bodily appropriation and how these were handled.

In 'Bodies of Evidence: Dissecting Madness in Colonial Victoria', Dolly MacKinnon elucidates the legislation bearing on post-mortem examination and dissection, and distinguishes carefully between those two. Confusion still lurks: as when it turns out that coroners used their discretion in ordering the post-mortems on deceased 'lunatics' that were required by law. MacKinnon nonetheless presents a rewarding analysis of medical dealings with the dead in Victoria's lunatic asylums, the 'tug of laws' that often resulted, and the efforts of colonial doctors to pursue a scientific study of insanity.

Paul Turnbull's essay addresses the collection and examination of Aboriginal remains by his 'Judicious Collector', Edward Charles Stirling, in turn-of-century South Australia. Setting Stirling's activities alongside European work influenced by Darwinism, Turnbull's lucid study makes clear links between the collecting of indigenous remains, frontier violence, and the 'racialised construal of Aboriginality'. While at times uneasy about how his research materials were obtained, Stirling espoused, and promoted, a view of superior and inferior 'racial types' that seemed to justify the anxieties of an emergent nation and its relations with an apparently doomed race.

Jo Robertson's 'The Leprosy-Affected Body as Commodity' investigates twentieth-century leper colonies in the Philippines and Japan. With a brief account of leprosy, she first shows how control measures and medical researches were alike centred on the bodies of those with the disease. In a sensitive analysis, Robertson goes on to examine the question of childbearing by leper colony inmates. The Japanese refusal to permit any childbearing was harsh and caused much personal suffering. But the policy of allowing it, on Culion Island in the Philippines, led to other hardships: the transmission of leprosy to children, who then furnished doctors with 'a rich field for research', or else their early segregation from their parents and a resultant high infant mortality.

The last three essays tackle issues in modern medicine. Sally Wilde's 'Gifts, Commodities and the Demand for Organ Transplants' considers two differing approaches to organ transplantation—organs as gift or as commodity—and queries two common assumptions: that the demand for organs will inevitably grow, and that their sale will better ensure their supply. Through a study of corneal and kidney transplants, Wilde argues persuasively that the demand for organs stems in part from preventable conditions and may also be reduced by technological improvements; while with careful management their supply may be at least as plentiful by donation as by sale. Both supply and demand have geographic variations, however, and Wilde observes that the problems of organ transplantation are best addressed by 'localised, culturally specific solutions'.

In 'Science Fiction, Cultural Knowledge and Rationality', Nicola J. Marks analyses the discourse of stem cell researchers on the subject of reproductive cloning. Through a series of interviews, she reveals how such scientists invoke the imagery of science fiction: to convey the exciting prospects for cloning, to dismiss public anxieties, or to express their own qualms about its potential drawbacks and dangers. After this intriguing essay on possible future bodies, the final one, 'Inventing the Healthy Body', presents old themes in new guises. Elizabeth Stephens explores the role of public anatomical

exhibitions, wherein medicine and spectacle are mingled, human remains are preserved for display by means of 'plastination', and dissection is directed at educating the general public. Like their predecessors, such exhibitions convey messages for personal health; but the warnings and exhortations of earlier times have given way to a modern medical view that 'health is always improvable and the body perfectible'.

The Body Divided ends with an epilogue by Leo Brown, describing the University of Queensland's annual ceremony of thanksgiving to the donors of cadavers for dissection by its medical students. This underlines the contrasts between past and present: freely donated bodies replace the unclaimed corpses of the helpless, and medical students dissect those bodies with gratitude and respect. It fitly concludes a book that is often disturbing or challenging, and invariably fascinating.

Anthea Hyslop
Melbourne

Martin Thomas: *The Many Worlds of R. H. Mathews: In Search of an Australian Anthropologist.* Allen & Unwin: Crows Nest, NSW, 2011. 462 pp., illus. (colour), endnotes, bibliog., index, ISBN: 9781741757811 (HB), 9781743311066 (PB), AUD $59.99 (HB), $35.00 (PB).

A first-class biography generally does one of two things. It can shed new light on an already prominent figure, someone we thought we knew; or it can bring to light someone long forgotten. *The Many Worlds of R. H. Mathews* does both. Historian Martin Thomas resurrects the Australian-born surveyor and self-taught anthropologist Robert Hamilton Mathews (1841–1918), whose name remains almost completely unknown outside specialist circles, although his copious publications on the Aboriginal populations of south-east Australia are routinely used in native title claims and have been acknowledged as reliable, thorough and humane by scholars including Norman Tindale and Deborah Bird Rose.

In the process, Thomas offers unexpected insights into the relationships between Mathews and several of his better-known contemporaries, notably Daisy Bates and Walter Baldwin Spencer. The latter, who resented Mathews' temerity in challenging the conclusions of his 'personal mentors' A. W. Howitt and Lorimer Fison, mobilised the full weight of his international standing and influential contacts to silence and discredit him. In revealing the extent to which the Spencer-Fison-Howitt triumvirate shaped and controlled early ethnographic research on Australia's Aboriginal cultures, Thomas simultaneously demonstrates the impacts of this feuding on Aboriginal lives: anthropological theory 'bled into areas of policy formation and governance' and 'affected the perception of Aboriginal society in the world at large'. In poignant counterpoint to the 'expanses of barrenness' in these dominant anthropologists' works, the 'voices … audible in [Mathews'] writing' grant us evocative glimpses of his Aboriginal interlocutors, the beauty and richness of their languages, and the diversity, sophistication and resilience of their social worlds and ritual cultures.

Thomas skilfully draws out intimate details of Mathews' personal life to illuminate broader elements of the Australian experience. The dark secret that prompted Mathews' father to abandon the family paper mill in Ireland and immigrate to Australia exposes both the opportunities and the costs of Empire. Mathews' childhood in rural New South Wales reveals the experiences of immigrant workers, the preservation of class and sectarian tensions from the old country in the new, and the ways in which the Australian-born Mathews' early encounters with Aboriginal people shaped his 'general attitude to Aboriginal society' and 'the specific questions he asked of it'. As a surveyor, Mathews undoubtedly 'contributed to the dispossession of Aboriginal communities by preparing land for sale, settlement and subdivision', yet this work also brought him into harmonious contact with individual Aboriginals and eventually led him to a series of Aboriginal cave paintings in Milbrodale in the Hunter Valley. These inspired his late conversion to the role of ethnological observer and his feverish documentation of Aboriginal rock art, initiations, kinship, legends and languages, totalling one hundred and seventy-one published articles and a wealth of unpublished letters, drafts and notebooks over the next 25 years.

The Many Worlds of R. H. Mathews is no hagiography. Thomas acknowledges the

personal and professional idiosyncrasies of his subject, noting that despite his friendships with 'a network of individuals who were … interested in the lives of their Aboriginal brethren' and 'worked actively for the advancement of their welfare and rights', Mathews himself 'never sought to change the society he lived in'. Probably his awareness of his own dependence on 'the good will of mission managers and other white gatekeepers' for access to the Aboriginal settlements in which he conducted his research led him to self-censor any explicit arguments he might have made for the legitimacy of the cultures which so fascinated him. Nor did it occur to Mathews 'to ask his informants about the changes they had witnessed in the course of their lives': he shared the prevailing conviction that the anthropologist's mission was 'to look beyond the contaminant of history … to extract and document supposedly timeless customs and traditions'.

Though neither saint nor activist, Mathews undoubtedly 'swam against the current of his epoch'. His studies of kinship classification largely rejected the grand theoretical edifices of his contemporaries, their insistence on the rigidity of Aboriginal marriage rules and the correspondingly primitive status of Aboriginal social evolution, in favour of nuanced descriptions allowing for flexibility and adaptation. In contrast to Howitt's interventionist and manipulative tactics, the reticent Mathews 'worked tactfully within and around' Aboriginal strictures of secrecy, pioneering a consultative approach steered by traditional owners. These illustrations of the diversity of the contact experience in Australia are perhaps the most memorable of this book's many revelations. Interactions between Aborigines and outsiders, although all too often marred by '[b]rutality, disgust, hatred, repulsion and willingness to exploit', could also be guided by markedly different emotions. With intelligence, sensitivity and humour, Thomas pieces together the fragments of Mathews' many worlds to reveal a 'magnificent obsession' with Aboriginal culture enabled by mutual respect and motivated by 'affection, empathy, curiosity, admiration … and, let us say it, love'.

Hilary Howes
Berlin, Germany

Jane Carruthers & Lindy Stiebel (eds):
Thomas Baines: Exploring Tropical Australia, 1855 to 1857. National Museum of Australia Press: Canberra, 2012. iv + 177 pp., illus. + folding map, ISBN: 9781921953002, AUD $29.95.

The work of the talented English artist Thomas Baines (1820–75) is well known in southern Africa, where he spent most of his adult life and produced a large body of work depicting scenes on the margins of European settlement. His name is less well known in Australia where he spent but two years, mostly far away from European settlement.

Baines came to Australia as a result of having been appointed artist and storekeeper for the North Australian Exploring Expedition (NAEE), 1855–7, under the command of Augustus Gregory. This was a British Government funded and managed expedition, although the appointments of Gregory, his brother Henry—deputy leader of the expedition—and the botanist Ferdinand Mueller were made in Australia. There were visions of establishing new British colonies on the north coast of Australia, to form a chain of settlements linking existing colonies in south-eastern Australia with outposts in east and south-east Asia and ultimately with India. Gregory's instructions were to look for land suitable for settlement.

The expedition assembled in Sydney, then travelled by sea to the mouth of the Victoria River near what is now the border between Western Australia and the Northern Territory. This is an imposing river, at least in its lower reaches, and the expedition's planners hoped that it would provide access to a wide swathe of the northern interior of the continent. While this hope proved largely illusory, Gregory did discover much good grazing country. In addition, the expedition added considerably to geographical understanding of northern Australia, while Mueller's assiduous collecting made it a milestone in Australian botanical history.

Although Baines was part of the initial inland exploring party, he was left behind at a depot camp on the watershed of the Victoria River when Gregory made a final push into the interior. He was left behind again when Gregory led a small group overland from the base camp near

the mouth of the Victoria River to Brisbane at the end of the expedition. Gregory charged Baines with closing down the camp, taking the expedition's schooner *Tom Tough* to Timor to obtain more provisions, and making a rendezvous with the overland group at the Albert River in the Gulf of Carpentaria.

Baines had enormous difficulty in carrying out these instructions, partly because *Tom Tough* was barely seaworthy, and partly because of mutinous dissension among his companions. Eventually he was driven to buy a new ship, *Messenger*, in Java, for the journey to the Albert River. Beset by unfavourable winds and acutely conscious that Gregory might be depending on him for supplies, Baines rashly decided to go ahead in the ship's longboat in an attempt to get to the rendezvous more quickly. In the event, *Messenger* reached the Albert River before the longboat did. Gregory, however, had already left. Baines returned to Sydney and stayed only long enough to complete the requirements of his engagement before returning to England.

These 'requirements' are the focus of the publication under review, which includes reproductions of many of Baines's paintings and sketches, the parts of his journal covering his longboat journey, and his map depicting the route taken by *Messenger* and the longboat from Timor to the Albert River. These reproductions are accompanied by five chapters by different authors that provide, respectively, biographical details about Baines together with overviews of earlier European encounters with northern Australia and of the NAEE itself; a survey of the imperial and geographical context of the expedition; an analysis of Baines's interactions with Aboriginal Australians; a discussion of the paintings and sketches he produced during the expedition; and an analysis and evaluation of his map.

Perhaps inevitably, given this structure, there is some duplication of material between one chapter and another. There is also a surprising number of small but irritating factual errors that should have been picked up by the copy-editor if not by the contributors themselves. Despite such occasional blemishes, however, the five chapters between them provide a good introduction to Baines's journal and map, and the editors are to be congratulated on thus successfully bringing these fascinating documents to public attention.

Lindy Stiebel in her chapter discusses Baines's interactions with Aboriginal people. Unlike some Australian explorers, Augustus Gregory always sought to avoid clashes with the Aboriginal people, and Baines, Stiebel maintains, followed his lead in this regard. Still, misunderstandings were possible, as when Baines became convinced, while in charge of the depot on the upper Victoria, that the Aborigines setting fire to the nearby scrub were intent on burning them out, whereas almost certainly they were practising traditional 'firestick farming' that saw them firing the scrub every year in order to encourage new growth. Such misunderstandings could have tragic consequences, though to Baines's relief there were none in this case. Baines, Stiebel concludes, is 'noteworthy for his efforts to engage with and record a different people'.

Baines has long been recognised as a first-rate artist. In the present volume several his paintings are reproduced in full colour—although of course on a reduced scale—and these amply display the quality of his work. Janda Gooding in her chapter on his art emphasizes the way in which Baines developed compositions 'that would portray members of the party as the heroic conquerors of the landscape and its indigenous inhabitants' in the service of empire. While she mentions Baines's 'small group of works' illustrating the flora and fauna encountered, and also his 'pictorial interest in geomorphology', she does not pursue the possibility that art and science might have had the same intimate connection in his work as they have been shown to have had in the work of his contemporary, Eugene von Guerard. It would be interesting in this context to know whether Baines had read any of Alexander von Humboldt's works in which the role of art in the scientific investigation of the globe was trumpeted.

Baines was also, we learn, an excellent mapmaker. 'The accuracy of the depiction of the coastline is remarkable' concludes Vivian Louis Forbes in his authoritative discussion of Baines's map and the techniques used in compiling it. In addition to displaying the tracks taken by *Messenger* and the longboat, the map has copious notes on it by Baines recording noon positions, weather, sightings and notable events that provide a valuable supplement to his journal.

The NAEE was a notable episode in the history of Australian science as well as of Australian exploration, and Baines played a significant role in it. The volume under review sheds welcome new light on a remarkable story and on a remarkable man who deserves to be better known in this country.

R. W. Home
The University of Melbourne

Martin Gibbs: *Charles Martin: His Life and Letters*. Published by the author: London, 2011. xv, 256 pp., ill., maps, ISBN: 978-0-9529101-4-5, copies available from the author at the cost of postage (gibbsmartin@talk21.com).

In 1908, an anonymous medical student wrote, with more than a touch of braggadocio, in the University of Melbourne Medical Students' magazine, *Speculum*, that 'a unique feature of Australian Universities is the prominence of the medical schools'. Such a boast would have been inconceivable twenty years earlier, but in the late nineteenth century a small group of remarkable medical men had been lured to the new medical schools in Melbourne and then Sydney, they in turn producing remarkable graduates of their own. As a consequence, the medical schools saw a huge growth in numbers and national prominence. Charles Martin was amongst the best of these medical pioneers. Although he was only in Australia for 12 years in the first instance (1891–1903), and subsequently for three years after his retirement (1930–3), his influence on Australia and Australian science is incomparable. Also, a good deal of his nurturing of Australian scientists and institutions whilst in England seems to have been inspired by a genuine love of the country.

Amongst those who were the recipients of Martin's support were Nobel Laureates Howard Florey as well as MacFarlane Burnet, who wrote that 'I have a terrific respect for C. J. Martin …He is quite the biggest man in every respect that I have come to know.' And yet Martin has not had the attention he richly deserves. His time in the UK as head of the Lister Institute (1903–30) has been written about by Chick and others of his contemporaries; Schedvin has highlighted his important encouragement of field and interdisciplinary work and we eagerly await Patricia Morison's biography. Other Australian scholars, such as Peter Hobbins, are working on other important figures nurtured by Martin, such as Charles Kellaway, but this biography is the first substantial work to appear on Martin.

The author of this biography is not a professional historian or medical graduate but is qualified by being Martin's grandson. He has the further qualification that he had the opportunity to live for extended periods in the first 12 years of his life with his grandfather whom he remembers fondly. Family reminiscences, and what seem to be abundant family archives, allow the author to provide the reader with a full and rich description of the private Martin and his friends and family. Gibbs has been assisted by Morison and others to access most of the main archival collections. Although exhibiting some idiosyncratic stylistic quirks at times, I enjoyed reading the book very much, including those intimate anecdotes that familiarity with the subject makes possible, such as Martin's regular refrain that cleaning was merely dilution. Like all good research scientists he experimented on himself (with plague fleas of all things) and was one of the first (along with his Sydney colleagues, the anatomists J. T. Wilson and G. E. Smith and the physiologist J. H. Hill) to use Australian mammals to help explicate general physiological problems, such as internal heat regulation – although allowing an echidna to die of heat exhaustion would struggle to pass any ethics committee today. His work for the Australian Army Medical Corps in World War One and in India makes fascinating reading.

There are some factual howlers, and the book provides no real context for the social and political background and for the medical history in which Martin played such an important part. This aside, the most unsatisfactory aspect for me was that the rich archival material made available in the book was mostly referenced under the title 'Family archives' without any provenance or indication as to how other scholars could possible gain access. I sincerely hope that these archives will be made available for research one day.

It needs to be noted that medical research in Australia is disproportionally highly funded in relation to other research when compared to other OECD countries due, in part, to the very strong biomedical tradition that began in Melbourne one hundred years ago. Martin is an integral part of that story and much still needs to

be written about his important role in the development of science in Australia. With the caveat concerning the family archives in mind, this biography should provide rich source material for future historians.

Ross L. Jones
University of Sydney

Emily O'Gorman: *Flood Country: An Environmental History of the Murray-Darling Basin.* CSIRO: Collingwood, Vic., 2012. x+ 257 pp. + index, illus. (colour), ISBN: 9780643101586, AUD $49.95.

Just how to manage for the benefit of all users, the highly variable water resources of Australia's largest drainage basin, containing the Murray–Darling River system, has been the subject of on-going and often heated debate for decades. Ironically, on the world's driest continent, an important consideration within these debates has been how best to prevent or lessen the devastating impacts of flooding that regularly happens within the basin.

As Emily O'Gorman shows in *Flood country*, floods constitute a central theme in the history of the area. Moreover, she believes that this history can be used to inform any future dialogue that takes place on flooding and related subjects. In the words of the author, this book aims to bring 'the region's flood history into conversation with very contemporary national debates'. O'Gorman draws other relevant elements into that conversation, also, including the impact of ENSO, climate change, the value of local knowledge, and human perceptions and memories of living in 'flood country'.

The structure of O'Gorman's narrative is basically chronological, built around four significant flood events within the Murray–Darling Basin (MDB), from 1852 to 1990. After a brief Introduction, the context, circumstances and impacts of these floods are examined in detail, each in a separate chapter: Gundagai 1852 (Chapter 1); Bourke 1890 (Chapter 3); Mildura 1956 (Chapter 5); and Cunnamulla 1990 (Chapter 7).

Each of these episodes of flooding leads to a rethinking about how the affected communities related to the rivers, and how to prepare against future overflows. New perspectives are often mirrored by new strategies and the development of new technologies, or a fresh use of existing forms. Such shifts are part of the history of the MDB and are explored in this study in a series of chapters interspersed between the flood stories. Chapter 2 focuses on the impacts of pastoralism and mining on stream environments (and *vice versa*) in the Basin in the period 1850 to 1890; Chapter 4 extends the period of coverage to 1956 and looks at the rise of engineering solutions to problems such as erratic water flows in the Basin; Chapter 6 charts the increased use of dams in the wake of the failure of engineering, particularly in the 1956 floods on the Murray.

A short Conclusion succinctly summarises the enormous detail provided in the preceding chapters. O'Gorman also underlines here the importance she sees in understanding the diversity of views regarding floods—from individuals, through communities, to government bodies. As she notes, knowledge and understanding of floods is perhaps even more important today as communities engage with the likely effects of climate change.

In a world of finite resources, environmental debates are always multifaceted, in keeping with the enormous range of ways in which humans regard and, as a result, interact with their environments. The historian's task in attempting to reconstruct the debates revolving around conflicting demands on the environment is to unpick the threads of complex arguments, set the contesting perspectives in their appropriate contexts (which often draws in concepts from much wider spheres), and explain the outcomes. Most importantly, one needs to be even handed and give all arguments an equal hearing.

In all of these tasks, Gorman has done a commendable job. The breadth of research and thought that has gone into this book is evident in the diversity of historical perspectives it presents. These include the views of scientists working in meteorology, hydrology, agriculture and, more recently, climate change. Advances in these disciplines are a significant element in the way floods have been managed or controlled since the latter part of the nineteenth century. Similarly, knowledge in the field of hydrological engineering has increased as a result of its input into managing water flows in the MDB. Many other perspectives have been aired in the debates about the control and use of water, and

O'Gorman considers them all. State and federal ministers have their say, as do farmers and residents. A continuing theme through this book is the sometimes tense opposition between local knowledge and official directives.

The book is well referenced, and profusely illustrated, including a section of coloured plates. A few of the images appear redundant but that is not a major concern and does not detract from what is an excellent environmental history. The recurrent inundation that has occurred on the floodplains on the Murray and Darling Rivers has never been the subject of a Royal Commission, unlike drought and fire, the other two formative features of rural Australia. It is to be hoped that this book achieves the author's ambition and becomes a part of any future discussion, including Royal Commissions, on the management and control of water in Australia's most important hydrological system.

Gary Presland
Melbourne School of
Land and Environment
The University of Melbourne

Palle B. Petterson: *Cameras into the Wild: A History of Early Wildlife and Expedition Filmaking, 1895–1928*. McFarland & Company, 2011. 228 pp., ISBN: 9780786461660 (PB), AUD $45.00 (ebook).

Cameras into the Wild is a work from the history of cinema that offers some interesting material for environmental history, in particular the history of Western attitudes to nature and the wilderness movement. As Petterson attests, the book (based on his PhD) is the compilation of 'the information I have been able to collect on nonfiction films containing wildlife and wilderness aspects'. Given the difficulties of preserving and locating early films that Petterson describes, his research efforts are impressive. Petterson registered 715 films produced between 1895 and 1928 that contained aspects of 'nature'. This included films documenting travels or expeditions, hunting films, and scientific and educational films that Petterson was able to view or read about in a detailed synopsis. This alone makes the book a useful reference for those interested in the genesis of filmmaking and understandings of 'wilderness', and for putting Australian nature film-making into a broad context.

Petterson divides his history into five chronological sections 1895–1902 'First Attempt to Make Nature Films', 1903–6 'Nature and Wildlife Films Take Form', 1907–10 'Exploring Borderlines' (which includes a discussion of Australian photographer Francis Birtles), 1911–21 'Concern for Nature Preservation' (which includes a discussion of Australian photographer Frank Hurley), and 1922–8 'Higher Quality and Different Conventions', each of which is given a chapter. The most detailed sections of the book are the chapters on the period from 1911 where there is more biographical source material and more complex films for Petterson to examine. In earlier chapters, the scarcity of surviving films shows through despite Petterson's valiant efforts to draw what conclusions he can.

The structure of each chapter is similar with a section describing the technological developments of the period for filmmaking and exhibiting, then a section detailing the 'important' films and filmmakers of the period. This structure means the bulk of the book consists of summaries of technological developments, descriptions of the content of key films and short biographies of key filmmakers. The overall effect makes this book read more like a catalogue than a history. While he does include occasional comparisons and points of analysis, Petterson pursues few of the underlying themes evident though the films he describes. Most of Petterson's analysis occurs in a chapter titled 'Getting around the subject' which contains a brief film-history literature review, methodology section and very short skim over some of the historiography and theory of 'nature'. These sections, presumably adapted from his methods and literature review sections of this PhD, offer few new insights to scholars familiar with these fields.

The book does offer some interesting primary evidence for changing popular attitudes towards nature. For example, Petterson charts the changing fashions of nature films from technically simple films showing the motion of waves—which were apparently very popular, then to the popularity of hunting films that focused on the excitement of the chase (that sometimes included set-piece scenes with semi-tame animals) and finally, to the growing numbers of 'nature protection films' that highlighted the plight of endangered species. Interestingly, Petterson observes

that from the 1910s, hunting films declined in popularity as the capture of footage of undisturbed animal behaviour came to be seen as a sign of a filmmakers' skill and a film's quality. These insights into changing fashions of film could usefully be compared with contemporary changes in public taste for writing and still-photography and it is a shame Petterson does not explore this further. Indeed, one of my chief frustrations with the book is that Petterson does little more than point to broader themes and the contextualising he does do tends to be simplistic and more concerned with categorising that synthesising. Similarly, there are sections where Petterson makes simplistic observations about method and sections where he uses problematic terms like 'nature', 'unspoiled' and 'wilderness' without qualification.

To be fair, Petterson does not claim his work to be environmental history or history of ideas and his work perhaps works better in the history of film history or cinema studies. Also, this book should not perhaps be judged too harshly as it a pioneering attempt at researching a previously largely unexplored body of source material. With this mind, *Cameras into the Wild* is best described as a useful reference on early wildlife filmmaking. Those looking for a more synthesised account, or any reflections on national trends, should perhaps wait for another work that examines this material in a socio-geographical context.

Chris Soeterboek
Hobart

Brian D. Tait (ed): *More than a Footnote: the Story of Organ Transplantation in Australia and New Zealand.* Australian Scholarly Publishing: North Melbourne, VIC, 2012. xxix + 567 pp., illus. (colour), ISBN: 9781921875229 (HB).

This collection of essays on the history of organ transplantation in Australia and New Zealand features chapters by nurses, physicians, surgeons and administrators, all of whom have worked or are currently working on aspects of organ transplantation. The editor, Brian Tait, and his support team are to be congratulated for the breadth of their vision in commissioning contributions to this book. There are chapters from patients and a donor family as well as from transplant coordinators and there is also a chapter on the Transplant Games, highlighting some of the activities of people living with solid organ transplants.

As with most histories compiled by practitioners, the strength of this volume is in the detail, while the weakness is in the absence of a broader contextual framework. However, some of the detail is very interesting indeed and makes an important contribution to our understanding of developments in transplantation at the level of the individual hospital. This is especially the case with the first eighteen chapters, in which leading practitioners outline their own experiences and how some of the clinical problems of transplantation were overcome. There are chapters on renal, heart and lung and liver transplantation, as well as a chapter on the transplantation of pancreatic islet cells.

An unfortunate regional hierarchy emerges through these chapters, with an emphasis on New South Wales and Victoria, the other Australian states and territories and then New Zealand receiving rather more minor billing. Never the less, through eighteen solid, detail-packed chapters, practitioners tell their valuable stories about the multi-disciplinary work that lies behind all successful solid organ transplants.

Unfortunately, this volume fails to examine changes in the reasons why solid organs fail – the epidemiology of organ failure or the 'demand' side of the organ transplant equation. Contrary to popular opinion, 'demand' has not simply risen over time, but has been affected by patterns of drug use, and disease epidemics. Tait has, however, gone to considerable trouble to provide due coverage of the 'supply' side of this story. There are two chapters on the history of organ donor coordination as well as a contribution from the family of an organ donor and this section of the book is followed by contributions from six transplant patients. It is not clear, however, why these sections are followed by a chapter on matching for organ transplantation which might better have preceded them. The chapter on the Transplant Games could then have directly followed the patients' stories.

This is a long book at 567 pages, including references, and the more controversial side to the transplant story is buried well towards the back. The two chapters on xeno-transplantation begin at page 429 and the two chapters on experimental

transplantation follow. However, I could not find any mention of the protests which have so often accompanied research using animals, such as the paint-bombing of researchers' cars in Sydney in the 1970s.

This volume was sponsored by the Transplantation Society of Australia and New Zealand (TSANZ) and the Asia-Pacific Histocompatibility and Immunogenetics Association (APHIA), (as well as Novartis Pharmaceuticals). This is appropriate because the final two chapters offer brief organizational histories of the TSANZ and the APHIA.

Overall, this book provides little information on the broader scientific and clinical context of transplantation elsewhere, or the ethical debates over the new definitions of death that were central to the transplant story in the 1970s and 1980s, but it does provide a solid coverage of the history of Australasian transplantation from the perspective of multiple scientists and clinicians who were participants in the story. In summary, this volume offers an enormous amount of detailed information on the history of solid organ transplantation in Australia and New Zealand.

Sally Wilde
Brisbane

Peder Roberts: *The European Antarctic: Science and Strategy in Scandinavia and the British Empire*. Palgrave Macmillan: Houndmills, 2011. 284 pp.,
ISBN: 9780230115910 (HB), AUD $145.00.

Peder Roberts holds that the Antarctic is 'a screen upon which European values, dreams, and anxieties have been projected'. In *The European Antarctic* he explores those values, dreams and anxieties through the scientific activities of governments and individuals in Britain, Norway and Sweden. For the British, he asserts, science was a tool of colonial administration and imperial development, for mastering nature and achieving environmental authority; for the Norwegians, science was the outgrowth of gentlemanly capitalism pursued in the absence of the state, for the definition of the nation and the success of the whaling industry; and for the Swedish, it was part of the definition and identity of academic culture, Swedish nationalism and Nordic regionalism.

The book's seven chapters proceed episodically through the first half of the twentieth century, but cohere well given the close associations and developments of the actors. The first chapter explores how a failed 1912 Swedish proposal for a whaling concession in the Falkland Islands Dependencies led the British into a deeper colonial relationship with the Antarctic. Following the First World War, this relationship was institutionalised in the Discovery Committee and Investigations—described in Chapter 2—which, with the proceeds of the whaling industry, studied all aspects of whales, embedding science and its attendant 'environmental authority' at the heart of the imperial enterprise. Chapter 3 explores Norwegian Antarctic science in the inter-war years, showing how commercial activity developed, in the absence of official state interest, under the influence of the 'gentlemanly capitalism' of whaling magnate Lars Christensen. Chapter 4 investigates the development of a culture of polar exploration at the University of Cambridge in the interwar years under the aegis of the Scott Polar Research Institute. Chapter 5 describes the interwar efforts of Swedish geographer Hans Ahlmann to re-invigorate Swedish polar exploration, emphasising scientific over geographic work and cultivating contacts within Britain. It was Ahlmann's work and contacts that led to the Norwegian-British-Swedish Antarctic Expedition (NBSX) of 1949–52, discussed in Chapter 6. The final chapter explores science and politics in the 1950s, showing how the American and Soviet projection into the Antarctic, and the attendant International Geophysical Year, disrupted the British and Norwegian 'nexus between science and sovereignty' and challenged the structure and culture of polar exploration and science which had developed in the interwar years.

But, readers of *HRAS* will ask, what about Australia? By virtue of its place in the British Empire, Roberts does explicitly include Australia, among others, within the 'European Antarctic'. Yet Australia is, understandably, a very minor part of this book, with the Australian government and individuals (principally Douglas Mawson) appearing only very briefly. Read with Australia in mind, though, parts of this book provide excellent counterpoints to well known events and periods of Australian concern and reveal the worlds into which some Australians ventured. For example, Roberts' discussion of Norway's interwar

activities allows us to appreciate what was motivating Hjalmer Riiser-Larsen when he sailed into the Southern Ocean at the same time as Douglas Mawson's British Australian New Zealand Antarctic Research Expeditions (BANZARE) of 1929–31.

While Roberts' book is embedded in the dominant spatial-geographic mode of Antarctic historiography, it makes at least three important contributions. First, it offers the first sustained inquiry in English of Norwegian and Swedish Antarctic histories in the first half of the twentieth century—this is an invaluable contribution, which corrects the Anglo-centric tendency of our scholarship. Second, it demonstrates the importance of a transnational approach for understanding Antarctic history. At several points, Roberts shows how developments in one country had been influenced by official, scientific or professional cultures and developments in another. And finally, Roberts offers a *longue durée* of Antarctic ideas, joining the early twentieth century to the years preceding the Antarctic Treaty of 1959. In so doing, he emphasizes how the interwar years entrenched certain visions of the Antarctic into official, scientific and professional thinking, and how these visions were disrupted, though certainly not surpassed, by the new 'age of science' ushered in by the International Geophysical Year.

It would be unfair to review this book on the basis of its contribution to Australian historiography. Nevertheless, Roberts seems to rely on a conception of the British Empire as simply Britain and its South Atlantic possessions, without fully taking account of the extra-European aspects of Britain's imperial identity. Roberts recognises the historical fact of Australia's position as a self-governing dominion within the Empire (and later Commonwealth), yet in his account Australia and the other interested dominions are only passive onlookers in the development of the Imperial Antarctic policy, articulated at the 1926 Imperial Conference.

Even without a major focus on Australia, readers of *HRAS* should take note of this fine study for what it can offer to Antarctic history as a whole. Indeed, scholars should take up the implications of Roberts' work. Roberts' study insists that we pay attention to transnational links and seek to analyse scientific programmes in the Antarctic for what they reveal about the values, dream and anxieties of those pursuing them. Antarctic historical scholarship continues to develop in critical and fascinating directions, and with this book, Roberts has offered a major waypoint in that development.

Alessandro Antonello
School of History, Research School of Social Sciences
Australian National University, Canberra

Robert Lehane: *Duelling Surgeon, Colonial Patriot: The Remarkable Life of William Bland.* Australian Scholarly Publishing: North Melbourne, 2011. ISBN: 9781921509841 (PB), AUD $44.00.

Robert Lehane's study brings engagingly to life one of the more colourful characters in a time and place noted for controversy: colonial New South Wales between 1814 and 1870. William Bland was indeed a remarkable figure, and his biographer does ample justice both to the man himself and to his context, in a highly readable work.

The book begins with the dramatic events that brought Bland to Sydney in 1814, and his early years in the colony. The son of a London physician, Bland trained in surgery, and in 1809, amid the Napoleonic wars, became a naval surgeon. A few years later, at Bombay, an exchange of insults between officers led to a duel: Bland's pistol fatally wounded his opponent, and he and a colleague were tried for wilful murder. The code of honour being invoked on his behalf, his sentence was not death but instead transportation to New South Wales for seven years.

Bland now found himself among all the tensions, inconsistencies and contradictions of a society in which free settlers and convicts lived in close contiguity and mutual dependence. A beneficiary of Governor Macquarie's enlightened policies, Bland was quickly appointed to a government medical post, and soon received a conditional pardon, after which he set up his own medical practice. There followed a disastrous marriage to a young woman who combined a missionary background with sexual promiscuity, and in 1818 Bland spent a year in prison for libel, after an anonymous manuscript lampooning Macquarie was found on the Parramatta Road. This episode introduces several important elements of Bland's story: the volatility of

colonial politics, the powers of early governors, his own ardent temperament, and his passion for political involvement.

Bland prospered during Brisbane's rule, establishing a successful medical practice and acquiring land, while also treating *gratis* the inmates of Sydney's Benevolent Asylum. The harsher regime of Darling led him to protest against the restriction of press freedom, to campaign for trial by jury and representative government, and to form a lasting political alliance with William Wentworth. Under Bourke's reforming governance, these two took the lead in founding the Australian Patriotic Association, and later entered the new Legislative Council as members for Sydney. Later still, they joined in supporting a renewal of transportation, albeit for different reasons. Bland opposed the growing power of the squatters, and advocated transportation with assignment, not as a source of cheap labour, but as affording Britain's offenders the best chance of reform and a better life.

Lehane handles with a sure touch the complexities of the colonial political scene, and ably weaves together Bland's political role with his many other concerns. One of these was the promotion of education, and Bland was closely involved in setting up Sydney College, so that colonists might send their sons there rather than overseas.

Absorbing details of Bland's work as a medical practitioner emerge throughout the book, often via press reports of inquests in which he was a witness, of disagreements among doctors, or of the illnesses of notables among Bland's patients. His reputation as a doctor stood high, and his generosity toward the sick poor won him renown. He was also something of an inventor: his scheme for extinguishing fire in wool cargoes aboard ships had some success, but his 'atmotic' airship never came into being.

Through Lehane's lucid prose and careful research, William Bland emerges as a man both likeable and admirable: a broad-minded intellectual of democratic views; a humanitarian devoted to social justice; a passionate soul whose human failings were rather endearing, and whose career, medical and political, greatly benefited the society in which he lived.

Anthea Hyslop
Melbourne

Notices

Tom Brooking & Eric Pawson (eds): *Seeds of Empire: The Environmental Transformation of New Zealand.* I. B. Tauris, 2011. 256 pp., ISBN: 978-0-85771-920-1, £59.50.

This is a collection of essays from different disciplines that highlights the environmental and cultural significance of exotic grasses in European colonies. The authors argue that the introduction of these grasses in New Zealand was carried on to such an extreme, that its forest-scapes were replaced by what became idealized scenes of pastoral productivity. In an imperial context the grasses formed the basis of a larder for Great Britain, but at the cost of local biodiversity.

Bernadette Hince (ed.): *Still No Mawson: Frank Stillwell's Antarctic Diaries 1911–13.* Australian Academy of Science: Canberra, 2012. 240 pp., illus., ISBN: 978 0 85847 330 0, AUD $24.95.

Frank Stillwell spent 17 months in Antarctica as a geologist under the leadership of Douglas Mawson. In this book Hince has for the first time published the complete diary kept by Stillwell that is now in the possession of the Australian Academy of Science. The diary is a record of everyday life at the main base camp at Commonwealth Bay, but is very far from mundane. The beautifully illustrated and annotated diaries, capture Stilwell's sense of scientific discovery, and danger that the 23 year-old experienced in equal measure as part of the Australasian Antarctic Expedition.

Gwen Pascoe: *'Long views & short vistas': Victoria's Nineteenth-Century Public Botanic Gardens*. Australian Scholarly Publishing: North Melbourne; State Library of Victoria: Melbourne, 2012. 288 pp., illus, ISBN: 978-1-921875-82-3 (PB), AUD $49.95.

Although they cannot be regarded as scientific institutions, as Pascoe argues in this book, Victoria's nineteenth-century public botanic gardens were places of 'scientific significance'. Thus to readers with an interest in applied botany, and in the history of the acclimatisation movement, *'Long views & short vistas'* will be an important work of reference, especially in its detailed chronologies and appendices at the end of the book.