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BTRATES

 Authority, acquisition and adaptation; nineteenth-century artefacts of personal consumption from the Prisoner Barracks at Port Arthur

Caitlin Dircks: BA (Hons), University of Sydney, 2013

Historical archaeology in Australia has countless artefact assemblages awaiting research and analysis. This thesis is the study of one such collection; the artefacts of personal consumption recovered during the first archaeological excavation at Port Arthur. The site was the Prisoner Barracks and was excavated in 1977 by Maureen Byrne and a team of volunteers but was never fully analysed due to Byrne’s sad death the same year. The assemblage, with all artefacts excluding the faunal material, has been catalogued and analysed for this thesis. The results present an interpretation of the assemblage, considering personal consumption and the effects of hierarchy on the general ways of life of the occupants.

This thesis uses archaeological and documentary evidence to build on the previous understanding of the Prisoner Barracks’ history. It establishes who the occupants were; privileged convicts in the early phases; and military regiments, constables or officers and their families in the later phases of Port Arthur’s convict history. Through the artefact analysis, everyday life is examined, revealing how consumption was a combination of occupants adapting to make do and also acquiring supplies beyond the settlement’s confines. The physical and institutional isolation and associated authority, which also changed over time, added complexity to the acquisition and consumption of goods. By exploring the potential of the site and the collection, this thesis also establishes the assemblage for further research involving larger scale comparisons.

From hideouts to hangouts: materialising myths at buffalo bush camps on the South Alligator River, Kakadu National Park

Charlotte Feakins: BA (Hons), University of Sydney, 2013

The broad aim of this thesis is to investigate whether there is a correlation between the iconic ‘bush legend’, as it is represented in Australia, and the material record at historical sites in the ‘Top End’. Contemporary methods employed in folklore studies and historical archaeology, such as semiotics and pattern recognition, are used to produce a conceptual framework identifying the characteristics of the ‘bush legend’. These form the basis for hypothesis testing, allowing comparisons to be made between the ‘bush legend’ and the archaeological record at historical sites.

This study maps two historic sites in the Northern Territory, both situated in the vicinity of the South Alligator River, Kakadu National Park. They are dated from the end of the nineteenth century up to the middle of the twentieth century. One was a less ephemeral, ‘proper’ camp, associated with the buffalo shooting industry, and the other was more ephemeral, possibly a ‘Wet’ season camp, and associated with mining or mustering horses. These form part of the conglomerate of economic ventures termed ‘fossicking economies’.

Although bush camps are often considered difficult to investigate archaeologically, due to their greater ephemerality, this thesis demonstrates that such sites can provide valuable data. When these archaeological data are combined with other modes of enquiry associated with historical archaeology, such as documentary and oral history, a much greater understanding of the history of each site can be gained. By closely examining the different types of documentary evidence available, and understanding the history of the area as a web of inter-connectedness, sites having limited documentary history can be better understood.

Interwoven connections among iconic bushmen, such as Fred Smith, Jack Gougos and Yorky Billy Alderson, are highlighted in this thesis. A deeper understanding is presented of a history that has been overshadowed by Eurocentric accounts, and the dominant, iconicographic heritage of Kakadu National Park. Importantly, through intensive research and cross-correlation of data, the relatively hidden history of Aboriginal people at these sites, especially women, is also told. Interestingly, while the archaeology corresponded with the ‘bush legend’, the documentary evidence did not always correlate. A captivating and dynamic past is presented that provides a solid foundation for further research into the unique ‘fossicking economies’ of the ‘Top End’.

Settlement patterns and indigenous agency in Te Tau Ihu, 1770–1860

Moira Jackson: PhD, Anthropology & Archaeology, University of Otago, 2014

Dynamic post-contact Māori settlement patterns in Te Tau Ihu o te Waka a Maui (the northern South Island) are used to investigate agency and the role of an emergent nineteenth-century European population on Māori landscape use. The study has shown that the settlement pattern changes observed in the 1770 to 1830 period were due mainly to agency and internal cultural drivers of change rather than by forces external to Aotearoa New Zealand. The conceptual framework is informed by social archaeological theory drawn from international culture contact studies. A geographic information system (GIS) was used to aid the analysis of temporal and spatial data derived from historical maps and charts augmented with archaeological, historical and ethnographic information.

Cemetery studies: international trends and local case studies

Jennifer Lane: BA (Hons), Anthropology & Archaeology, University of Otago, 2013

This research investigates the ways in which cemeteries have been studied internationally and within New Zealand, and from these studies a set of eight research questions was developed and tested in a pilot study carried out in the Northern Cemetery of Dunedin. The Northern Cemetery is a category I protected site on the Historic Places Trust’s list, as it is one of the earliest cemeteries in New Zealand that entered the public in a non-denominational layout. This pilot study was based on Phillip Edgar’s (1995) Master’s project in the Southern Cemetery’s Presbyterian section, and adopted many of his classification forms, but also recorded several attributes from other national studies. This investigation consisted of 52 randomly selected plots from the within the 200 blocks of the cemetery, spanning the whole period of occupation from 1873
to the current year. The eight research questions investigated the relationships between the historical context (particularly class, society, and ideology) and the physical remains of the plots (through the plot dimensions, location, material, morphology, inscriptions, and iconography).

The study identified a set of four classes within the cemetery that were dependent on the physical dimensions and location of the plot, and also discovered that several of the physical attributes varied depending on the class. These attributes were also investigated in terms of their changes over time and compared to the ideological and social contexts to identify if there was a relationship between them. While the sample was not large enough for an accurate study of the social and ideological changes during the period of occupation, the pilot study investigated many physical attributes of the plots in detail that suggested patterns that would become clearer in a larger study.

Researching an assemblage of handmade bricks and brick construction in the Port Phillip district

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This research comprises a literature review and field survey with developed sampling methodology that has uncovered information about bricks, brick construction methods and styles at the Briars farm complex in Mount Martha on the Mornington Peninsula, Victoria. Construction commenced with Alexander Balcombe’s tenure in 1846 and over time, building additions and demolitions took place for specific purposes and functions for the farm’s operations. Hand-made bricks were manufactured on site using locally sourced clay and fired in temporary stack kilns. Machine-made bricks were also found, purchased from the Blackburn Brick Company. Construction involved ticket-of-leave men and local bricklayers. Field survey established a typology of the brick assemblage from the site, encompassing physical characteristics and technical shapes of hand-made bricks. A range of brick sizes was identified that is indicative of the manufacturing process over a period of time, using different sized moulds and variations in firing temperatures of stack kilns. Physical characteristics identified included horizontal and vertical hack marks from the stacking of wet clay bricks to dry prior to firing and variations in colours including salmons, browns, oranges and purples. Colour banding was also identified with texture being both smooth and coarse grained finishes.

Construction techniques comprised nine brick bonds at the site, perhaps a cultural expression of the skilled artisanal bricklayers at work. Six archways were also identified, with fireplaces and chimney stacks relatively consistent in construction methods. Slate damp-proof courses and a black tar-like substance were added to bed joints to prevent rising damp. Bluestone was the dominant footing material. Mortar analysis included acid digestion to test its relevance and accuracy in determining mortar composition for particular periods of construction. This research provide a detailed account of the technical nature of the brick assemblage at the Briars farm complex and offers a template to be used for future research into the world of bricks, brick construction and the role of the bricklayer as a skilled artisan. This research also contributes to understanding better the brick industry on the Mornington Peninsula where a sample of the Briars brick assemblage is presented.

‘Wrought into being’: an archaeological examination of colonial ideology in Wellington, 1840–1865

Rosie Geary Nichol: MA, Anthropology & Archaeology, University of Otago, 2013

The archaeology of urban environments in New Zealand is typically relegated to cultural heritage management investigation. This type of investigation is restricted by the limitations of the cultural heritage management framework, and urban archaeological investigation is often compelled by heritage regulation rather than academic inquiry. This has contributed to a limited archaeological understanding of an important period in New Zealand’s history – that of early colonial urbanism. Colonial urbanism is not often examined as a phenomenon in and of itself in New Zealand’s archaeological discipline, nor is archaeological theory applied to this context at a sustained and meaningful level. This thesis compiles existing archaeological and cartographic evidence from this period in a geographic information system project and examines its relationship with the ideologies that influenced New Zealand’s colonial settlers.

Wellington was the first urban settlement established by the New Zealand Company in New Zealand in 1840. The Company and its settlers espoused an ideology strongly influenced by nineteenth-century capitalism and British imperialism. This ideology was reified by colonial theorist Edward Gibbon Wakefield and emphasised a perception of land as material. In view of this emphasis, archaeology offers a particularly appropriate approach to an examination of the relationship between this ideology and the urban form created by the settlers.

Using the settlement of Wellington as a case study, this thesis examines colonial urbanism through a unique theoretical framework constructed using archaeological, historical and urban planning perspectives. This framework facilitates an alternative understanding of the colonial urban environment by reinterpreting the city as a material artefact. The data compiled in this research displays how this artefact – the city – is a product of its colonial creators, and, in particular, the ideology that influenced these colonists. It identifies a causal relationship between the motivating ideology of the colonists and the form of the city artefact, highlighting the impact of ideology on the process of urban development.

The archaeology of the New Zealand stamp mill

Peter Petchey: PhD, Anthropology & Archaeology, University of Otago, 2013

This thesis is an archaeological study of the stamp mill, often referred to as a ‘stamper battery,’ that is one of the iconic features of New Zealand’s historic goldfields. After the Otago gold rushes started in earnest in 1861 thousands of men flocked to the alluvial diggings, and they were soon searching for the quartz reefs that they were sure were the source of the river and stream gold. Hard-rock mining started in 1862 in Otago and Coromandel, and machines were erected to crush the rock and release the gold that it (hopefully) contained. These machines were stamp mills, a mechanically simple hammer mill that raised and dropped heavy weights onto the quartz in order to reduce it to the consistency of sand. The first few mills were improvised locally from materials at hand, and these were soon followed by a number of ‘engineered’ stamp mills imported from foundries in Melbourne. A local manufacturing industry quickly grew up, and other mills were imported
from Britain and America. Today many examples of these mills survive in the old goldfields in varying states of preservation. They constitute archaeological evidence of two important aspects of the goldfields: technology, and a place of work.

Much industrial archaeology has traditionally focused on technological details, and this is the starting point for this research. Contemporary industry literature is used to describe and understand the engineering of the stamp mill, and this understanding is then applied to the archaeological record. The results of a wide-scale survey that covered sites from Fiordland in the south to the Coromandel in the north are considered in terms of technological adoption, adaption and innovation in order to determine how and why gold milling technology came to New Zealand. The result indicates that the majority of the technology was imported, with Australia acting as a source of conventional technology, and Britain and America as sources of more innovative designs. However, far from being completely technologically dependent on these places, it is argued that New Zealand was a technological participant in the international mining industry. There is ample archaeological evidence for local agency in New Zealand, whereby technology was chosen and adapted to suit local requirements, with some local designs then being re-exported. New Zealand was admittedly never more than small player in this international field, but it was nevertheless an active one.

The thesis then turns to the second issue: the stamp mill as a workplace. Since the 1970s commentators have pointed out that Industrial Archaeology should take note of social issues in the industrial world, but much subsequent work has been criticised because of its focus on technology and structures. By taking the same engineering analysis of the archaeological evidence of the New Zealand stamp mills as used in the discussion of technology, the mill as a place where people worked is considered. Evidence of wear, repair, modification and pragmatic adaption is discussed to identify the work that was actually carried out by the mill workers, and detailed volumetric analysis of various mill parts is used to quantify some of the tasks in relation to contemporary records of workmen’s abilities. Finally, the workplace environment is also considered, including hazards such as noise, dust and poisons. The result of this, unsurprisingly, find that the battery house was by modern standards a very dangerous place. However, it is also observed that in a world without social welfare, the battery house represented employment and income that was vital for the working man and his family.

In conclusion, the stamp mill is part of an archaeological landscape that has both international links and individual social meaning. Modern New Zealand society evolved in the melting pot of the nineteenth century, and the gold mining industry played an important role in that development. The combination of evidence of international influence and local agency in mining technology, and the role and experiences of the mill workers, provides a small insight into the emergence of the complex modern world.

A rose by any other name: historical epidemiology in late colonial and early modern Victoria (1853–c.1930)

Phillip Roberts: PhD, Australian National University College of Asia and the Pacific, 2013.

This thesis contains an examination of infectious disease and its socio-economic relationship within the Victorian population from 1853 to 1930 (the study period). The purpose of this is to interpret some now obsolete diagnoses and to study the resulting disease natural history by treating diagnosis as an artefact of disease and its social context.

It is well known that unique socio-economic change occurred during the study period on local, national and global levels. The effect of such change on the infectious diseases; pertussis, typhoid, group A streptococci infections, diphtheria, tuberculosis and syphilis is addressed in the thesis at both a regional and local level using government and hospital admission mortality and morbidity data.

Disease exposure and disease susceptibility were observed to vary substantially over the study period for typhoid and pertussis. Typhoid mortality shifts dramatically from children and older adults before 1870, to young adults after 1870, which is indicative of a change in disease exposure patterns with the urbanisation of the colony. Pertussis mortality patterns reduced in some groups compared to others, indicative of changing susceptibility to the disease. These examples highlight the heterogeneity of factors affecting disease causation for different infectious diseases and therefore the specificity of information that can be drawn from observations of changing disease patterns.

The data will also be shown to indicate that variation in the natural history of disease also occurs. For Group A streptococcal infections, a scarlet fever epidemic cycle was observed until 1876, from which point on mortality from post streptococcal nephritis increases dramatically showing a change in the progression of group A streptococcal infections. For diphtheria cases, however, the natural history of the disease remained very predictable until medical developments in the late nineteenth century. Like disease causation the socio-economic factors associated with disease progression are found also to be disease specific.

To investigate variation in the natural history of diseases with a more complicated ecology, tuberculosis and syphilis mortality and morbidity were investigated. For tuberculosis this investigation showed that mortality from pulmonary and extra-pulmonary tuberculosis was negatively correlated for much of the study period. This was displayed in both the government and hospital records. Mortality from congenital syphilis and venereal syphilis also trended in opposite directions, with mortality in children trending higher while syphilis mortality in adults trended lower. This was concluded to be due to an increasing prevalence of syphilis in the Victorian population throughout the study period.

The principal findings of this work are how disease-specific the ecological interaction is between parasite and host and how responsive particular diseases can be to historical events whilst other diseases may not have any reaction or a completely different reactions to the same event.

This thesis proves that different disease natural histories are excellent gauges of changes in human behaviour.

Landscape archaeology of historical rural industries of Sandymount

Fin Robertson: BA (Hons), Anthropology & Archaeology, University of Otago, 2013

This dissertation takes a landscape approach to examining the physical manifestations of historical rural industry in the Sandymount region on the Otago Peninsula. The study area contains examples of several of the important industries undertaken during the nineteenth century in New Zealand. Surveys of several house sites were carried out, and numerous other landscape features were recorded, in order to create a picture of the activities that occurred. Historical research was carried out to see how these activities fitted in with Dunedin and New Zealand as a whole, and why these activities changed over time. Dairy farming was the most common industry in the
Defending Dunedin: the archaeology of Dunedin’s coastal fortifications, 1885–1945

Alexander Scahill: BA (Hons), Anthropology & Archaeology, University of Otago, 2013

This dissertation is an archaeological analysis of Dunedin’s coastal military fortifications in the period from the 1880s, when the country was threatened with Russian invasion, through until the end of the Second World War. This investigation examines the nature and extent of these fortifications, and was conducted through both field survey and mapping, and historical research. With very little previous work conducted on these types of site, this research provides valuable insight into fortification construction methods and temporal change throughout this period. This investigation also examines the mindset of a young nation, and their reaction when facing for the first time a serious external threat to their way of life.

Heritage today, gone tomorrow: in situ preservation of underwater cultural heritage in law and practice

Debra G. Shefi: PhD, Department of Archaeology, Flinders University, 2014

Reflecting current trends in practice and research toward a universally recognised best practice for underwater cultural heritage (UCH) management, international guidelines encourage the utilisation of in situ preservation as the ‘first option’ in securing these non-renewable resources. In situ UCH management is identified as the prime standard by both the 2001 United Nations Educational, Scientific and Cultural Organization’s (UNESCO) Convention on the Protection of the Underwater Cultural Heritage and the 1996 International Council on Monuments and Sites (ICOMOS) Charter on the Protection and Management of Underwater Cultural Heritage. At present, however, neither UNESCO nor ICOMOS explicitly define the suggested ‘first option’. As such, the scope and context of in situ preservation is open to interpretation, and can be construed to exclude a number of in situ management techniques currently employed by heritage practitioners – including relocation and underwater repositories.

As many practitioners rely on the 2001 Convention and its Annex to support domestic legislation, or as the stand-alone reference in lieu of domestic law, it is imperative that the interpretation of the ‘first option’ is not at once inclusive and unequivocally defined. This study therefore examines whether an assessment of international conventions and guidelines, domestic laws inclusive of heritage materials and practitioners’ publications relating to UCH, with a specific focus on in situ preservation, can identify discordance between law and practice. The analysis occurs with the examination of three genres of literature forming the basis of UCH management (international and domestic laws enacted as of July 2012 and practitioner publications) and an assessment of five case studies applying various in situ preservation techniques within site management. The data and discussion of results will demonstrate if and how managerial terminology requires clarification within the assessed literature. More specifically, conclusions will aid in the development of a more robust and well-supported definition of in situ preservation, which can be applied as a global best practice for UCH management.

Soldiers’ foodways: historical archaeology of military comestibles in the Waikato Campaign of the New Zealand Wars

Alexandra Lee Simmons: PhD, Anthropology & Archaeology, University of Otago, 2013

Food is an essential part of human existence and directly linked to the cultural behaviour of individuals, groups and institutions. In their commentary on food studies, Mintz and Du Bois noted that war has been relatively neglected as a research focus. This thesis investigates British and colonial soldiers’ comestibles during the Waikato campaign of the New Zealand Wars, a regional conflict that commenced in 1863. It is the first major investigation that has been carried out on this subject in New Zealand and one of the few investigations worldwide on soldiers’ comestibles during a war.

The thesis addressed three questions: what did soldiers eat and drink during the campaign; how was food security ensured; and what foodways practices indicated status. The questions address themes that are at the core of foodways research. Food security was of specific interest because the Waikato campaign followed the disastrous Crimean War and took place during a time of British military supply system reform.

Cognitive archaeology and middle-range theory guided the research process. A middle-range methodological approach was used to address the research questions in three distinct data sources: the official records, eyewitness accounts, and the archaeological record. Each source was compiled as an independent record of comestibles using the same criteria, which were based on underlying food culture rule sets. The rule sets were modified and used to construct a food culture research framework that addressed the range of data available in the sources. The framework structured the investigation.

Among the findings was evidence that the War Office supply and transportation system reforms had little impact on food systems during the campaign in New Zealand. More unusual findings included the link between food security and luxury foods. The research also indicated a variety of food practices were used to indicate status. Many of the foodways were embodied in the mess system – a system of hierarchical separation. For example, the mess building or tent was a daily visual reminder of the military hierarchy, e.g. commissioned officers’ messes, sergeants’ messes, enlisted men’s messes. Military hierarchy is directly linked to military control and discipline.

The ideas and hypotheses presented are pertinent to future archaeological investigations at military sites in New Zealand and overseas. The research methodology and the foodways research framework also have applications for comestible research at other sites such as railway camps, abandoned towns, mining camps, as well as for regional analysis of foodways at contemporary pre-historic sites.

A woman’s place …: an historical archaeological investigation of identity and power on the nineteenth-century pastoral landscape of south east Queensland

Linda Terry: PhD, The University of Queensland, 2014

An individual’s perception of their place is integral to the complex processes of identity development and maintenance. These processes are highly contextual and occur in a dynamic landscape where power is a defining factor. In this thesis, using two case studies, I employ a micro-scalar approach to demonstrate that the identity of middle-class women living on pas-
The Western Australian penal colony, enacted in 1850 and lasting until the mid-1870s, has typically been examined as the end product of a larger pan-Australian process of convict transportation. As such, Western Australian convictism was viewed as essentially the same as that enacted in the Eastern Australian penal colonies, but on a much smaller scale, and crucially, as unimportant within the greater story of Australian convictism. This view has been exacerbated by a concerted effort in Western Australia itself to erase the convict period from colonial memory. In comparison with New South Wales and Tasmania, there has been very little archaeological or historical research conducted into the Western Australian penal system. Consequently we know very little about the operation of the system, the lives of the convicts within it and the impact it had on the development of Western Australia.

The view that Western Australian convictism was basically the same as that in the eastern Australian colonies is problematic because the system existed within a penal paradigm that was fundamentally different to the one that inspired the settling of New South Wales 60 years earlier. In 1850 British transportation occurred within a legislative and ideological framework that was focused on reform and incarceration, rather than the simple removal of unwanted criminals. Transportation was no longer considered an effective punishment and the practice was only continued by the British government to advance specific strategic interests and operated within a global administrative and legislative framework applied equally in different penal colonies. Modelling of this global framework demonstrates that the form and operation of the Western Australian system had more in common with contemporary penal colonies in Bermuda and Gibraltar, than earlier systems in New South Wales and Tasmania.

Physically Western Australian convictism was designed to meet both the needs of the British penal system and those of the colony. Fremantle Prison, the central hub of the network, operated essentially the same as any other British prison within the Empire and was intended for the reform, control and punishment of newly arrived and recalcitrant convicts. However the ‘ticket-of-leave’ system, a limited form of parole, was extensively used outside the prison to mobilise convict labour and ticket-of-leave men were dispersed throughout a network of eight regional convict depots and subsidiary work stations. Archaeological and historical investigation of three convict depots, at York, Toodyay and Guildford, demonstrate that away from Fremantle, traditional penal concerns of security, control and reform were low priority. Instead, these places were designed to allow settler access to convict labour and to reinforce traditional British class hierarchies. Convicts granted a ticket-of-leave were not subject to processes of reform, had economic freedom, and crucially, the capacity to enact personal agency to improve their own lives. The archaeological record suggests that convicts supplemented the standard penal diet by hunting, sought to improve their daily lives in other ways by the open consumption of alcohol, tobacco and patent medicines, and maintained political and ethnic identity through their use of material culture.

Recording and analysis of the built environment and spatial layout of regional depots suggests that they were also used to reinforce traditional class hierarchies. Convicts, transported to Western Australia in part to form a colonial working class, were at the bottom of this hierarchy, below other members of the Convict Establishment including soldiers and civilian administrators. The physical form of convict depots, while built to a standard design, also provide evidence of class barriers and conflict between different groups. The Royal Engineers responsible for building the depots used the limited legislative power available to them to undermine the power and influence of the civilian Superintendents in charge and to advance their own position and prestige.

This research suggests that convictism in Western Australian operated as two parallel and complementary systems that

**REFERENCE**


Global, regional and local networks: archaeological investigation of the Western Australian penal colony 1850–1875

Sean Winter: PhD, University of Western Australia, 2013

The Western Australian penal colony, enacted in 1850 and lasting until the mid-1870s, has typically been examined as the
allowed the needs of both the British government and the Western Australian colony to be met. This dual convict system was largely successful, allowing geographical, economic and population expansion and tying the colony into global administrative and trade networks.

**Artefacts and community transformations: the material culture of nineteenth-century North Dunedin**

**Naomi Woods**: MA, Anthropology & Archaeology, University of Otago, 2013

Large quantities of artefacts have been recovered from development-based archaeological investigations in North Dunedin during the last decade. There has been no attempt, however, to draw this material together and develop a picture of the neighbourhood as a whole. This area, as with the rest of Dunedin, experienced major economic and social transformations during the second half of the nineteenth century as a result of colonisation, the gold rush of the 1860s, economic depression once this boom was over and the process of industrialisation in the 1880s and 1890s. The aim of this thesis was to discover whether these transformations are visible in the material culture record and if the artefacts can add to our understanding of these processes and how they affected the people living in North Dunedin at this time. This analysis of the nineteenth-century North Dunedin community was conducted without the highly contextual household information that usually forms the basis of community studies, instead using the evidence gathered from the material culture itself. The artefacts from one primary study site (234–242 George Street) were analysed directly while the material from the rest of the study area sites was evaluated through data presented in excavation reports. Evidence relating to the massive influx of wealth and people that came with the gold rush, the hardship faced by many businesses after this gold ran out and the social and economic effect of industrialisation were all able to be identified in the material culture, as was the development of a distinct North Dunedin identity. Comparisons were then made between the North Dunedin findings and other colonial communities that have been studied in a similar way, which revealed that parallel processes were affecting many British colonial cities at the end of the nineteenth century, but the ways in which they were handled was often unique and contributed to each city’s character. These results not only demonstrate the possibilities of less context driven community studies but also highlight the potential of development-based archaeological investigations and reports as invaluable academic resources.