

Reviews

Nautical Archaeology Society *Underwater Archaeology: The NAS Guide to Principles and Practice (Second Edition)*. Wiley-Blackwell Publishing, Chichester, 2008; xiv + 226 pages, 131 illustrations, 52 colour plates; paperback; ISBN 978-1-4051-7591-3. AUD 59.95 (inc. GST).

The long-awaited follow-up to the original 1992 Nautical Archaeology Society (NAS) handbook, *Archaeology Underwater: The NAS Guide to Principles and Practice* (edited by Martin Dean, et al.), is an amply-illustrated, easy to follow guide that provides a good general introduction to the techniques and principles of archaeology in submerged and semi-submerged (foreshore) environments. Like its predecessor, the new 'NAS Handbook' (as it is popularly known) addresses topics ranging from initial involvement in underwater archaeology projects to post-fieldwork analysis and publication of results, but has benefited from the addition of six new chapters that include an array of pertinent subjects, including underwater cultural heritage legislation, archival research, archaeological conservation, and site monitoring and protection. Contributing authors were tasked to develop individual components of the book based on their respective fields of expertise. The book is printed in a larger format on better quality paper than the first edition, and features several full-page colour plates, thereby enhancing its overall appearance and readability. Thankfully, many of the explanative drawings rendered by Ben Ferrari that were a unique and appealing feature of the first edition have been retained and adapted, and are augmented by equally informative original artwork produced by Graham Scott.

In many respects, the coverage of the book – like that of its predecessor – is restricted to the United Kingdom, as evidenced by the archaeological sites and related subject matter featured throughout the text and figures. This limited international perspective is unfortunate (and perhaps a bit surprising) given the widespread dissemination and popularity of the first edition, especially among overseas government and university-based maritime archaeology programmes. That said, images of a few ethnographic and archaeological ship examples outside the United Kingdom (including Sweden's *Vasa*, a nineteenth-century shipwreck at Dor, Israel and an Indian three-log *kat*), are scattered throughout the volume. Additionally Chapter 7 ('International and National Laws Relating to Archaeology Underwater') provides a general discussion of submerged heritage legislation currently in place within the United States and Europe, as well as case studies of legally contested shipwreck salvage projects in Canadian, South African, Chinese, U.S. and international waters. The discussion of UNESCO's international *Convention on the Protection of the Underwater Cultural Heritage* (2001), while perhaps too brief, is effective in outlining the Convention's background and salient points, as well as touching on its international ramifications.

As with the first edition, the text is organised according to chapter, section and subsection; however, the new version has done away with the cumbersome numerical cross-reference system that characterised the original volume and relies instead on text-based titles and subtitles that are much easier to follow. The first chapter addresses the philosophy behind the development of the NAS Handbook, and is followed by two sections (Chapters 2 and 4) that provide a general introduction to archaeology underwater and basic principles of archaeological investigation. The latter is particularly useful, as it effectively demonstrates topics such as the importance of submerged archaeological sites, site types, links

between categories of evidence, and site-formation processes in a concise, clearly written, and organised manner. The inclusion of a brief section (Chapter 3) that offers ways to become involved with underwater and foreshore archaeology projects, while useful, is awkwardly positioned between the two introductory chapters on archaeology. It would have been better to include this section either before the material discussed in Chapters 2 and 4, or at the end of the volume, perhaps in conjunction with Appendix 3, which discusses the NAS Training Programme in Foreshore and Underwater Archaeology.

Chapters 5 and 6 discuss project planning and safety, and provide a good overview of these topics in very general terms. Notable for their absence in the new edition are images – such as the Ben Ferrari drawings in the original volume that showed the organisation of equipment aboard a project support vessel – that visually depict and reinforce key points outlined in the text. As mentioned previously, Chapter 7 addresses national and international legislation applicable to underwater cultural heritage, and is particularly effective in its discussion of jurisdictional zones established in the United Nations Convention on the Law of the Sea (UNCLOS), and their application in international waters. Similarly, it provides a good summary of other legal issues that pertain to submerged archaeological sites, including the applicability of international salvage law, and the definition(s) of ownership and abandonment. The chapter's discussion of national legislation is useful, but could have benefited from one or more appendices that summarise attributes specific to various national cultural heritage statutes currently in existence (such as those alluded to on pages 48–49 for Australia, Turkey, Greece, and others).

The sections that address the topics of archaeological recording, position fixing, and underwater search and survey methods (Chapters 8, 11, 12 and 14, respectively) are generally better than the drafts that appeared in the first edition, and are augmented by new chapters that discuss archival research, photography, and geophysical and remote-sensing surveys (Chapters 9, 10 and 13). All are clearly and concisely explained, and in most cases accompanied by the simple – but extremely effective – illustrations of Ferrari and Scott. Unfortunately, the order in which some chapters are arranged once again doesn't seem to follow a logical progression. For example, the section that addresses archaeological photography seems out of place wedged between the chapters that discuss archival research and position fixing, and would have better complemented the chapter about archaeological illustration (Chapter 18) at the end of the volume. A small number of images in these sections (i.e. Figure 13.4 on p. 110) are poorly reproduced, and it is somewhat disappointing that the book fails to provide website links to free downloadable site recording software (such as Site Recorder and Site Surveyor), even though these programs are specifically referred to in the text.

Chapter 15, which explores destructive investigative techniques such as subsurface probing and excavation, does not differ appreciably from the version that appeared in the first edition; however, the effectiveness with which this material was originally addressed and illustrated warrants the similarity. The chapter that follows ('Archaeological Conservation and First-Aid for Finds') is an entirely new addition to the book, but is no less effective in addressing its subject. Topics ranging from underwater burial environments to occupational health and safety for conservation technicians are discussed at length, mostly in abbreviated bullet-style

points that avoid the jargon and complexity that sometimes characterises publications in archaeological conservation and conservation science. It is by no means a guidebook to the discipline's most current methods and materials – and notably lacks a few well-known archaeological conservation treatises in the References section – but serves well as a primer to the uninitiated. Similarly, Chapter 17 provides a good general overview of underwater and foreshore site monitoring and protection, and explores some of the methods currently in use to detect and retard short- and long-term impacts to in situ deposits and features.

The final three chapters of *Underwater Archaeology* consider the topics of archaeological illustration, post-fieldwork analysis and archiving, as well as presentation, publicising, and publication of the results of underwater archaeological research. The section addressing archaeological illustration is a new addition developed from a subsection of Chapter 12 ('Post-Fieldwork Recording, Analysis and Publication') in the original volume. It is refreshing, in this age of digital cameras, CAD software and 3D laser scanners, to see a widely publicised work that stresses the continued relevance and significance of hand-drafted archaeological drawings and illustrations. The chapter's only real drawback is its placement within the book, which would seem more logically suited to follow the sections about analysis and publication rather than precede them. The final two chapters are well organised and written, and nicely summarise the ultimate goal(s) of archaeology underwater: to share the results of research with peers and the public, and ensure data is accurately interpreted and effectively archived for future generations. Two appendices – one dealing generically with anchor recording and the other with muzzle-loading shipboard artillery – are useful and informative; however, the former (Appendix 1) would have benefited from visual examples of the various types of stone and stocked anchors referred to in the text, as well as a brief discussion of anchor variants that have been identified from East Asian archaeological sites (thereby satisfying the 'global' aspect of the NAS Big Anchor Project). The volume would also benefit from at least one additional guide that addresses, in very general terms, ship timbers and hull construction. A third appendix briefly advertises the NAS Training Programme in Foreshore and Underwater Archaeology and is followed by a short glossary, fairly comprehensive – but largely UK-specific – list of references, and an index.

Underwater Archaeology is visually appealing, easy to follow, and a deserving successor to the original NAS Handbook. It effectively addresses the discipline(s) of underwater and foreshore archaeology in a sensible and enlightening manner, and its approach to principles and practical elements is equally engaging and informative. It is the perfect introductory text for both undergraduate students and interested members of the diving public, and deserves to maintain its reputation as one of the world's most widely disseminated, recognised and utilised maritime archaeology books.

James W. Hunter, III
Maritime Archaeology Program
Department of Archaeology, Flinders University

Peter Veth, Peter Sutton and Margo Neale (eds) *Strangers on the Shore: Early Coastal Contacts in Australia*. National Museum of Australia, Canberra, 2008; 320 pages; paperback; ISBN 9781876944636. AUD 29.95 (inc. GST).

Like most children who attended school in Australia during the 1970s, I was given the strong impression that the 'discovery' and European settlement of Australia was a very

British affair: on sports days, we all ran, jumped and threw things in honour of 'houses' named after explorers like Cook, Flinders, Kennedy and Mitchell. This book presents research that refutes this anglocentrism, emerging from a conference that marked the 400th anniversary of 'the first recorded visit by outsiders to Australia', the voyage of the Dutch *Duyfken* under Willem Janszoon to Cape York in 1606. Fifteen chapters explore diverse forms of contact between Indigenous peoples and visitors, including Macassans, Dutch, English and French, from around the continent's fringes.

Peter Sutton's and Peter Veth's introduction advocates a cross-cultural, comparative approach that combines a wide range of evidence: a style of approach exemplified in the United States by Kent Lightfoot's Californian research and in Australia by Rodney Harrison's work on the pastoral industry. Indeed, the fifteen contributions to the volume draw upon a range of disciplines, and reveal tremendous diversity – although readers of this journal will note that around half the chapters are authored by archaeologists. Its organisation is loosely temporal, beginning with Colin Sheehan's account of Dutch voyages to Australia for the Dutch United East India Company (VOC), which explains the company's Asian economic policies in the context of its emergence from the Netherlands' unique 'federal republic', a loose collectivity of town governments that permitted it to become a major European power by the mid-seventeenth century. Peter Sutton examines Dutch-Australian contact in Cape York 1606–1756, focusing on Indigenous social and emotional reactions to the Dutch. Through a fascinating and detailed study of the various versions that make up the historiography of these early encounters, he explores historians' common emphasis on violence and Indigenous 'resistance', at the cost of 'more trusting, ambiguous and even quite mysterious forms of contact' (p. 39) that expressed 'feelings' such as aggression, demand-sharing, betrayal, grief, fear and seeming indifference.

Fiona Skyring and Sarah Yu combine documentary and oral histories for Karajarri country, south of Broome, tracing the history of conflict surrounding white transgression of indigenous protocols in the pursuit of resources such as land, pearl shell or sex and showing how these people resisted invasion and 'maintained cultural integrity'. Margo Neale explores how Indigenous people employ visual narratives that embody 'self-liberating strategies' to challenge colonial stories/versions of the past. Beginning with a detailed analysis of Rembarrnga (Katherine region of the Northern Territory) artist Paddy Fordham Wainburranga's famous bark painting, 'Too Many Captain Cooks', Neale contrasts western modes of remembrance with visual techniques of inversion, parody and irony that tell the story of colonialism from an Indigenous point of view.

Shifting to the south, Jo McDonald examines encounters between black and white in Sydney, from Cook's first visit to Botany Bay (known to the local Gweagal people as Gamay) in 1770, focusing on the region's rock art. She notes the paucity and limited range of contact art in the region, reflecting the rapid and profound disruption of local traditions, and the seeming lack of cross-cultural communication that contrasts with the situation in northern Australia, where Indigenous artists expressed their interaction and familiarity with Macassans in detailed, peopled images.

John Mulvaney examines the d'Entrecasteaux expedition of 1792–1793 and its encounters with the Tasmanian Aboriginal people of Recherche Bay, south of Hobart, over an eight-week stay. Accounts by the French offer a 'precious record of Indigenous culture only ten years before British settlement overwhelmed traditional ways' (p. 116), as well as evidence of exchanges of ideas and goods. Mark Staniforth reviews the evidence for whaling as a form of cross-cultural

interaction and the involvement of Indigenous people in the industry in an examination that takes in Canada and North America as well as New Zealand and Australia.

Campbell Macknight reviews his forty-year study of Macassan trepangers (collectors of sea-cucumber) in Arnhem land, noting new insights such as evidence for the origins of the industry, the influence of the Chinese market, his own argument for the introduction of smallpox from Indonesia, and the identification of active Indigenous responses to outsiders. He notes how the history of trepanning has been turned to more recent political use at national, regional and Aboriginal community levels, but finishes on a poignant, personal note that explains his interest in Yolngu and Makassan worlds as a bridge to a new and cosmopolitan view of human experience.

In a particularly self-reflective essay, Anne Clarke and Ursula Frederick ask how to draw upon rock art from the Groote Eylandt archipelago, on the western side of the Gulf of Carpentaria, in ways that move beyond the simple shock of the new and unfamiliar. Instead of simply focusing upon exchange in the past, however, they use a 'framework of performance' to examine the processes of translation, transformation and mediation required to represent the past in the present, and consider the ways that this is, in itself, a form of cross-cultural interaction.

Ian McIntosh returns to trepangers in a consideration of a Yolngu sacred history of an idyllic, mythical pre-Macassan age characterised by harmony and reciprocity between black and white. Memories of rice-growing, iron-making and weaving as well as multi-racial armies and villages are centred upon the peninsula known as Dholtji (or Cape Wilberforce), where it is possible that exiles from the Indonesian Kingdom of Gowa settled in 1667. This body of Dreaming law remains very important to Yolngu descendant clans, who have incorporated a range of related ceremonies and stories into their lives, using its ideal of harmony as a benchmark for their dealings with more recent outsiders.

Len Collard and Dave Palmer examine the encounter between western sailors and Nyungar on the coast of Western Australia, combining techniques of imaginative story-telling with the historical record to create a space for an Indigenous perspective.

Maria Nugent re-examines various meanings ascribed to Captain Cook's landing in Botany Bay in 1770, suggesting that this foundational moment of British settlement has been (mis)understood as either a contest between cultures, or more recently as meeting place. She reconstructs traditional protocols surrounding such encounters to reveal intense, if indirect, engagement with the strangers. James Warden considers the intellectual framework that gave meaning to the few pre-settlement European encounters with Aboriginal people recorded by Dampier, Cook and Banks. Maritime archaeologist Michael McCarthy discusses the Australian Contact Shipwrecks Program, and its potential to shed light on interactions between shipwrecked sailors and Indigenous peoples.

Overall, this very diverse collection represents an impressive depth of scholarship, comprising mostly substantive research (with up-to-date references to further reading), although several contributions offer self-reflection too. Such collections are necessarily varied in coverage and approach, and such a topic, defined from the first pages as aiming to uncover and analyse historical diversity, underlines the volume's variety. Initially, I wondered whether the book was intended to celebrate encounters on the beaches as the archetypal or emblematic form of cultural exchange. Sometimes this kind of contact has tended to dominate popular perceptions of colonialism, offering the on-the-beach drama of tense, violent, or romantic encounters between

radically different traditions at the expense of considering the longer-term, more familiar, disciplined and disciplining colonial regimes that have continued to shape race relations into the present. But this is a far more sophisticated enterprise than that. I thoroughly enjoyed this thought-provoking and wide-ranging collection, and can recommend it wholeheartedly to others.

Jane Lydon
Monash University

Bryn Williams and Barbara L. Voss, (eds) *The Archaeology of Chinese Immigrant and Chinese American Communities. Thematic issue of Historical Archaeology 42(3), Society for Historical Archaeology, 2008; v + 194 pages; paperback; ISSN 0440-9213.*

This volume on Overseas Chinese historical archaeology is a welcome and long overdue addition to the discipline. Over several centuries the Chinese diaspora saw thousands of people, mostly unattached males, move from the coastal provinces of southern China to various parts of the globe. Lured by gold discoveries and the need for labour on plantations, railways and other economic ventures, early Chinese immigrants became integrated with the processes of European colonial expansion. The Chinese diaspora therefore ranks as one of the largest and most influential migration events in world history. Yet its social, economic and political impact on the development of the modern world has, until recently, barely been acknowledged.

Research on the subject has largely been spearheaded by the fields of history and immigration studies, which in the last decade have recognised the diversity, social complexity and dynamism within the diaspora, and highlighted the important roles the Chinese played in the socioeconomic development of Australia, the US, and other western nations. Such complex analyses, however, have largely been lacking in historical archaeology which, despite its stated interest in the formation processes of the modern global system, has tended to treat the Chinese diaspora as a curious subtext and its study as a narrow, specialist field. This volume, which actively seeks to situate the historical archaeology of the Overseas Chinese within new, emerging narratives of diaspora studies, marks a significant step towards redressing this situation.

The volume begins with a succinct but comprehensive overview by Voss and Allen of the history of Chinese immigration to the United States and past and present research directions, and then embarks on a number of individual case studies of Chinese settlements, cemeteries, habitation sites and material culture both in urban and rural contexts. In addition, it presents a paper by Wegars on the Asian American Comparative Collection and a bibliography by Shultz and Allen of published and unpublished references on Overseas Chinese archaeological sites.

The remainder of the volume contains a diverse array of approaches and subject matter, but it is possible to detect some central themes in the issue. One of the most significant of these is that of agency. It is one of the great myths of the Overseas Chinese that they were passive recipients of discrimination, when in fact power negotiation between the immigrant and host communities was multi-faceted and multi-directional. Baxter's analysis of the anti-Chinese movement in California, for example, highlights the way Chinese immigrants actively resisted oppression and discrimination through their social organisations, the formation of protective precincts (Chinatowns), letter writing, legal action and open violence. This theme is also explored by Fosha and Leatherman in their study of the Chinese community of Deadwood, South Dakota.

If there is any criticism to be made of these studies, it is that the Chinese response to the anti-Chinese movement is portrayed as relatively simplistic and reactive. Overseas Chinese communities were not homogenous and therefore their relationship with the host community was not always united, and nor was their reaction purely defensive. Studies of Overseas Chinese communities presented in other forums have begun to reveal complex power negotiations and assertive roles (e.g. Chan, 1999, 2001; Curthoys 2001; Lydon 1999, 2001; Rains 2005; Wong Hoy 2007).

Another theme in the volume is the fluidity of identity. In particular, the notion that Chinese immigrants maintained trans-national identities, being involved in the political, economic and social affairs of both their home and host countries. This concept is particularly evident in two studies of cemeteries, one by Smits and another by Kraus-Friedberg, but can also be read elsewhere. Smits, for example, in an examination of the Chinese section of Portland's Lone Fir Cemetery, presents the archaeological and documentary material evidence of Chinese immigrants and their descendants establishing trans-national economic and social practices. While still maintaining roots in their home villages, these individuals also participated in America's national economy and forged new Chinese American identities. These new identities challenge the old sojourner stereotype, which portrays Chinese immigrants as itinerant workers emotionally and culturally disconnected from their host countries and always focused on returning home.

Also examining identity, Williams' paper on Overseas Chinese masculinities and their expression and construction through material culture, provides an important foray into the issue of gender. It is ironic that for an immigrant group numerically dominated by males, far fewer studies have been done of men than of women and children in Overseas Chinese communities. Subordinated to ethnicity and racism, masculinity has been seen as omnipresent, yet somehow irrelevant influence on social behaviour and organisation. Yet Williams, by examining two social constructions of Chinese masculinity (the feminised, Orientalised view imposed by the West and an idealised native Chinese discourse focused on noble virtues and military strength), presents a preliminary framework for identifying multiple hegemonic discourses.

In line with the notion of trans-nationalism, the third theme of the volume centres on the concepts of hybridisation and syncretisation. The prevalence of traditional cultural practices and material culture in Overseas Chinese communities has become a thorny issue. Through the use of old models of acculturation and assimilation, this continuation of traditional practice has been interpreted as evidence of the inherent cultural conservatism of the Overseas Chinese and their resistance to change or interaction with their host culture. Such a view can no longer be supported (e.g. Rains 2005; Wong Hoy 2007) and throughout this volume arguments are made for a more synergistic view of Overseas Chinese behaviour and material culture. For instance, Van Bueren in his paper on Chinese farm workers in the California Mother Lode, as well as the papers by Fosha and Leatherman, Smits, and Kraus-Friedberg, present evidence for cultural accommodation, invention and fusion occurring, under various socioeconomic contexts, concurrently with traditional practice.

The final key theme evident in the volume is the issue of scales of analysis. One end of this continuum is represented by Greenwood and Slawson's intimate, highly detailed study of a household site associated with a seaweed harvester, Wong How. Wong How and his family lived at an isolated location on the central Californian Coast from 1910 to 1975. Usually such close biographical investigation is the province of family

history research, but because of its remoteness and late period of occupation, the Wong How site is highly intact, providing a relatively unique opportunity for an archaeology of household and family. The value of such an investigation lies in its construction of a fine-grained account of immigrant experience that reveals the complexity and nuances of identity and behaviour. This approach has particular value in the study of the Overseas Chinese, a people who have frequently been treated as a homogenous group rather than a complex set of diverse individuals.

It must be acknowledged, however, that the intactness and historical connectedness of Wong How's site is a rarity, and it is this fact which fuels Voss' criticism of the 'household' as a valid unit of analysis in the archaeology of the Overseas Chinese. In her paper on the Market Street Chinatown of San Jose, Voss directs attention to the notion's embeddedness in contemporary Eurocentric thinking, and the current archaeological obsession with establishing clear associations between archaeological sites and materials and discrete groups. Voss is right to point out that this approach usually fails the Overseas Chinese for a number of reasons, including the prevalence of collective living, and of communal refuse disposal. As Voss argues, what is needed is a multi-scalar, context-based approach that acknowledges different units of social analysis and allows for a meaningful analysis of social collectives.

While the data and perspectives delivered in this volume provide a basis for challenging old assumptions and establishing a sympathetic and more accurate re-reading of the Chinese diaspora, much work still needs to be done. This is particularly the case in Australia and New Zealand, where historical archaeological research into the Overseas Chinese continues to be fragmented and largely unpublished. A weakness of this volume, for Australian researchers at least, is that it focuses exclusively on American Overseas Chinese. While there were many similarities in the immigrant experience here and elsewhere, there were also critical differences that need to be recognised and examined. Another issue is that despite arguing for a more holistic view of the Overseas Chinese, much of the discussion still focuses heavily on racism and persecution. The Chinese agencies presented here remain defined and limited to a large extent by constraints imposed by Europeans rather than examined on their own terms. Nonetheless, this volume remains highly useful to Australian researchers as it provides important comparative data and highlights new theoretical and methodological approaches. It is recommended reading to inform future studies.

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Kevin Rains

Senior Heritage Planner, Gold Coast City Council

Douglas C. McVarish, *American Industrial Archaeology: A Field Guide*. Left Coast Press, California, 2008; 384 pages; paperback; ISBN 1598740997. AUD 85.00 (inc. GST) available in Australia through Footprint Books.

This is a fascinating and irritating book that should rest alongside the *Dictionary of Industrial Archaeology* on the bookshelf of every industrial archaeologist and heritage specialist. Both books represent an attempt at the seemingly impossible quest of adequately covering all American industrial archaeology in one field guide. Indeed, one might say that the author, architectural historian Douglas McVarish, is a sort of Don Quixote of Industrial Heritage tilting, of course, at the 'Dark Satanic Mills'.

Despite the difficulty of his quest, however, McVarish does a surprisingly good job at bringing it to completion. His central focus in this work is to define the key features of American industrial heritage, providing the lay person and the professional alike with a basic guide to some of the principal sites, structures and objects of different industrial sectors. Such information is, of course, invaluable to those who need to gain a rapid understanding of a new or little known industrial site.

The structure of the book comprises an introduction and fifteen substantive chapters representing broad industry groupings. The chapters are: Bridges; Railroads; Roads and Highways; Waterways; Shipyards and Marine Structures; Power Generation; Water Supply and Treatment; Manufactured Gas Plants; Cotton Processing and Textile Production; Gristmills, Windmills and Grain Elevators; Iron and Steel Production; Extractive Industries; Aviation; and Industrial Building Construction and Industrial Landscapes.

Each chapter contains: a brief introduction to the technology and key features of each class of site, place or structure, with characteristics that help identify important elements of the type; a glossary of common terms; and references. Ample use is made of black and white drawings – most from the *Historic American Engineering Record* (HAER) – which help in clearly identifying the sites and their features.

It is possible to dip into this book and get a comprehensive treatment of a particular industry, some idea of how things worked and some information to inform subsequent research. The volume also provides a wealth of comparative material on a range of different industries. This is of particular benefit to Australian readers given that the majority of overseas research is currently available only in difficult to access 'gray literature' (although some of the HAER material is on-line).

Naturally, the language and terminology throughout the volume is American, and this presents something of a mixed blessing. On the one hand, it adds to the proliferation and confusion of terms (and particularly Americanisms) in industrial archaeology but, on the other, it is useful to know both the British and American terms for features and objects in order to fully search the literature.

The scope of the book, while comprehensive, is not exhaustive: the heavy clay industry, for example, is notable for its absence, as is the oil industry. Similarly, the coverage in some chapters seems skimpy. For example, froth floatation in mining is inadequately explained or demonstrated.

There is also the odd error, such as the Hammerhead Crane illustrated in Figure 6.6 which is actually a Giant Cantilever Crane. This is a common enough mistake, but one which should not be present in a reference work. Also, for some curious reason, slips and slipways are referred to as 'Maritime railways', a term that even *Wikipedia* finds a bit odd.

My biggest criticism, however, is reserved for the section on 'Industrial Landscapes', which focuses primarily on built environments like company towns and other settlements associated with industry. Admittedly, this is a topic which can fill a book of its own but, even so, its treatment here seems too brief. There is little mention of the relationship between industry and the environment, the patterning of industries in the landscape or the development of industrial nature. There is also no discussion of the significant ideological reasons that led companies to build company towns in the first place. Lowell, Massachusetts, for example, is a well known company town which is mentioned in passing but could have made an informative case study of the interplay between ideology and landscape. Even more extraordinary, given the volume's American focus, is the absence of any discussion of slave plantations, one of the most significant industrial landscapes of the United States.

Although this book includes 'Industrial Archaeology' in its title, it includes little discussion of archaeological sites, and no consideration of archaeological techniques, but rather focuses almost exclusively on the built environment. This is consistent with the author's definition of Industrial Archaeology as 'the study of sites ... reflecting changing industrial processes and practices', but others might regard the volume as more correctly belonging to the broader category of 'Industrial Heritage'.

To conclude, this volume is not without fault, but in undertaking what seems an impossible task, McVarish has made a great success of his review of industrial archaeology. In doing so, he has provided the industrial archaeologist and heritage professional with a fine reference book that is readable, interesting and a must purchase for all professional libraries. Left Coast Press deserves a note of thanks for publishing such a well-illustrated volume.

Dr Iain Stuart
JCIS Consultants

Soren Blau and Douglas H. Ubelaker (eds) *Handbook of Forensic Anthropology and Archaeology*. Left Coast Press, California, 2009; 534pp; hardcover; ISBN 9781598740745. AUD 209.00 (inc. GST). Available in Australia through Footprint Books.

As part of the Green Press Initiative, this edition has been printed on stock containing 30% recycled paper.

The *Handbook of Forensic Anthropology and Archaeology* is the second publication in the World Archaeological Congress Research Handbooks series, and contains contributions from

55 highly experienced professionals currently working in the field of forensic anthropology and archaeology. Data is well presented in 22 tables and 119 black-and-white figures.

The book is divided into five parts. Part One, 'History of the Disciplines' comprises nine chapters which provide a historical background to the development of forensic archaeology and anthropology in the United States, Canada, South America, Australia, Indonesia, and four countries of the European Union. Part Two, 'Forensic Archaeology' contains two chapters devoted firstly to the search for, and detection of, human remains, and then to the professional excavation and recovery of these remains in a forensic context.

Part Three, 'Forensic Anthropology' includes eight chapters relating to victim identification: the distinction between human and non-human bones; assessment of ancestry; estimation of age, sex and stature; cranio-facial identification; and forensic odontology. In addition, this section contains chapters devoted to dating of skeletal remains of forensic importance, analysis of commingled remains, detection and interpretation of antemortem and perimortem trauma, analysis of burned human remains, uses and limitations of biomolecular technology, and post-mortem damage to human bones brought about by soil contact, plant and predator action, and agricultural activities.

Part Four, 'The Crime and Disaster Scene: Case Studies in Forensic Archaeology and Anthropology' comprises nine chapters, each presenting case studies to demonstrate the importance of the involvement of forensic archaeologists and anthropologists in the investigation of homicides and crimes against humanity, as well as the task of disaster victim recovery and identification. Topics covered include the problems of maintaining international standards of human identification and crime scene investigation in the face of public impatience, budgetary constraints and post-conflict politics. Excavation in locations with difficult access is discussed, as well as the impact of disaster work on anthropologists, and the ongoing personal security risks for anthropologists working in the field. This section also highlights the importance of involving local professionals and the community in the recovery and identification process.

Part Five, 'The Professional Forensic Anthropologist' is of particular interest as it discusses ethical issues associated with professional practice, as well as the practicalities of working under the auspices of large international organisations. The role of the expert witness and legal aspects of victim identification are also discussed in separate chapters in this section. In addition, there is an overview of the value of statistical methods and three-dimensional computer imaging and reconstruction.

One minor criticism of this book is that it does not fully consider archaeological science's potential contribution to the forensic investigation of burials. Such matters are touched upon briefly in Chapter 12 and again very briefly in Chapter 34, but are really deserving of greater explanation. Of particular interest to the forensic field are experiments conducted by archaeologists to determine the effect of burial and biological action upon wood, metal, textiles, leather and other types of personal effects commonly encountered in burials (see Nicholson 1996; Was-Gubala & Salernao-Kochan 2000; Crowther 2002). In addition, the expertise of archaeological scientists to retrieve and analyse microscopic plant and animal remains from soil, as well as detect and analyse biological residues on objects holds great potential for forensic applications (see Haslam et al. 2009). Some recent developments in the field of archaeological science which can be directly applied to the forensic examination of grave sites include the calculation of soil temperature at burial sites for a variety of soil types, depths and vegetation conditions (see

Prangnell & McGowan 2009); the identification of areas of human activity by analysis of the lipid content of soils (see Hjulstrom & Isaksson 2009); and the ability to determine whether the heavy metal content of human bones is a result of pre- or post-mortem events (see Lund Rasmussen et al. 2009). The field of archaeological science is so broad in itself that a detailed exposition is probably best left for a subsequent volume in the Research Handbooks series, but this book would have benefited from a brief overview of the subject.

By inviting contributions from experienced professionals working in Europe, the Americas, Asia, Africa and Australasia, the editors have produced a volume that provides a truly global perspective on the practice of forensic anthropology and archaeology as it stands today. For students contemplating a future in forensic archaeology and anthropology, a look at the brief biographies of the contributors should give an appreciation of the many and varied career opportunities available to graduates. The broad scope of this book also gives enquiring students an idea of the sub-specialties available in these fields. Australian readers will be pleased to find that the book contains contributions from twelve forensic anthropologists and archaeologists who either studied in Australia or currently base their work and teaching here, giving this publication a further dimension of interest not found in some of the more Americo-centric forensic books. In summary, the *Handbook of Forensic Anthropology and Archaeology* is outstanding for its global perspective, and gives such an informative overview of the subject that this book should be recommended reading for all students and lecturers in forensic science, anthropology and archaeology.

Glenys McGowan
School of Social Science
University of Queensland, St Lucia, Queensland

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