

THE



# ARTEFACT

Pacific Rim Archaeology

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**JEREMY SMITH: Uncovering the Secrets of “Little Lon”**

**JOHN MORTON: Desmond Morris, Anthropology, and the Not Very Human Animal**

**ISABEL ELLENDER: The Yowenjerre of south Gippsland: traditional groups, social boundaries and land succession**

**BRUNO DAVID: Hand Shelter (Ngarrabullgan), Cape York Peninsula, Australia: site report**

**DIRK H. R. SPENNEMANN: Late Lapita colonisation of a high island in Western Polynesia: The case of ‘Eua Island, Tonga**

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The Archaeological and Anthropological Society of Victoria, Inc.

## THE ARTEFACT

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# Uncovering the Secrets of "Little Lon"

**Jeremy Smith**

From May to July 2002, one of Australia's biggest archaeological investigations was undertaken in the city block bounded by Lonsdale, Little Lonsdale, Exhibition and Spring Streets in Melbourne. The area had long been considered likely to contain a treasure trove of historical and archaeological information. Building plans are being finalised that will see a large part of the block developed for a 33-storey glass office tower, known as the Urban Workshop development. Heritage Victoria specified that before the construction workers move in, a team of archaeologists be required to excavate for a few months to uncover some of the secrets of Melbourne's 19<sup>th</sup> century history.

The excavation was conducted by two archaeology consultancies, Godden Mackay Logan and Austral Archaeology. La Trobe University was also a project partner, providing archaeology students to work on site, and research support.

The city block known as "Little Lon" has a colourful history. In the last decades of the 19<sup>th</sup> century the area was infamous as Melbourne's den of iniquity. It housed a number of brothels, including the infamous upmarket establishment of Madame Brussels. In fact, when the gold Victorian Parliamentary Mace mysteriously disappeared in October 1891, some people claimed that it was last seen on stage in a playful parliamentary re-enactment at Madame Brussels. At one stage, the authorities were so concerned about an epidemic breaking out in the Little Lon district that they considered clearing out all the residents, and flattening the whole area.

Some archaeological work took place on the site in 1989. This work confirmed that slums and brothels did exist in Little Lon but the findings also painted a more complex picture of daily life. It emerged that small cottage industries, artisans and tradespeople, and families were all occupying the small plots tucked away on the laneways that led off the main streets. In one area, the remains of a seamstress's cottage were excavated – the artefacts recovered include pins and needles, thimbles and off-cuts

of material. In another part of the site a small family dwelling was revealed, complete with children's toys and a writing slate that shows a parent was teaching their child to read and write.

The Little Lon excavation also gave an insight into the multicultural nature of Melbourne's population. Following the discovery of gold in the early 1850s, people from many different nations flocked to Victoria to seek their fortune. Often the squalid lodgings in Little Lon were all they could afford. The assortment of different artefacts found during the excavation indicates that Syrians, Indians, Chinese and Italians were living in the city at this time. In particular, Chinese artefacts like Chinese coins, medicine bottles with Chinese characters, opium pipes, Oriental ceramics and gaming pieces have all been unearthed.

Ironically, the high archaeological significance of Little Lon is due directly to the poor quality of living conditions that prevailed in the 19<sup>th</sup> century. Sewerage was not installed in the area until the 1890s - until then the residents disposed of all their refuse in cesspits at the rear of the properties. For archaeologists, these pits offer a valuable insight into the material possessions of the occupants of Little Lon. Each cess pit can contain as many as 7,000 artefacts – broken ceramics, glass, bone and an assortment of other relics. More than 30 cesspits were unearthed as part of the recent excavation, and more than 135,000 artefacts were discovered. Of course, it is not only the artefacts that hold interest for the archaeologists – the remains of the various buildings constructed on site are also important. These architectural remains, consisting of simple post-holes, stone and brick footings and other ruins, tell the tale of Melbourne's development from simple wattle and daub huts through to more substantial bluestone and brick structures.

In the 20<sup>th</sup> century, the Little Lon block was taken over by industry, with the small cottages and dwellings being replaced by warehouses and factories. In the 1950s, the area became a car park, with asphalt being laid down

across the site. The 20<sup>th</sup> century use of the site has preserved the archaeological record very well - in recent years many areas of Melbourne have been extensively developed, with underground car parks or basements being constructed as part of large building projects. Buildings of this type usually result in the destruction of archaeological deposits, but at Little Lon, there has been almost no underground disturbance to date.

The artefacts from the site have now been taken to La Trobe University, where they will be analysed by archaeologists and students during the next two years. The number and condition of the artefacts found on the site was overwhelming. Many ceramic and glass objects were found intact, and a surprisingly high number of luxury items were also found including cosmetic jars, jewellery, figurines and other ornaments.

The artefacts and the other findings from the recent excavations at the Little Lon site have provided a unique opportunity to unlock more of the secrets of Melbourne's settlement and growth. The work has thrown light on the identity, activities and possessions of residents in one of Melbourne's most complex and engaging districts.

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# Desmond Morris, Anthropology and the Not Very Human Animal

John Morton

**Abstract:** Desmond Morris has done much to popularise a certain view of human nature. Implicit in this view is the idea that *Homo sapiens* is simply one creature among others, a natural being subject to the laws of biology like all other species. While Morris's views have long been regarded as tendentious and provocative, seemingly diminishing the image of human beings as moral agents, his view of animality is equally problematic, ideologically conditioned by secular strands of the Judaeo-Christian tradition that see animals as base or 'inhuman'. This paper points to the problems and contradictions involved in Morris's brand of biological reductionism, but also suggests that anthropological reactions against it, when they invoke the importance of 'culture' and 'meaning', are equally problematic and contradictory. Biological and cultural determinism are, in effect, two sides of the same coin, reproducing the opposition between man and beast, and (implicitly) the Judaeo-Christian theme of a battle between Good and Evil. A plea is made for the transcendence of such binarism in the popularisation of anthropological knowledge.

When I was a schoolboy in London in the 1950s and 1960s I used to hurry home after school to watch a long-running (500-edition) television program called *Zootime*. *Zootime's* presenter was an engaging, energetic and prematurely balding individual who was, at various times, the head of the Granada TV and Film Unit at the Zoological Society of London (the London Zoo) and the Zoo's Curator of Mammals. His name was Desmond Morris. Now, some forty or more years later, Desmond Morris remains engaging and energetic, and, judging from his relatively unchanged appearance, seems to have found the elixir of life.

In the mid-1960s, Morris began to turn his attention more strongly to creatures that could not be found in zoos – at least not behind the bars and other barriers that both physically and symbolically separate all other creatures from *Homo sapiens*. With initial publications on *Men and Snakes* [1965], *Men and Apes* [1966] and *Men and Pandas* [1966], Morris went the whole hog in 1967 with *The Naked Ape*, a spectacularly popular account of *Homo sapiens* as 'just another primate' that sold in hundreds of thousands. He then repeated the event in 1969 with *The Human Zoo*. Donna Haraway has accurately dubbed these books 'lively tales' (1989:127) and at the time they were praised, even by their detractors, for the 'brilliance' of the writing (Lewis and Towers (1969:xvii). Since then,

Morris has, in one form or another, focussed public attention onto a host of anthropological issues in books and films like *Intimate Behaviour* [1971], *Manwatching* [1977], *The Soccer Tribe* [1981], *The Human Race* [1982], *Bodywatching* [1985], *The Human Nestbuilders* [1988], *Babywatching* [1991], *Christmas Watching* [1992], *The Human Animal* (1994), *Bodytalk* [1994], *The Human Sexes* [1997], *Body Guards* [1999] and *The Naked Ape* and *Cosmetic Behaviour* [1999]. With a keen eye for the spectacular and the controversial, Morris imbued these projects with great popular appeal. Possibly, no other contemporary presenter has influenced the public's perception of what it means to be human – as well as what it means to be an animal – as much as Morris.

Yet Morris will not accept the tag 'anthropologist'. Rather, he understands himself to be a zoologist or biologist who uses purely objective field methods superior to those of psychoanalysts (who use 'lengthy verbal sessions'), sociologists (who use 'precise questionnaires'), psychologists (who use 'laboratory tests') and anthropologists (who use 'tribal interrogations') (Morris 1994:8-9). Morris's own, allegedly non-distorting method is what one might call 'non-participant observation'. 'Above all', says Morris, this means 'watching people in their most ordinary, everyday environments, in the streets and shops, the

parks and offices, the gardens and the countryside' (1994:9) – or in what he also calls 'the wild' or 'their natural habitat'. Of course, this discursive strategy is very much a red rag to a number of proverbial bulls, not least of all because, for any anthropologist, the likely reaction would be to say that human beings by definition do not live 'in the wild' (because their 'natural habitat' is 'cultural'), and that 'observation' without 'participation' seriously distorts a human field by making 'the native point of view' inaccessible. Morris, the average anthropologist would indubitably say, chooses largely to ignore the significance of local contexts.

Yet this is not entirely true, as can be illustrated by a brief look at the televised version *The Human Animal*. One of the things that strikes me when I watch this television series (or read the book) is that Morris seems to want to have his cake and eat it. That is to say, while he certainly treats *Homo sapiens* as a species with uniform behaviours, he is also not entirely blind to variation and local knowledge. One television reviewer hit the nail squarely on the head when he wrote:

*It was entertaining enough watching (The Human Animal), but it isn't long before you begin to wonder when (Morris is) going to get to the point – what central idea is actually concealed beneath this gaudy pile of fascinating facts.<sup>2</sup> ... At times he seems to be arguing a case for a biological determinism, as when he describes the evolution of the smile out of primate grimaces of submission. At others, his evidence testifies to the peculiar power of human culture, over and above genetic inheritance; in Italy, [for example,] you can draw a line on a map that separates those who signal 'no' by shaking their heads and those who use a sharp upwards movement of the head, a line that historically marks the limit of ancient Greek colonisation. Morris is clearly eloquent in the language of the body – I just wish I knew what he is trying to say (Sutcliffe 1994).*

However, I think the task is not really so difficult. Morris has travelled extensively throughout the world for his studies and has observed human cultural variation maybe more than most. Yet variation remains a surface phenomenon for him; the one thing that strikes him about *Homo sapiens* is that, beyond the 'superficial differences', there are more 'basic similarities' (his words used in *The Human Animal*), so that what anthropologists generally refer to as 'culture' is relegated to shallowness – 'icing on the cake'. With this in mind, Morris is able to flatten vast arrays of human experience into a complex of instincts or virtually uncontrollable 'urges' that operate at a deeper level. So, for example, he is able to conflate warfare, competitive field sports, corporate dealing and the work of parking inspectors as so many manifestations of an alleged 'hunting instinct', with 'the primeval hunter inside us' finding 'creative symbolic outlets' (1994a:77) for this unstoppable, constitutional force. Or, he is able to point

to the broader shoulders of men as indicative of innate forcefulness and see it reproduced in the shoulder pads of Tibetan monks and 'power-dressing' female executives – as if the shoulders were some unmistakable sign of the will to power. Such simplifications and distortions are characteristic of Morris's projects. Obvious problems – like the presence of 'hunting instincts' in female parking inspectors or a 'male' will to power in corporately employed women – are conveniently ignored. Indeed, much of what Morris dishes up for public consumption is riddled with these difficulties. As one recent reviewer has written: 'Though aloft behind his scholarly façade, Morris offers nothing scientific ... At most, Morris gives his readers (and viewers) anecdotal evidence, robbing examples from cultural anthropology and warping them to fit his genetically determined assumptions' (Rich 1998). The criticism is both apt and commonplace.

But if Morris's widespread appeal has little to do with empirical credibility, where does it come from? Much, no doubt, can be attributed to the populist character of both his books and his films, which often merges into sheer prurience. One episode of *The Human Animal* broke viewer rating records in the UK thanks to its screening of the internal dynamics of both male and female orgasms. Morris, I believe, delights in this kind of mischievous cloaking of the sensational in the name of science. Interestingly, when a teacher (Richard Gardiner) at the University Lake School in Wisconsin recently showed Morris's *The Human Sexes* as part of his anthropology course, the administration promptly terminated his tenure. Whatever one thinks of such conservative reaction, Morris's response was revealing. He wrote to the teacher:

*I am appalled to hear that your teaching position has been terminated ... This is a scandalous action for the authorities to have taken and their motives should be carefully examined ... to ascertain whether there is some hidden agenda in operation ... The Human Sexes was a serious, educational, scientific endeavour ... There is not a single element of the series that could be considered as pornographic ... (2000).*

It is interesting, though, that Morris has long been obsessed with science being defined by what is now fashionably termed 'the gaze' (as in 'Man-watching'), which feminist scholars have recently specified as a gendered relationship of dominance. Scandal, alleged hidden agendas and pornography are no strangers to Morris's own professional life, although he remains apparently committed to an exclusive vision of scientific objectivity.

Indeed, Morris is convinced of the separation of his subjectivity from his objectivity and has invoked it to explain his passion for surrealist art. Morris was a serious painter before he was a serious scientist and says that he leads a 'double life' mapped by the two independent workrooms at his studio – one dedicated to art, the other to science.



*My library being next to my studio is like the two hemispheres of my brain, the right and the left, the analytical, rational half and the other, intuitive and emotional. People ask: 'How do you manage to be so objective about people?' and I think one of the reasons I was able to be was that I had already given the other side of my brain full expression. If you do not allow both sides free expression, the risk is they get muddled up, and you allow emotion to get into your scientific work and scientific reasoning to get into your emotional aspects (in Billen 1996).*

Yet as the interviewer who elicited this comment remarked: 'how misleading it is for Morris to tell himself that his scientific work is all analysis and his painting all imagination. Naked apes, bottoms growing out of chests (Morris has argued that women's breasts simulate their buttocks), mouths that look like vaginas (another alleged simulation) – what are these, if not surrealist images?' (Billen 1996). Well, if they are not actually surrealist images perhaps we might say they are surrealist images in disguise – a kind of pseudo-scientific return of the repressed, necessarily unacknowledged, and pseudo-scientific at least in the sense that the facts are presented in a fascinatingly bizarre way.

An outstanding example of Morris's melding of science with the surreal is his introductory sequence to *The Human Animal*, which shows two people (one male, the other female) with utterly expressionless faces walking naked through a crowded shopping centre. One would have to agree that this imagery is indeed fascinatingly bizarre, as well as truly surreal. Indeed, being naked in a public place is one of the better known images from western dreams, where it usually evokes embarrassment and, as symbolic divestment, often pointing towards anxious revelation. But there is a complete lack of this typical embarrassment on the faces of the couple in *The Human Animal*, who give nothing away. No awkwardness, no anxiety is revealed there, just expressionless motion – the human form as pure object, divested of all 'e-motion'. Perhaps then, these objects to which Morris constantly turns his gaze – otherwise known as human beings – are projections of that very objectivity that he proclaims to be so fully separated from his art. Yet this is indeed 'art-ful' imagery. Moreover, it is a specific kind of image of human existence which is *completely unnatural* – unnatural in terms of the couple's behaviour, and even more unnatural in terms of their demeanour. People 'in the wild' in shopping centres simply do not behave like that.

Let me take the issue somewhat further. In the same episode of *The Human Animal*, which is about 'body language', Morris talks about the manner in which liars give themselves away. This is how he expresses himself in the accompanying book:

*When deception is taking place [the deceiver] feels a strange compulsion to touch his face. Every so often one or both hands move up towards his mouth, as if trying to mask the lie that is issuing from his lips. Once there, another fleeting sensation takes over – the feeling that covering the mouth is too obvious. So the hand moves on and rubs the cheek, strokes the nose, scratches the eyebrow or touches the forehead (1994:36).*

Now, it so happens that, at the conclusion of the same episode of *The Human Animal*, Morris sits in a chair delivering a brief monologue, during which he touches his face four times.<sup>3</sup> This evidence, on Morris's own testimony, to a large extent speaks for itself: at the very least, we may say that Morris feels in some way that he is not uttering 'the truth, the whole truth and nothing but the truth'. But about what? Well, he initially touches his head three times as he expresses his views that: 1) his work does not make humans 'beastly'; 2) he is 'proud' to call himself an 'animal'; and 3) he does not intend to degrade human beings by calling them animals. Finally, he covers his mouth after saying that he is 'simply being honest' and placing human beings where they belong, in the 'general scheme of nature'. We may assume, then, that, fundamentally, he believes none of these things. As he once famously said: we are not 'fallen angels' but actually 'risen apes' (Morris 1994a:6). In other words, we are fundamentally base – perhaps even diabolical; and certainly not noble or heavenly.

I want to end with a brief consideration of the metaphysical dimensions of this idea. Morris has, in fact, made it onto 'the celebrity atheist list' (anon n.d.) and his public championing of science and his evolutionist evangelism immediately evoke the spectres of Christian fundamentalism.<sup>4</sup> However, it is a different (though connected) heretical theme that I want to explore in these concluding remarks. In his book *Culture and Anomie*, Christopher Herbert (1991) has called attention to some of the remarkable congruities that obtain between Christian theodicy and the secular views of anthropologists concerned with culture as an externalised form that imposes itself upon us to make us truly human. Culture, Herbert suggests, has not only been cast as a metaphysical or occult phenomenon; it has also functioned as a secular theodicy, providing a plausible account of wholeness in a world that also contains the limitless, formless and amoral world of nature. The idea of nature, therefore, displaces the Christian idea of the Devil insofar as it is positioned as the dark realm of meaninglessness and the counterpoint to a superimposed symbolic order, without which we would descend to become what Clifford Geertz – a most famous proponent of the 'culturalist' point of view – once called 'unworkable monstrosities with very few useful instincts, fewer recognizable sentiments, and no intellect: mental basket cases' (1973:49). These 'basket cases' may well be a convenient fiction for Geertz as he 'talks up' culture, but they are, I suggest, also evocative of the kind

of creature that Morris lays before us when he trucks in 'instincts', 'urges' and 'primeval forces' that lie beneath a cultural veneer.

Morris's vision of 'the human animal' is hence a clichéd one of moral deficiency. Although some critiques have concentrated on his portrayal of human being as darkly aggressive and dangerous (e.g. Lewis and Towers 1969), the more general form of this deficiency is in the simplified depiction of the fundamentals of human life as being ultimately beyond the realms of the symbolic order - hence human cultural differences are allegedly 'superficial'. I wonder, though, what a television series called *The Human Animal* would look like if it had been made by, say, Margaret Mead or Ruth Benedict - or, more recently, by their effective successors Marshall Sahlins (e.g. 1976) or Clifford Geertz (e.g. 1973). Or is it too fanciful to think that Sahlins or Geertz could give any like title to any such series? The point is that the invocation of 'culture' as an antidote to Morris's excesses is not especially useful and is likely to lead to excesses in the opposite direction - to make humans appear as orderly 'angels' rather than unruly 'apes'. It is interesting to note here that Morris once raised a chimpanzee, called Congo: but he did not teach it language (usually taken by anthropologists to be the quintessential form of human culture) - he taught it art (representing that side of himself that is 'emotional'). One could take this as a model of the problem: the cultural anthropologist's obsession with symbolic orders is reflected in a kind of monomania that very precisely inverts Morris's opposition between fundamental universals that belong to nature and superficial particulars that belong to culture. For commentators like Geertz, for example, we are simply unformed with culture, so that our instinctive nature is vague and without shape, relegating it to a superficial position similar to the one that culture occupies in Morris's equally problematic binarism. In structuralist terms, the stories are the same, told back to front or upside down. Be we 'essentially' lowly ape or high angel, we remain profoundly unreconciled and schizoid in character.

My sense, then, is that the stock reaction of cultural anthropologists to Morris is partly compromised by participation in his terms 'nature' and 'culture'. Let us imagine, then, that a television series called *The Human Animal* could be made by someone like Tim Ingold. This, of course, is much more plausible, not because Ingold shares much (if anything) of Morris's vision, but because his theories of human existence do not set up spurious dichotomies between culture and nature, order and disorder, and so on (see, for example, 1986). What Ingold once said of sociobiology - that it is 'an attempt to discover what is *inhuman* in man - to characterize the human being stripped of humanity, revealing an animal residue' (1988:5) - applies equally well to Morris's projects. By the same token we may say that cultural anthropology is still too often an attempt to discover what is *superhuman* (what Kroeber once actually called

'superorganic'), again stripping human being of humanity, but now revealing a metaphysical residue - 'the creation of meaning' (Sahlins 1976:102). I like to think that, in the public domain, anthropology can (and should) project a third way where neither 'nature' nor 'culture' reigns - where we can be seen to investigate neither 'nature' nor 'culture' but human beings in all their complex and contradictory forms. But it is difficult to think of anyone who could make this sexy.

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#### Endnotes

1. Square brackets denote dates of publication where the book is not referenced in this paper. In relation to Morris's sequence of publications, I have been guided by the following web biography (accessed in November 2000): ([athttp://freehosting2.at.webjump.com/144af0521/de/desmond-morris/biography.html](http://freehosting2.at.webjump.com/144af0521/de/desmond-morris/biography.html))
2. Those who have watched or read Morris will know that he often favours the Frazerian or 'bower-bird' approach to the collection of human cultural fragments.
3. Thanks to Pasquale Stella for his acute powers of observation in first pointing this out to me.
4. Morris once proudly and excitedly told an interviewer about how his books used to be burned by the church in Malta.

# The Yowenjerre of South Gippsland: traditional groups, social boundaries and land succession

Isabel Ellender

**Abstract:** A re-appraisal of the ethnographies of south Gippsland has revealed evidence for traditional mechanisms of land succession where a lineage was dying out. This is an alternative explanation for the change of ownership of the Yowenjerre country to one that attributed conquest of one belligerent Aboriginal group by another. The spiritual significance of Wilson's Promontory and the strip of country along the south east coast of Victoria is distinguished from the political and social protocols of the land succession event. The reconstructions of territorial boundaries described have contemporary significance for native title and cultural heritage management. The information for this paper was derived entirely from primary and secondary documents, and the words of Aboriginal people in those documents were used when available. Regrettably, although they were sought, surviving oral histories were not available to the author.

## Introduction

The intrigue with which anthropologists and archaeologists hold the complexity of Aboriginal social organisation lies, for the former, in its intricate relationships with other organisational processes, and for the latter, in the search for methodologies to recognise it in the archaeological record. Difficulties arise when, for example, archaeologists attempt to use territorial organisation and social boundaries described in ethnohistoric sources, or imposed by prior colonial and modern governments, to reconstruct Aboriginal territories and boundaries in the distant past (David and Lourandos 1999; McBryde 1986; McNiven 1999). Aboriginal territorial organisation has been shown to be more dynamic than originally thought, and not based on criteria familiar to European politics and economics. The challenge of teasing out a particular aspect of territorial organisation and social boundaries in southern Victoria arose from an opportunity to investigate land ownership and the 'strong' social boundaries of that territory for which there is a fortuitous wealth of ethnohistoric documentation and material culture.

At the time of white settlement of the Port Phillip District there existed on the south coast of Victoria an Aboriginal territory with apparently ambiguous ownership. The territory included Wilson's Promontory and the mainland to its northwest (Figures 1 and 2). Ambiguity of land ownership has not been commonly reported in southern Australia – rather, Aboriginal culture is thought to have had a clear and firm relationship between people and their coun-

try. Furthermore, the territory was located in a region of particular spiritual significance which has also defied precise definition. This extended along the Bass Strait coast from the east coast of Port Phillip Bay possibly as far as Lakes Entrance (Howitt Papers 1053/1b). Aboriginal tradition frequently imbued a place with special spiritual qualities but this, like ambiguous land ownership, is not a well-documented phenomenon in southeastern Australia.

This paper addresses two questions: first, can the basis of the ambiguity of ownership of country between the Tarwin River and Corner Inlet be identified in the historic sources? Second, what was the supernatural, social and political context of the country on the south Victorian coast that led to its apparently equivocal status?

## The ethnographic setting

Detailed ethnohistoric information for the region derives from the writings of Gippsland's Lake Tyers and Ramahyuck missionaries – Charles Tyers, John Bulmer, and Friedrich Hagenauer, as well as the Chief Protector of Aborigines George Robinson and his Assistant, William Thomas. They observed and recorded Aboriginal society and culture from 1839 until the late 19<sup>th</sup> century: indeed, they were the first outsiders to make detailed recordings as inexorable changes came about in response to the white colonisation of Gippsland. Bulmer understood Ganai languages which enabled direct dialogue with people in their own language and resulted in a greater insight and detail of Gippsland society and culture.

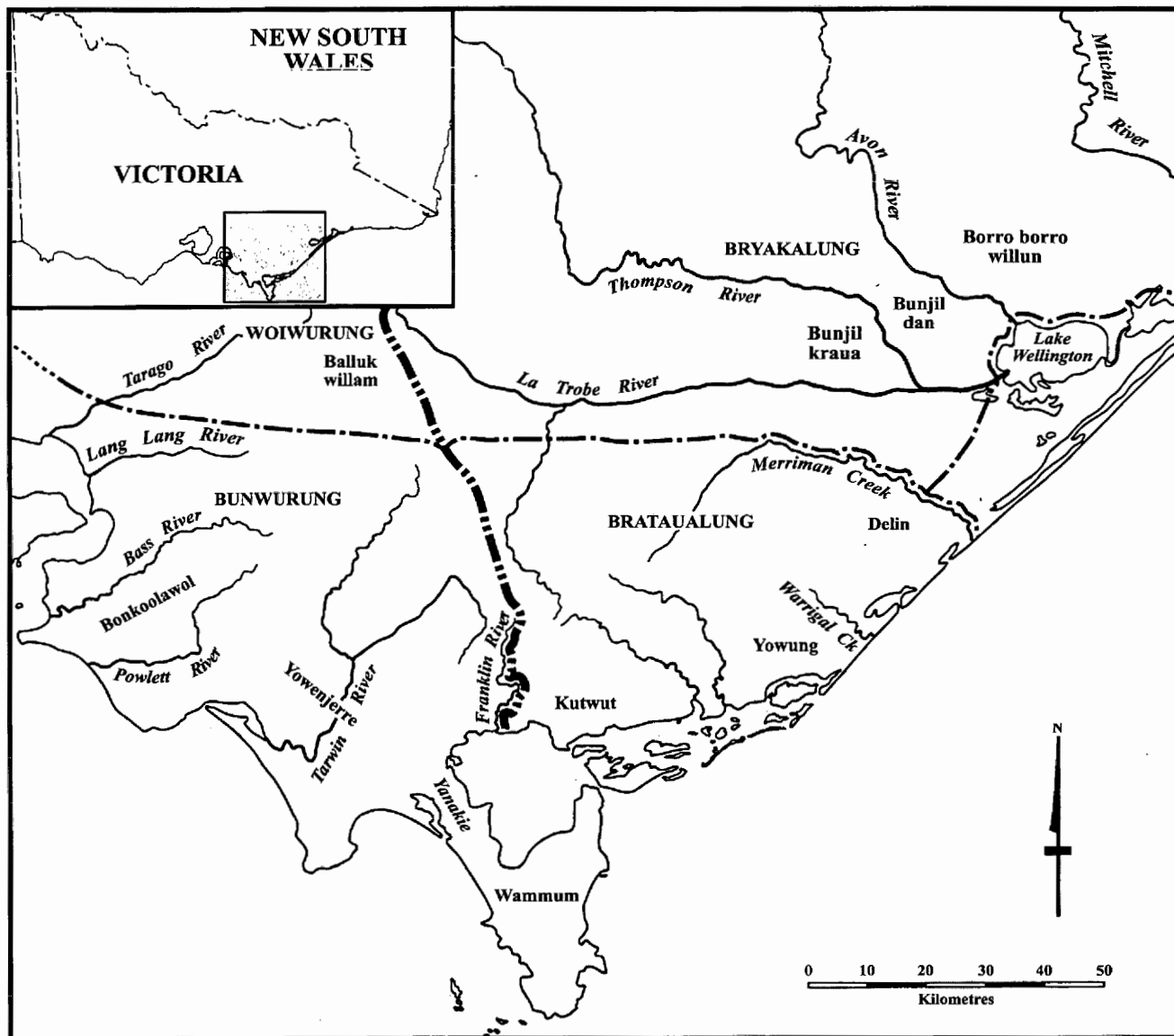


Figure 1: The Aboriginal social groupings in southwest Gippsland before 1844

Towards the end of the 19<sup>th</sup> century Alfred Howitt was a Mining Warden and Police Magistrate in north and central Gippsland but had a consuming interest in Aboriginal society and culture. He gathered material from a wide array of non-Aboriginal informants, talked to Aboriginal men, and conducted his own observations, to which he brought a new anthropological understanding of Aboriginal society. It was by then 30 years or more after first white settlement, but his ethnological notes and publications contain valuable detail of Gippsland customs. The intense interest of these early observers resulted in a vital body of information about the social organisation of Gippsland, though the accounts vary in detail, suffer from the lack of rigour and synthesis of modern anthropological training, and reflect the cultural biases of the observers.

#### The country

To this day, disagreement and confusion about the loca-

tion of the boundary between the Gippsland 'mob' and the Western Port 'mob' persist among Indigenous communities as well as government instrumentalities. Indeed reconstructions of Aboriginal social and territorial boundaries have important implications for current Aboriginal and governmental politics especially in the fields of native title and cultural heritage management. There is clear consensus among the early writers as well as in the current thinking of Indigenous peoples that Būnwūrūng<sup>1</sup> people lived west of the Tarwin River and Gūnai/Kurnai people lived east of Yarram, but the location of the boundary and the precise identity of the people who lived in the middle remain enigmatic.<sup>2</sup>

When George Robinson passed through Gippsland in 1844, he was informed that Wilson's Promontory and Cape Liptrap had been owned by a Būnwūrūng group, called the Yowenjerre, inferring a boundary to the north of Wilson's Promontory (Figure 1). His Būnwūrūng infor-

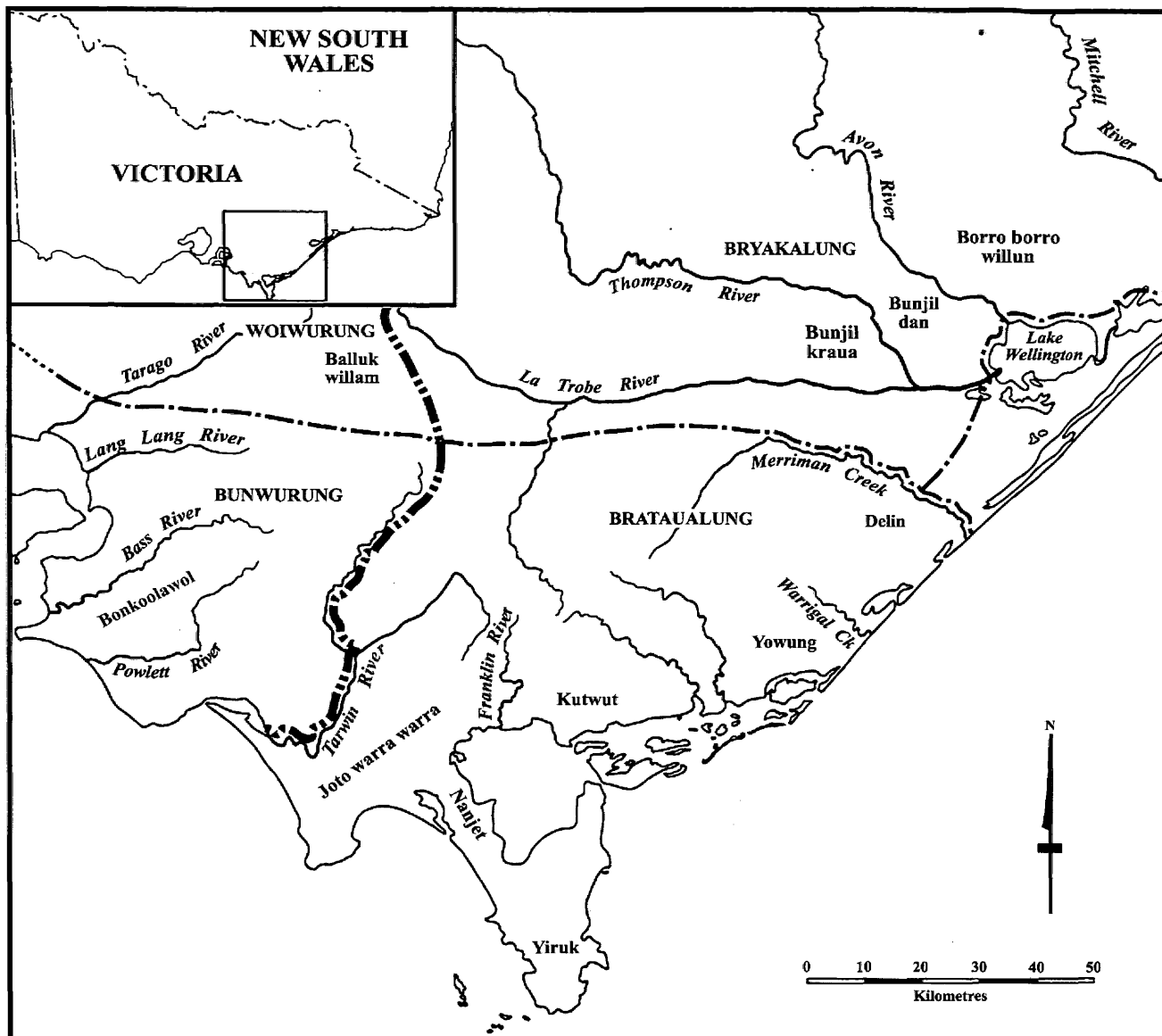


Figure 2: The Aboriginal social groupings in southwest Gippsland after 1844

ments told him that the last chief of the Yowenjerre, Purnine, had indeed lived on Wilson's Promontory (Robinson: 27 April 1844). James Tyers, writing in 1853, also included Wilson's Promontory and Corner Inlet in Yowenjerre territory (in Wesson 2000:19). However, somewhat later in that century, Būndawal (one of Alfred Howitt's Gūnai/Kurnai informants), declared the Tarwin River was the boundary and that a Gūnai/Kurnai group occupied the Promontory and the 'left hand side of Anderson's Inlet' (southwest); the Būnwūrūng group occupied the northeast side of the Inlet (Howitt Papers Box 1053/4a). Although Howitt does not record precisely when Būndawal was speaking, it appears that the boundary had shifted by 1844 when Robinson passed through the region, and this date will be nominally adopted for convenience. The shift in the boundary and change of land ownership is understood to have taken place under circumstances akin to warfare whereby a long-standing feud resulted in Gūnai/Kurnai warriors taking over the

territory between the Tarwin River and Deep Creek, which flows into Corner Inlet at Port Franklin.

A better understanding of the circumstances of the change of ownership emerges from an examination of the structure of the local groups and of ways in which land could be transferred in Aboriginal Australia.

Nineteenth century observers Bulmer, Hagenauer, and Howitt understood that large groups which they called tribes were made up of a number of constituent parts. The use of the terms 'tribe' and 'clan' has been questioned by several contemporary researchers of Aboriginal culture and society (Peterson 1976; Sutton and Rigsby 1982; Sutton 1995). They have questioned the validity of the tribe (a corporate entity using a single language) as a distinctive entity prior to European contact, though the term is used today by Aboriginal groups. Similarly misleading is the anthropological term 'clan' – a group of people related usually patrilineally and owners of their 'estate'. Instead, the rather vague term 'local group' is preferred

here to describe the groups encountered in Gippsland – namely the people collected around a head man at a particular locality who might comprise his relatives as well as long and short-term visitors. Such local groups were identified according to certain criteria such as where their home country lay, the name they gave themselves and were known by others, as well as their language, the name of their senior man, and terms that separated 'us' and 'them' (Wesson 2000:20, 39, 42-48).

At the time of white settlement, Gippsland Aboriginal people were divided into five large groupings (early ethnographers called them tribes) who spoke what have been variously called three dialects of the Ganai language (Howitt Papers n.d.; Howitt 1904:73), or three languages (Hercus 1969; Fesl 1985)<sup>3</sup>. These five groups were further divided into local groups (Figures 1 and 2)<sup>4</sup>.

The Būnwūrūng people occupied the region to the west of the Gūnai/Kurnai and were similarly subdivided into local groups. They were part of the extensive Woiwūrūng-speaking alliance of south central Victoria which has been referred to as the Kulin (Howitt 1886). The distribution of local groups of the Gūnai/Kurnai and Būnwūrūng prior to 1844 are shown in Figure 1 and after that date, in Figure 2. Most ethnographers (Robinson 1844; Bulmer 1878-92; Howitt 1886) write about the group distribution shown in Figure 2 while commenting that there had been a different configuration before (Figure 1), which their Aboriginal informants spoke about.

Most ethnographers writing in the second half of the 19<sup>th</sup> century describe the Joto warra warra as the western-most local group of the Brataualūng, a Gūnai/Kurnai people (Būdawal in Howitt Papers Box 1053/4a; Wesson 2000) (Figure 2). Their country was located to the north and northwest of Wilson's Promontory. In 1844, Robinson reported that their chief was Wormgorng, and located their country between the Tarwin River and Deep Creek near Port Franklin, including Cape Liptrap and Wilson's Promontory, the southern portion of which the Brataualūng called Yirūk (Robinson 27 April 1844).

While Robinson was camped on the Tarwin River, he observed that it was the 'natives of Gipps Land' whose canoes he saw, and who had been in the locality of the lower Tarwin cutting 'fern tree and getting opossum' (Robinson 27, 28, 29 April 1844; 12 May 1844). He was told that this land had previously belonged to the Yowenjerre, 'a section of the Boongerong (Būnwūrūng), now extinct, extirpated by the Borro borro willun Gippsland Blacks' (Robinson 27 April 1844).

Borro borro willun (Figures 1 and 2) was the Būnwūrūng name for the Kūtbūntaura who lived in the locality of Angus McMillan's Bushy Park on the upper reaches of the Avon River, north of Stratford (Fison and Howitt 1880:228; Robinson 29 June 1844; Pepper and De Araugo 1985: end map). Although they were Brataualūng people, their country was isolated from most other Brataualūng (Howitt 1904:73) and surrounded by Briakalūng peoples.

## The Būnwūrūng

The Būnwūrūng were among the first Victorian Aboriginal people to be affected by the whalers and sealers from 1798 through the first decades of the 19<sup>th</sup> century (Gaughwin 1978). The British settlement of the Port Phillip District rapidly dispossessed them of their land and inflicted on them the worst debilitating ills of western civilization. Hotchin identified an increase in some of the social mechanisms that worked *within* traditional society, such as pay-back revenge and sorcery that were the cultural responses to the increased mortality, diseases and disruption resulting from contact with the colonists (1990:106-7). This, he argued, led to further depopulation and weakening of the social fabric and demography making the group vulnerable to appropriation. Such depopulation is supported by Howitt's claim that even before the extensive white settlement of the region, there were 'only 500 blacks in the area' of Western Port in 1841 (Howitt Papers Box 1053/4a).

It is noteworthy that the depredations on Būnwūrūng people by Gūnai/Kurnai warriors described by Assistant Protector, William Thomas and others occurred in Brighton, Western Port and 'between Kangerong and Arthur's Seat' (Thomas 1840 cited in Gaughwin and Sullivan 1984). No mention is made of attacks occurring on the Būnwūrūng clans further east, though of course, Thomas, Robinson, and others who commented on the feud, were for the most part, only in contact with the Būnwūrūng closer to Melbourne. Gaughwin and Sullivan speculated that east of Western Port was depopulated for a buffer zone between the warring groups which only occurred latterly in response to white incursion (Gaughwin and Sullivan 1984:83).

## Yowenjerre

The Yowenjerre were the eastern-most group of Būnwūrūng people before 1844, and belonged to the Būnjil moiety. Robinson, by questioning his Būnwūrūng informants, learned how the Yowenjerre (Figure 1), had been overcome by the Borro borro willun and that the last 'chief of the Yowenjerre was Purnine, native place Warmun (Wilson's Promontory), is dead' (27 April 1844). They had been a powerful people said Robinson's informant, Munmunjinind, the son of a Yowenjerre headman killed by Gippsland men (Robinson 5 May 1844). After a massacre of 60-70 Yowenjerre men by Gippsland warriors (Thomas Misc. Paper 88: item 21), their land had been neglected and the lack of firing of the heath had made most of it impenetrable. This was exactly what Strezelecki in 1840, Western Port squatter, Samuel Anderson in the same year (Horton and Morris 1983:61), and Robinson himself in 1844, had encountered in their attempts to explore Gippsland.

Evidence for the prior Būnwūrūng ownership of the country east of the Tarwin River can be identified in the legend of Loo-ern (Smyth 1878:453)<sup>4</sup>. Howitt (Howitt Papers Box 1053/3b and 2c) retells the legend of 'a gigantic

being like a blackfellow' – the important Spirit Ancestor, Loo-ernn, of the Woiwŭrŭng speakers of the Yarra River. According to the legend, Loo-ernn, who lived on the Yarra, was baking eels in a ground oven on the Yarra flats when he spotted a swan's feather on the south wind. He traced it to its source where he found flocks of swans resting on Western Port Bay. After a time, the swans flew off to the east and Loo-ernn followed them to Corner Inlet at Wammŭm (the Bŭnwŭrŭng name for Wilson's Promontory). Loo-ernn and his wife, Loo-ernn-tukan, still live on Wammŭm and watch over the Bŭnwŭrŭng people who had followed him to south Gippsland. This story confers Woiwŭrŭng and Bŭnwŭrŭng ownership on Wammŭm, since an important Spirit Ancestor would reside in his people's country (Sutton 1995:57).

More evidence that Wammŭm saw a change of ownership comes from Robinson's Bŭnwŭrŭng informants (30 June 1844). They told him that the chief of Wammŭm had been Purnine, a Yowenjerre man. Some years later Bŭndawal informed Howitt that 'the people of Yanakie where the sand hills are were called by the name Nanjet', who were Brataualŭng people (Howitt Papers Box 1053/4a). He appears to be referring to the replacement of the Yowenjerre of the Yanakie isthmus by the Brataualŭng Nanjet. The name Nanjet also meant 'bad ground' (Howitt Papers Box 1053/4a), that had bad connotations perhaps associated with the land take-over and/or more likely, with its subsequent inclusion into the Wea wŭk, considered by the Brataualŭng to be 'bad country' (described later).

When the surveyor, J.P. Townsend surveyed in south Gippsland in 1841 he only used the Bŭnwŭrŭng names for Corner Inlet (Lŭng) and Wilson's Promontory (Wammŭm) which suggests a strong familiarity consistent with Yowenjerre ownership of Wilson's Promontory at least at that time (Townsend 1841).

William Barak, headman of the Yarra Woiwŭrŭng, informed Howitt that it was sometime before 1835 that a group of Bŭnwŭrŭng went to the Tarwin to harvest native cabbage when they discovered Kŭtwŭt people (Figure 1) had taken the cabbage without permission. The Bŭnwŭrŭng men found and killed the culprits, but were themselves victims of retaliation (Barwick 1984:116). This set up an on-going feud between the two groups. Tyers recorded that in about 1840 a group of Melbourne men had come to Corner Inlet and killed at least 30 Brataualŭng people (Tyers 1853). The Bŭnwŭrŭng men who accompanied Robinson on his journey through Gippsland in 1844 informed him that all but two of the Yowenjerre had been killed. They themselves took special precautions when they entered what they then considered 'foreign' land east of the Tarwin: they would only sleep on leaves piled into a 'couch' (Howitt Papers Box 1056/1b). So, the replacement of the Yowenjerre occurred just before and at the time of the first white settlement of Gippsland, and by the 1840s Joto warra warra people occupied the land east of the Tarwin.

Joto warra warra was probably the Ganai name for the Borro borro willun group (a Bŭnwŭrŭng name) who settled in their 'new' country. Tommy Hoddinott, a Brataualŭng man and a Howitt informant, stated that the Joto warra warra adopted the name of the Tarwin River, which he called Joto warra warra (Howitt Papers Box 1053/3a and 3b). Another Howitt informant – Bobby Coleman, also a Brataualŭng man, used the name Kŭtbŭntaura/Bŭnjil Nŭllŭng for the people of Bushy Park (i.e. the Borro borro willun) and referred to them as a 'people who don't know where their country is...' (Wesson 2000:29). This makes sense when considering Angus McMillan, in staking his run at Bushy Creek in 1840, was one of the earliest settlers in Gippsland and became notorious for the way he 'massacred any Aboriginal in sight' (Pepper and De Araugo 1985:18) after they scattered his stock. Later in 1840, he became the leader of the infamous Highland Brigade responsible for the horrendous massacre of 100-150 Gŭnai/Kurnai people on the banks of Warrigal Creek until the water 'ran red with blood' (Pepper and De Araugo 1985:18). The routing of the Yowenjerre was taking place at that time. It is understandable then, that Borro borro willun people driven from their country by such hostile behaviour would have sought a safer place to live some distance from McMillan's 6000 acres (Pepper and De Araugo 1985:128). Howitt's informants told him that Borro borro (Bushy Park) was a meeting place for several Gŭnai/Kurnai groups who had staged inter-group fights and Jeraeils (initiation ceremonies) there, – but not until the 1850s when conditions became safer to be there (Howitt Papers Box 1053/3b).

### Land transfer

Anthropologists (such as Elkin 1974; Peterson 1976; Berndt 1982; Sutton 1995) have written extensively on Aboriginal territorial organisation. In general, they agree that local groups own their 'estate' or 'country' and that the 'band' is a bigger conglomeration of members of several local groups who hunt and gather within the 'range' (a large area consisting of parts of several estates). The local group – the landowners, held ownership rights of the estate, and the band – the land users, held rights to resource use within the range. An individual would generally inherit from his or her father the creation stories and rituals associated specifically with that country as well as the sacred places and the particular knowledge relating to them. An individual's claim to his or her country would be through that paternal inheritance but also on the basis of his or her birth in that country. Individuals also claimed links, ownership and rights to resources in the country of their mother. Wives were chosen from other local groups and generally moved to live in their husbands' estates. It was politically strategic for the senior man to reside in his estate, thereby securing ownership and control. In fact, he often gave his name to his country as well as his people (Peterson and Long 1986; Sutton 1995).

It would be an uncritical belief that claimed land in traditional or even in current Aboriginal societies was/is something which was always and invariably non-transferable. It assumes that 'country' (the land an individual inherited usually patrilineally, belonged to and which belonged to him or her), had from time immemorial been handed down in an unbroken male line and was the land to which that particular individual or group had always laid claim. This notion does not allow for the inevitable dying out of some lines, especially when land-owning groups might only consist of 25-50 persons. Extinction of a lineage leading to an ownerless country would result in a small number of populous groups occupying small counties surrounded by areas where the landowners had died out. Clearly, landowners astutely perceived this imbalance in land use and ownership, and took measures to manage the land/people distribution (Sutton and Rigsby 1982:159).

Although inheritance of country was set out in traditional laws, there were also protocols for dealing with land that had become owner-less. A neighbouring group could declare themselves managers or custodians, but eventually such land was taken over by those who had some claim to it, such as would be the case if it were their mother's country. In due course, those who staked a claim could make it their own country, even though this often invoked challenges and non-acceptance by neighbours and those who had ranged over that land. Persistence, residency, and time would usually see the claim secured (Sutton 1982).

A social process by which certain people shift into a vacant estate is by segmentation or fission. This may result when socio-political harmony of a group is threatened due to population increase beyond a critical mass, demographic restructuring, or resource deterioration (McNiven 1999:157). Tensions increase to a point where families hive off and move away from the parent group's territory. They may relocate with kin or onto a vacant estate to which they have some kinship, economic or religious connection. In ranging over parts of the estates of others in the normal course of every day life people would know a great deal about those estates, especially their food resources, sacred places and the traditional lore – 'the sacred geography' (Rose 1996:35). They would also become aware if landowners were becoming depleted and would know the familial links. But to take over a vacant estate was not a free-for-all and hardly ever a unilateral forcible conquest (Sutton 1996:8).

The events associated with the disappearance of the Yowenjerre and the re-occupation of their land now seem clearer. The serious disruption of Bünwürrung society by whalers and sealers (Gaughwin and Sullivan 1984:82) and the long-standing feud with the Gūnai/Kurnai in the decades before 1844 (Thomas 1840) probably combined to deplete the Yowenjerre to the point of being unable to sustain their hold on their country. William Thomas observed how another Bünwürrung group called the Bonkoolawool of the Bass River region had been reduced

in numbers by disease and activities of the whalers and sealers to such an extent as to render them extinct (Thomas n.d.: MS, Item 21). For the Yowenjerre, the effects of subsequent white colonisation were the last straw, and their land was left without its owners, its caretakers. The Europeans who fought their way through southern Gippsland's forests found the unburned heath had grown to an impenetrable thicket. However, we know from elsewhere in Australia that at no time does a country cease to be an estate even if the owners have been removed or wiped out: the land retains its sacred places and lore, and does *not become a no-man's land* (Sutton 1995:8, *my emphasis*). Rather, the land merely lies socially fallow until kin or custodians move in and become the new owners.

Who were the people who exercised their land users' rights to hunt and gather in the range that took in margins of the Yowenjerre estate? Where the people who moved into the Yowenjerre estate exercising their economic, kinship or religious rights or was it a case of conquest?

There are few clues to the first question. Although the Yowenjerre and Brataualung neighbours followed different social rules of marriage, totems and alliances, there is evidence of communication between the two that could derive from a shared foraging range. As neighbours, the Yowenjerre and Kütwüt probably ranged over parts of each others' land in the daily quest for food and other resources. Indeed, the feud was started because the Kütwüt *did not ask* Yowenjerre *permission* to gather native cabbage. Although 'boundaries are/were permeable, flexible, rarely monolithic' they were nevertheless upheld to assert the ownership rights of the landowners (Rose 1996:45). Furthermore, there were some marriages between the Yowenjerre and the Brataualung (Howitt 1904:272). But those who moved to live in the vacant estate would most likely have had familial and/or economic links with the Yowenjerre or the band that shared the margins of that county.

The historical documents name the Kütbüntaura (a Brataualung group) as those who routed the last of the Yowenjerre east of the Tarwin and who took up residence there under their headman, Wormgorng. The fact that the Kütbüntaura had occupied a country remote from their own Brataualung people may have played a significant role in their strategic move south to be among their own. Bobby Coleman called them 'the people who don't know where their country is' (in Wesson 2000:29): perhaps they were in some sort of territorial limbo on the Avon River surrounded by Briakalung people. But another link between the Kütbüntaura and the Yowenjerre presents itself in the alliance between the Kütbüntaura and their Briakalung neighbours, the Bünjil Dan. The Bünjil Dan exchanged wives with the Brataualung Kütwüt, immediate neighbours of the Yowenjerre (Fison and Howitt 1880:228). This marriage alliance with the Kütwüt (who probably ranged over the eastern margins of Yowenjerre



country) conferred certain rights that provided another link albeit tenuous, between the Kütbüntaura and the Yowenjerre. Given what is known about the protocols of estate succession, it seems probable that the Kütbüntaura may have retained economic, kinship and/or religious links with the Kütwüt if not with the Yowenjerre. Perhaps all it took for a small group of Kütbüntaura (or Borro borro willun as the Bünwürüŋ called them) to stake their claim was to move in and 'squat'. Although succession of a vacant estate is usually by an adjacent group, many Gippsland intermarriage arrangements were between distant groups (Howitt 1904:272) which constructed and maintained claimant links between remote locations. The Kütbüntaura were a large group, and for a splinter group to move away especially in response to Angus McMillan's hostility, may have been timely. At some early point the splinter group became known as Joto warra warra and intermarried with the surviving Yowenjerre of Anderson's Inlet (Howitt 1904:257). Būdawal observed that the Joto warra warra 'spoke a little Nūlit' implying that the remaining Yowenjerre learned to speak the language of the Kütbüntaura.

An alternative explanation for the change of Yowenjerre estate ownership is that of conquest. Although conventional anthropological wisdom has it that conquest was uncommon as a process of land succession (but see Sutton 1982), there are elements in this change of ownership that were not consistent with straightforward succession by legitimate claimants. The many references to violent exchanges between the Western Port and Gippsland mobs support the notion of a conquest, as does Robinson's expression to 'extirpate' meaning to 'destroy, root out ... a nation...' (Concise Oxford Dictionary 1976). However, recordings of raids by one group on another and payback feuding are numerous (eg. Howitt 1904:348; Berndt & Berndt 1982:346). The Bünwürüŋ men with Robinson were clearly wary when crossing the Tarwin into perceived 'foreign country'. The timing of these events coincided with the appearance of Europeans in South Gippsland and the Bays, the disruptive effects of which are known to have contributed to emptying the Yowenjerre estate and influencing Aboriginal cultural responses. In particular, the arrival of Angus McMillan in Gippsland brought an unprecedented enemy, creating a 'push' factor for the Borro borro wilam perhaps too difficult to fight. Furthermore, the early disruption of the Port Phillip Kulin may well have stood in the way of Bünwürüŋ allies or kin with similar social organisation and familial links from more appropriately inheriting the vacant Yowenjerre estate.

#### **'Debatable ground' or powerful country?**

The relationship between Gūnai/Kurnai and Bünwürüŋ neighbours, the social boundary between them and the special nature of the territory spanning their countries all had a part to play in the complex social arrangements of traditional southwest Gippsland. The particular character of the territory between Port Phillip Bay and Wilson's

Promontory was referred to by Smyth as 'debatable ground' (1878:II:14). But the Woiwürüŋ and Bünwürüŋ called the region Mar-ine-bek and the Gūnai/Kurnai called it Wea wūk (Howitt 1904:403).

The Mar-ine-bek extended from the Yarra River, up Gardiner's Creek to Dandenong Creek and its source, and from there to the La Trobe River and by Howitt's account, to the Gippsland Lakes (Howitt Papers Box 1056/1b). 'Half bad country' lay around Brighton, St Kilda and Mordialloc and was permanently inhabited (Howitt Papers Box 1056/1b). Howitt infers here that east of the Mornington Peninsula was not permanently inhabited, or at least during the time he observed it. Robinson had already reported that the land between the Tarwin River and Port Albert was 'unoccupied' (Robinson Journal 27 April 1844).

When strangers or visitors visited the Mar-ine-bek particular protocols had to be observed. It was the Spirit Ancestor, Loo-errn who instituted the formalities to be carried out by 'alien but friendly blackfellows into his country' (Howitt 1904:417). Those visitors with good intentions who enacted the protocols were protected from Loo-errn's wrath while those with evil or harmful aims or those who failed to observe them would fall sick.

*'When a man is to be made free of the Mar-ine-bek, say at Tarwin, the old man plucks most of the new comer's beard – and runs a streak of raddle [ochre] over his head and down his back and down in front to the branjep [apron]. A wide white streak is drawn like a pair of braces from the back and front on each side. He is taken to a certain place and fed with eels which are caught with a jag spear and roasted for him. He must also learn the Bunerong language which is spoken there and which is the language of Lohan who lives at Wilson's Promontory and who made this custom.' Those entering had to sleep on a couch of leaves to avoid contact with the powerful ground. To breach these laws resulted in swellings of the armpits, groin, and neck. The special language that must be spoken was called Palalbeck (Howitt Papers Box 1056/1b and 1053/2c).*

The sacred and powerful territory extended east from the Mar-ine-bek and became continuous with the Wea wūk of the Gūnai/Kurnai. Similar protocols were required of visitors to the Wea wūk. A visitor had to be looked after by a local man, sleep on a thick layer of leaves to avoid contact with the powerful ground, be painted with a white band across the face, and learn the Nūlit language (Howitt 1904:403).

Despite having similar protocols, the Woiwürüŋ and Bünwürüŋ people regarded the Mar-ine-bek as 'something special, fine, beautiful or admirable', while the Brataualūŋ regarded the Wea wūk as 'bad country' (Howitt Papers Box 1056/1b). For the Bünwürüŋ and Yarra Woiwürüŋ the particular practices performed by

strangers were to assert the power and authority of Loo-ernn and the country over which he walked to Wammūm. It is customary in Aboriginal Australia to seek permission to enter another's country partly in recognition of the ownership of the land but also to minimise trespass onto sacred places (Rose 1996:45). The Būnwūrūng men who spoke with Robinson in 1844 were very circumspect about divulging what they knew of the Mar-ine-bek. One gets the impression that they were acutely aware not only of the presence of sacred places around them, but of powerful forces that on the one hand could punish and destroy yet on the other, protect those who came in good faith. Not only was Loo-ernn watching but so were the Wiwonderer who were dangerous animals with bodies of stone living in the mountains northeast of Western Port (Smyth 1878:455). This attitude to the territory reflected its recent past as a dangerous place in which a person could be ambushed, kidnapped or killed.

The Būnwūrūng men with Robinson in 1844 made the distinction between what they recognised as Loo-ernn's protocols and the processes to be followed in entering the country of others. As Būnwūrūng people they were already accepted by Loo-ernn, and although the Mar-ine-bek between Western Port Bay and Wilson's Promontory was uninhabited, they were clear that it still contained its own sacred geography and lore. But the change of ownership of the Yowenjerre estate into Brataualūng hands affected the rules of trespass. By crossing the Tarwin River, they were trespassing on land that was no longer Būnwūrūng but Brataualūng land. Sutton's assertion is upheld: a vacant estate does not become a no-man's land.

### **Wammūm**

Where does Wammūm stand in the process of succession of the Yowenjerre estate? Wammūm is rarely mentioned in the ethnographies as a place where people hunted and gathered or lived permanently with the exception of the Yanakie sand flats at the northern end of the peninsula. But the Yanakie people were ousted by the Nanjet people who were Brataualūng. Even so, the Briakalūng and Brataualūng regarded Nanjet as 'something to do with bad ground' (Billy Wood in Howitt Papers Box 1053/4a). This may refer to the time when the Brataualūng were feuding with the Būnwūrūng, and Wammūm had belonged to the Yowenjerre. Alternatively it may have something to do with the spiritual nature of Wammūm to both or either of these groups. It is significant that the Būnwūrūng staked their claim on Wammūm at the very edge of their territory because an important Spirit Ancestor trekked there with his followers and then resided there as the great protector. The most important sites are those that mark the beginning and end of an Ancestor's travels (Berndt 1976:57).

Although Loo-ernn was a Woiwūrūng Spirit Ancestor, the Brataualūng also revered him as 'Loan' (Howitt 1886:417). They also believed that Loan looked after them and lived among the rocky crags of Yirūk (the Brataualūng name for the southern end of Wilson's Promontory meaning a

'rocky place' (Howitt 1904:409)). One day, a group of senior Brataualūng men were hunting on the hills that overlook Wilson's Promontory when they

*'saw a blackfellow coming down the mountain with a great spear over his shoulder. He disappeared into a cavern. Since he did not appear, some went into the cave with lighted torches of bark. They went in some distance but could not find him. This was Lohan.'* (Howitt Papers Box 1056/1b).

Was it when they took over the inspiring and spiritual landscape of Wammūm that the Joto warra warra and other Brataualūng also adopted Loo-ernn as their spirit? Although they had no legend about Loo-ernn's trek to Wammūm, Mulaba, an old Kūtwūt man, stated that his ancestors came from the west where there were 'no great numbers of Blacks' (Howitt Papers Box 1053/4a; Howitt 1904:129). For the Brataualūng, Wilson's Promontory held ceremonial and protective roles. The ceremonial or religious importance is highlighted by an event told to Howitt. It relates the story of Tankli (Tommy Hoddinott) who underwent rituals there which made him a traditional doctor. Billy Wood's reference to Nanjet as 'bad ground' may have had something to do with it being restricted or dangerous ground for those not supposed to be there. But by the time Howitt was recording his informants, Billy Wood told him that Kūtwūt and Yowūng people regarded the Promontory as a sanctuary from enemies and a place to elope to (Howitt Papers Box 1053/4a). This place of social refuges on the south Gippsland coast has also been discussed by McNiven (2000).

It is also possible that Loo-ernn/Lohan was a Spirit Ancestor shared by the Woiwūrūng, Būnwūrūng and Brataualūng: Berndt surmises that shared special sites was possible (1976:139). Further research may reveal a 'handover' site (Sutton 1995:54) at Corner Inlet where Loo-ernn approached Wammūm. Loo-ernn would also have remained as part of the sacred geography of the fallow Yowenjerre estate: the Joto warra warra had to establish their own sacred geography in time because they had to leave theirs behind in their old home.

### **Concluding remarks**

This paper has explored the source of the ambiguity of ownership of the country between the Tarwin River and Corner Inlet as well as the supernatural, social and political context of the country on the southeast Victorian coast. The country, which once belonged to the Yowenjerre, was re-occupied by a group who probably took up certain rights to that country when its landowners were eliminated. So, there really was no ambiguity to those familiar with the rules of land succession and the protocols of boundaries: in fact, it was concerned not so much with a shift in boundary as a change of Yowenjerre estate ownership. It was perhaps just coincidental that the country also possessed particular spiritual significance in its own right. The power of Wammūm, itself closely associated with the special properties of the Mar-ine-bek/Wea wūk,

endured the machinations of the land succession and remained spiritually important to both the Būnwūrūng and the Brataualūng.

Barwick (1984) and Wesson (2000) broke new ground in their re-appraisal and analysis of the primary ethnographic sources to reconstruct not just the traditional social groupings and boundaries in southern Victoria, but some of the complexities and detail of the social structures, relationships and contexts. Although this was part of the initial stimulus for my research, my objective remains to search for ways in which such social groupings can be discerned in the archaeological record. The boundary between the Gūnai/Kurnai and the Būnwūrūng was chosen because it was reported to be a strong boundary between hostile parties, each upholding different social laws and hopefully material culture. Although I recognise that the boundaries in Figures 1 and 2 are depicted in a definitive, inflexible and probably unrealistic form, the strong separation of the Gūnai/Kurnai and Būnwūrūng societies offered an opportunity to investigate whether or not such boundaries are reflected in the material culture.

Perhaps 'the degree of cultural drift between populations – as measured by differences in the material culture – is a good index of the fixity and strength of the boundary between groups at any given point in time' (Yesner 1985:53). However, to identify two groups archaeologically is 'troublesome at best; few archaeologists agree on the technological and stylistic criteria necessary to define such systems'. Any one technological system – flaked stone, ground stone, ceramics etc will not on its own reveal the boundary (Yesner 1985:53), hence the need to explore all available ethnographic and archaeological evidence. Furthermore, rather than fit such evidence into the ethnohistoric framework of territorial organisation and social boundaries (the latter shown above to be fraught with pitfalls), my task will be to interrogate different types of material culture (e.g. baskets, shields, canoes, some stone artefacts, even some stone types), from the adjacent regions, and assess the degree to which spatial and temporal changes in style can be associated with historically recorded social boundaries. Indeed, can the archaeological record throw light on the likely location of the boundary?

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## Endnotes

- 1 Wesson (2001: pers. comm) explains Ganai pronunciation: the *ō* in *Lōng* is a long 'o', the *ū* in *Būnjil* a long 'u', and *ū* in *Woiwūrūng* is pronounced like 'a' in barn.
  - 2 This paper adopts the term *Gūnai/Kurnai* for the Gippsland Indigenous people which is their way to accommodate disagreement over the exact pronunciation.
  - 3 **Directional Names** of the five large groups of people within Gippsland were set according to points of the compass from the centre of Gippsland (the Mitchell River) - *Brataualūng*, *Briakalūng*, *Brabralūng*, *Tatungalūng*, *Krowatungalūng*. The *Brataualūng* lived in the southwest. *Brataualūng* is the masculine name for the people whose country stretched 'from the La Trobe River to Cape Liptrap, and from the southern watershed of the La Trobe River to the sea' (Howitt 1904:77). They were known as the 'Fire People', where *taua* meant 'fire', *Bra* referred to 'man' and *lūng* was a possessive masculine word ending (Wesson 2000:41; Bulmer in Howitt Papers nd) or meant 'father' (Howitt 1880). Thus, loosely, - 'the land of the fire people that was my father's'.
  - 4 Within the *Brataualūng* Directional Name were several local descent groups (Wesson 2000) (see Figure 1 and 2):
 

**Joto warra warra (Borro borro willun)**. The Joto warra warra occupied the country to the north and northwest of Wilson's Promontory after white contact. In 1844, their country lay between the Tarwin River (variously known as Joto warra warra, Tolengorme or Katungal River) and Deep Creek near Port Franklin, and included Cape Liptrap (Robinson 27 April 1844). Other accounts put the western boundary at Cape Liptrap (Howitt 1904:77; Fison and Howitt 1880:228). Tommy Hoddinott, a Howitt informant and a Yeru-ng man, called them Joto warra warra after his name for the Tarwin River (Howitt Papers Box 1053/4). The Joto warra warra succeeded the Yowenjerre in ownership of land east of the Tarwin.

**Borro borro willun/ Kūtbūntaura**. *Borro borro willun* was probably a *Būnwūrūng* and *Woiwūrūng* name for the *Kūtbūntaura* who lived in the locality of Angus McMillan's Bushy Park (Fison and Howitt 1880:228; Robinson 29.6.1844; Pepper and De Araugo 1985:end map). Their name means 'the people who carry (kutbun) fire (taura)' (Fison and Howitt 1880:228).

**Kūtwūt** occupied the Franklin and Agnes Rivers at Foster (Howitt Papers Box 1053/4a; Fison and Howitt 1880:228).

**Yowūng** occupied south from the La Trobe River and around Warrigal Creek and Tarra River (Howitt Papers Box 1053/4a; Fison and Howitt 1880:228).

**Delin** occupied what became Buckley's Coady Vale station on the Merriman's Creek (Howitt Papers Box 1053/4a; Fison and Howitt 1880:228).
- The Būnwūrūng (variously spelled)**
- Būnwūrūng* country stretched from the Werribee River, Port Phillip and Western Port Bays, Mornington Peninsula, French and Phillip Islands, and east to Cape Liptrap and Wilson's Promontory (Barwick 1984:115; Howitt 1904:71). The inland boundary with the *Balluk willam*, a *Woiwūrūng* group, ran approximately between Warragul, Neerim and the upper La Trobe River (Massola 1959:180).
- Yowenjerre** were the most easterly group of the *Būnwūrūng* people and the western neighbours of the *Brataualūng*. Their country extended from the Powlett River in the west to Corner Inlet in the east, and included the Tarwin watershed, Wammūm and Cape Liptrap (Robinson 27 April 1844). Their western neighbours were the *Būnwūrūng* group, - the *Yallock bulluk*, 'the river people' who occupied the country from the Bass River to about Warragul (Barwick 1984:118).
- 5 *Loo-errn* (Smyth 1878:453) was probably the *Būnwūrūng*/*Woiwūrūng* rendition of the name of the Spirit Ancestor, that for *Ganai* was *Loan* (Howitt 1886:417) or *Lohan* (Howitt Papers Box 1056/1b and 1053/2c).

# Hand Shelter (Ngarrabullgan), Cape York peninsula, Australia: site report

**Bruno David**

**Abstract:** Excavation of Hand Shelter reveals a small, single occupation event dating to around 650 years ago. This occupation included use of stone tools (possibly to maintain wooden artefacts) and the creation of 13 hand stencils. The size of the hand stencils suggests occupation included a male adult. As occupation coincides with the known abandonment of Ngarrabullgan as revealed by other sites, Hand Shelter represents some of the last activities undertaken by Djungan on the mountain until recent times.

Ngarrabullgan is a large, tabletop mountain located about 100km west of Cairns in north Queensland. Sixteen caves and rockshelters have been excavated on and near the mountain, revealing regional occupation since 35,500 BP until about 650 years ago, when occupation on the mountain ceased (see David & Wilson 1999; David 2002 for details). This paper presents the results of one of these shelter excavations.

Hand Shelter was rediscovered by an Earthwatch expedition on 13th June 1997. It is located among outcropping sandstone boulders along the mid-slope of a gentle rise, towards the centre of the Ngarrabullgan plateau (co-ordinates: 16° 49.97'S 144° 49.77'E; Grid Reference: 26872 813766) (Figures 1-2). Situated among eucalypt woodlands, it is 600m north of the permanent water source, Lake Koongirra. Grass trees – *Xanthorrhoea johnsonii* – dominate the understorey. A seasonal creek flows within 75m of the site during the wet season. The site is located only 7m southeast of Grass Tree Shelter, at a slightly higher level along the slope (670m ASL) (Figure 3).

Hand Shelter is a small, shallow rockshelter under a massive boulder, with 28m<sup>2</sup> ground floor area, most of which (25m<sup>2</sup>) is taken-up by rock rubble, bedrock or large boulders (Figure 4). A total 15m<sup>2</sup> of this floor area consists of exposed sandstone surfaces. Soft, sandy sediments cover 3m<sup>2</sup> (11%) of the ground surface. The site was recognised as cultural when 13 hand stencils were identified under the overhang. The sheltered area under the overhang is a maximum 13m wide, 3m deep and 3m high.

Hand Shelter was in a good state of preservation upon rediscovery, with no evidence of recent human and/or animal (e.g. cattle) disturbance. Some wasp nest and termite

activity was evident along the rock wall, with fungus and/or algae also present. The main source of damage was some natural flaking of the rock surface, resulting in the partial destruction of many of the hand stencils. Such processes are not unusual among the soft sandstones of this part of Ngarrabullgan.

## **Rock-art**

All stencils except for four are of hands, depicting the fingers down to the wrist (Figure 5). They are all portrayed upright, with the wrist at the base. The four exceptions (stencils 1, 2, 4, 5 in Table 1) include the hand as well as the forearm. The stencils are spread across much of the decorated surface, roughly aligned. A series of four horizontally aligned stencils occur towards the bottom of the rock surface; the rest are in higher parts of the underneath surface of the overhang. The wall surface today appears to be relatively stable and slightly silicified. However, none of the stencils show any evidence of silicification. All stencils were undertaken in red pigment, most likely earth ochres.

Three dimensions were measured for each of the measurable hand stencils (Figure 6); this was possible for only four stencils. Left or right hand determinations were also made (on the assumption that the palm of the hand was pressed against the rock during the stencilling process). The 'mid finger' size measures the distance from the tip of the middle finger to its base. Similarly with 'little finger', which measures the distance from its tip to its base. The 'thumb' measurement records the distance along the thumb axis, from the tip of the thumb to the base of the palm where it meets the wrist. All readings were to the closest 0.5cm. Table 1 presents the measurements.

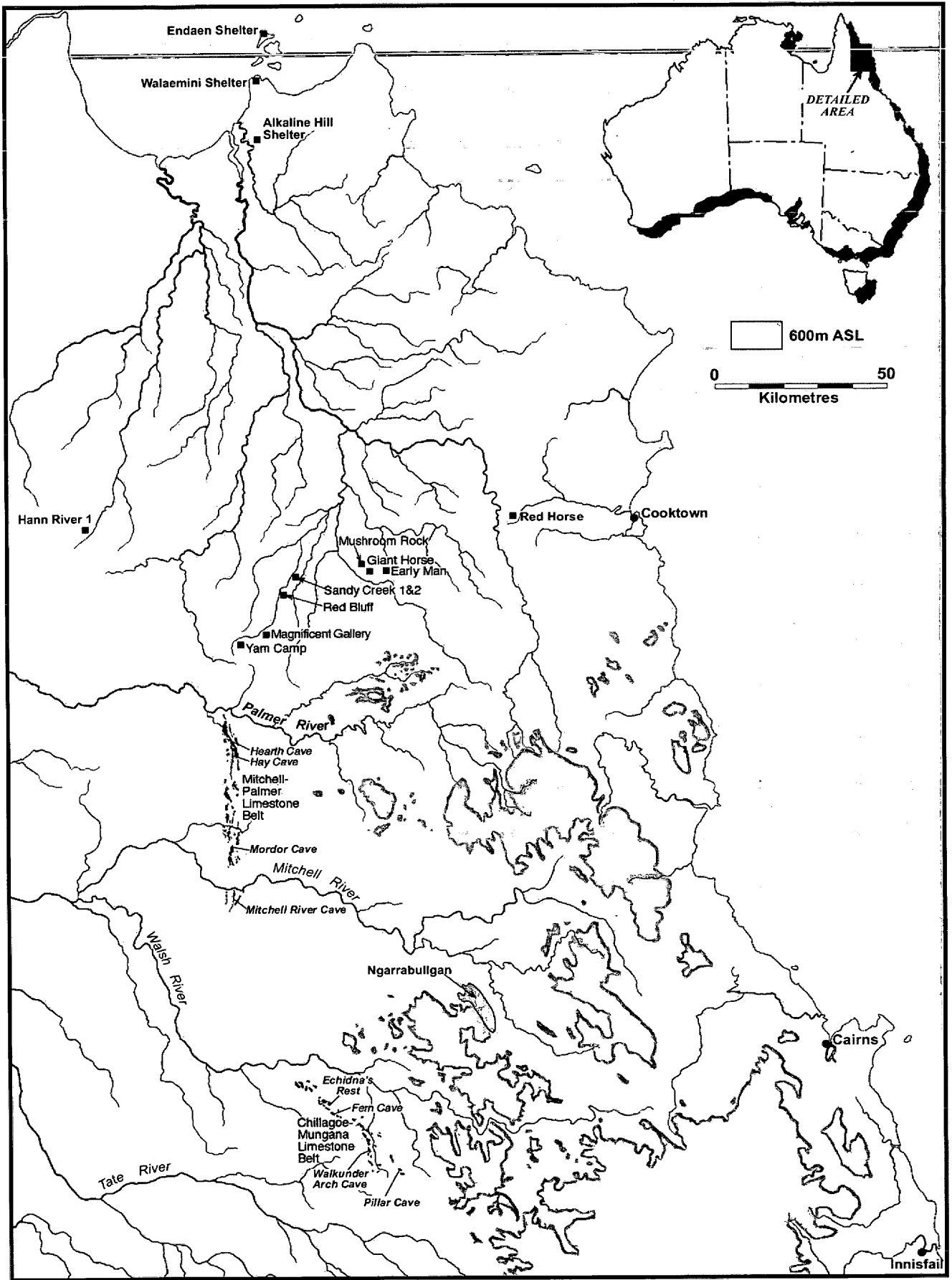
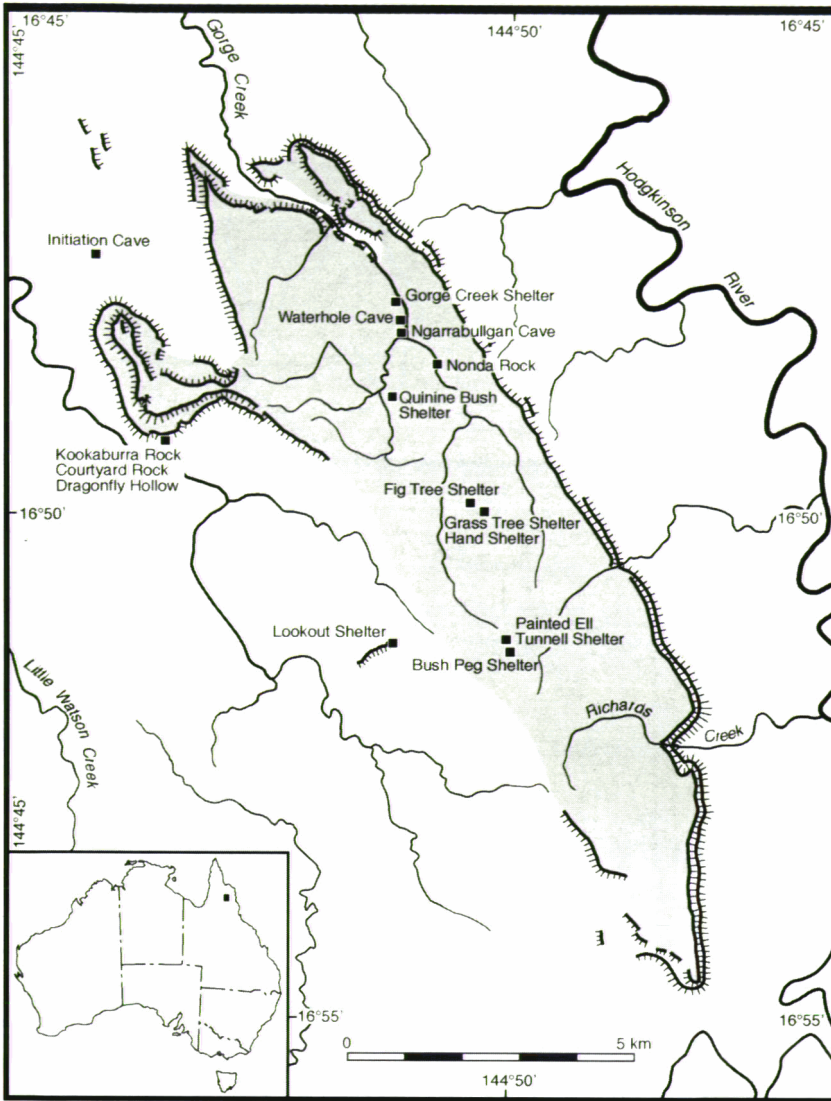


Figure 1: Map of North Queensland showing location of Ngarrabullgan and excavated archeological sites in the region



**Figure 2:** Map of Ngarrabullgan showing location of excavated caves and rockshelters



**Figure 3:** Hand Shelter

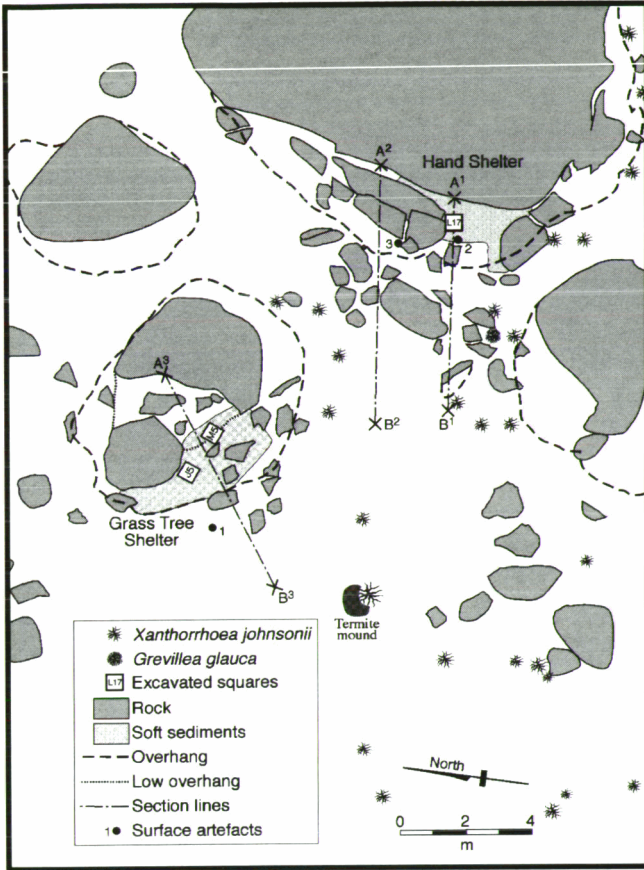


Figure 4a

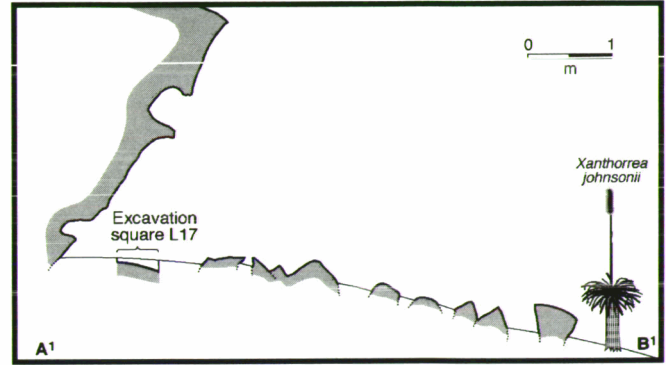


Figure 4b

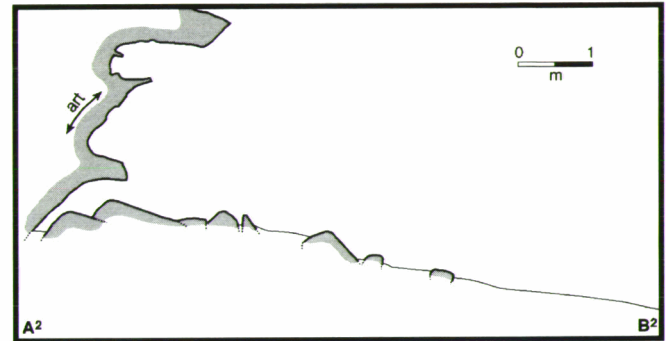


Figure 4c

Figure 4a, b & c: Map and cross sections of Hand Shelter, showing its relation with Grass Tree Shelter

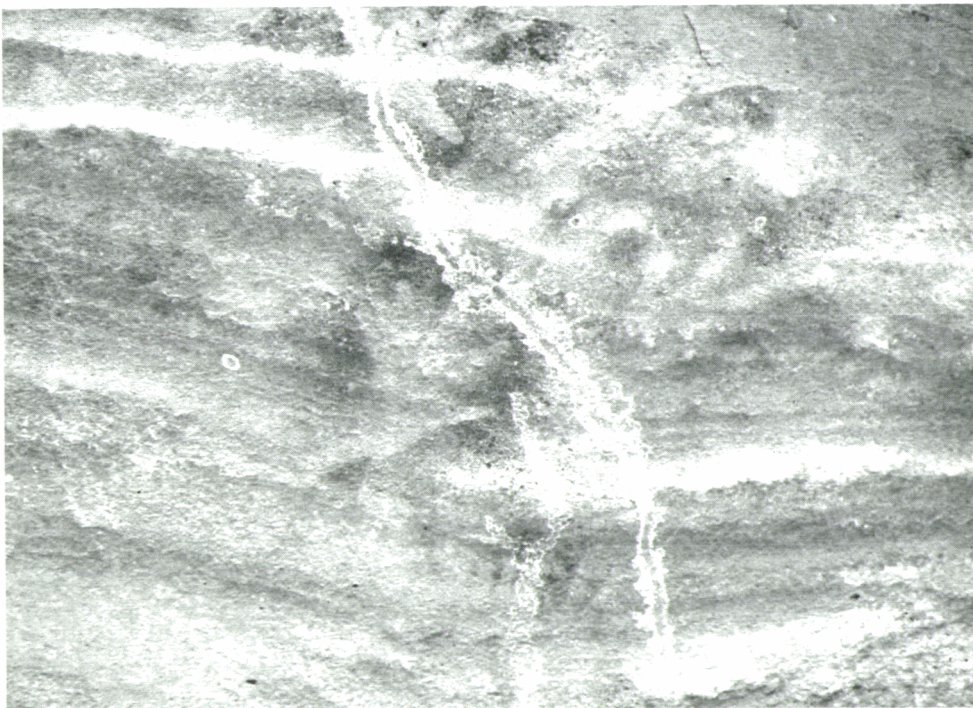


Figure 5: Stencilled panel



Hand stencil #	Left or right hand	Mid finger measurement (cm)	Little finger measurement (cm)	Thumb measurement (cm)
1	L	8.5	?	14.5
2	L	?	?	?
3	R	~8.5	~7.5	?
4	R	8.5	?	?
5	?	?	?	?
6	L	?	?	?
7	L	>7	>6	>13
8	?	?	?	?
9	?	?	?	?
10	?	?	?	?
11	?	?	?	?
12	?	?	?	?
13	?	?	?	?

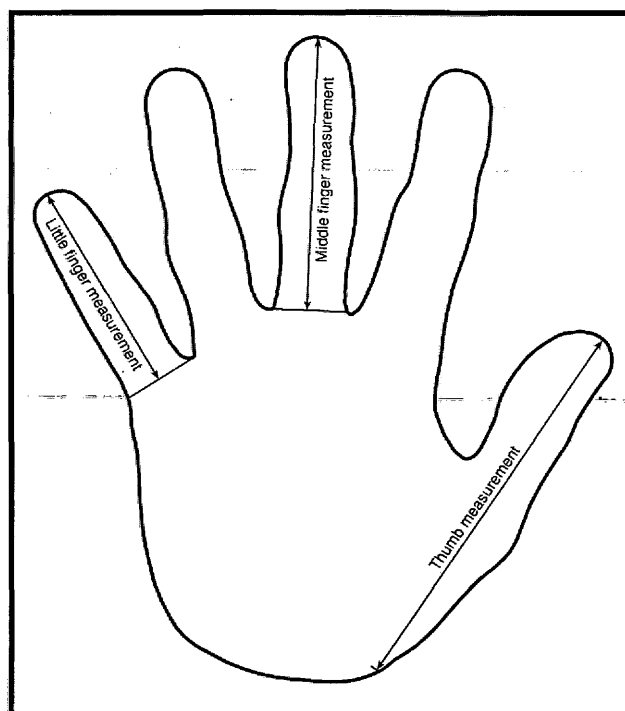
**Table 1. Measurements on hand stencils**

*The only four measurable hand stencils are very large, likely male. There are no juvenile hands.*

### Excavation and results

A single, 50 x 50cm test pit was excavated near the centre of the soft deposits, where sediments appeared deepest (Figure 3). The sampled area represents 8% of the excavatable, soft sandy surface. Excavation proceeded to sandstone bedrock.

Excavated sediments are sandy and very shallow, with a maximum depth of 10.2cm. Only two stone artefacts were recovered (in XU2 and XU3). Two stratigraphic units (SU) were identified – SU1 and SU2 below it (Table 2, Figure 7). SU1, representing the surface four centimetres of the deposit, is differentiated from SU2 principally by the presence of a fine moss that binds the SU1 sediments together. The two stone artefacts were found at the interface of SU1 and SU2; they seem to have accumulated at a time when the old SU2 surface was exposed as ground level. SU1 appears to have largely accumulated since final abandonment. Both stone artefacts relate to a late stage of the reduction process, showing no evidence of cortex. The small flake from XU2 is made on quartz, a locally available raw material. Its maximum length is 5.7mm, while its percussion length (distance from point of impact to termination along the percussion axis) is 3.8mm. This represents a small, wide flake whose characteristics are typical of percussion flakes resulting from the retouching of tools that have already been cleaned of cortex. The artefact from XU3 is a snapped flaked piece, undertaken on rhyolite, a raw material type that originates away from the mountain, some 2.6km to the southwest of Hand Shelter. It has a maximum length of 29.9mm. There is some use-wear consistent with wood scraping visible under 10x magnification along a 12.2mm edge. The use-wear includes small, invasive flaking and step fracturing, a maximum of 3.2mm



**Figure 6: Measurements taken on the hand stencils**

along the edge. Together, both these artefacts are consistent with the opportunistic use and maintenance of carried tools during a brief stay under the Hand Shelter overhang. No cultural evidence apart from stone artefacts was unearthed at Hand Shelter. The total absence of bone is not unusual at Ngarrabullgan: no site on the mountain apart from Ngarrabullgan Cave has revealed any faunal remains. However, sites at the base of the mountain, in similar sedimentary settings, are rich in bones. The absence of faunal

SU	Dry Munsell	Sediment description
1	10YR 5/3 ('brown')	Surface layer. The ground surface is firm, with some minor amounts of moss holding it together. SU1 is a homogeneous, ashy sand, with very minor amounts of leaf litter on the surface; the ground surface is virtually a bare sandy surface. Charcoal pieces are present in low quantities. Sediments are dry and compact. The boundary between SU1 and SU2 is gradual, taking place over a vertical distance of 1-2cm.
2	10YR 5/6 ('yellowish-brown')	Sediments throughout SU2 are homogeneous and sandy. They are compact but easy to dig. They are fairly dry, becoming slightly more humid towards the base. Towards the southern end of the square, an <i>in situ</i> root appears, along with a small amount of termite activity. This is extremely localised in extent, and was easily isolated during excavation.

Table 2. Sediment descriptions

remains at Hand Shelter and at other sites on the mountain is taken to reflect a general lack of terrestrial mammals on the mountain (Hall *et al.* 1999).

The charcoal is not concentrated in any part of the excavation. It is sparse and disturbed, reminiscent of naturally occurring charcoal that is commonly found on the ground surface throughout this part of the Ngarrabullgan landscape. It shows no obvious cultural traits, and is therefore interpreted here as the result of either natural or anthropogenic bush fires. A small amount of termite material is present; it was easily delimited and isolated during the course of the excavation. The stone artefacts are considered to be *in situ*.

### Dating

It appears that soft sediments began accumulating around the time of human occupation; two radiocarbon determinations have been obtained, at 570±60 BP (Wk-5865) for the basal excavation unit (XU5), and 710±40 BP for XU3. These two determinations are statistically indistinguishable at the 95% confidence level ( $t = 3.77$ ), and overlap at two standard deviations. They have been interpreted as representing a single occupational event, warranting their combination in order to obtain a mean age. Following the method of Ward & Wilson (1978) and Wilson & Ward (1981), this reveals a combined age of 667±33 BP, and a calibrated age of AD 1270-1320 or AD 1340-1400.

Given the very small number of stone artefacts and a total absence of all other cultural materials except for hand stencils, we interpret these results to indicate a single period of occupation, of short duration, by a small number of people around 650 years ago. Furthermore, because it is a small site that appears to have been occupied only once, and the rock art shows no evidence of multiple painting events - all stencils are undertaken in one colour, and all show similar degrees of weathering - it is also suggested that the hand stencils at Hand Shelter date to about 650 calibrated years ago, corresponding to the occupation event. This site appears to offer some indication as to the age of these hand stencils at Ngarrabullgan.

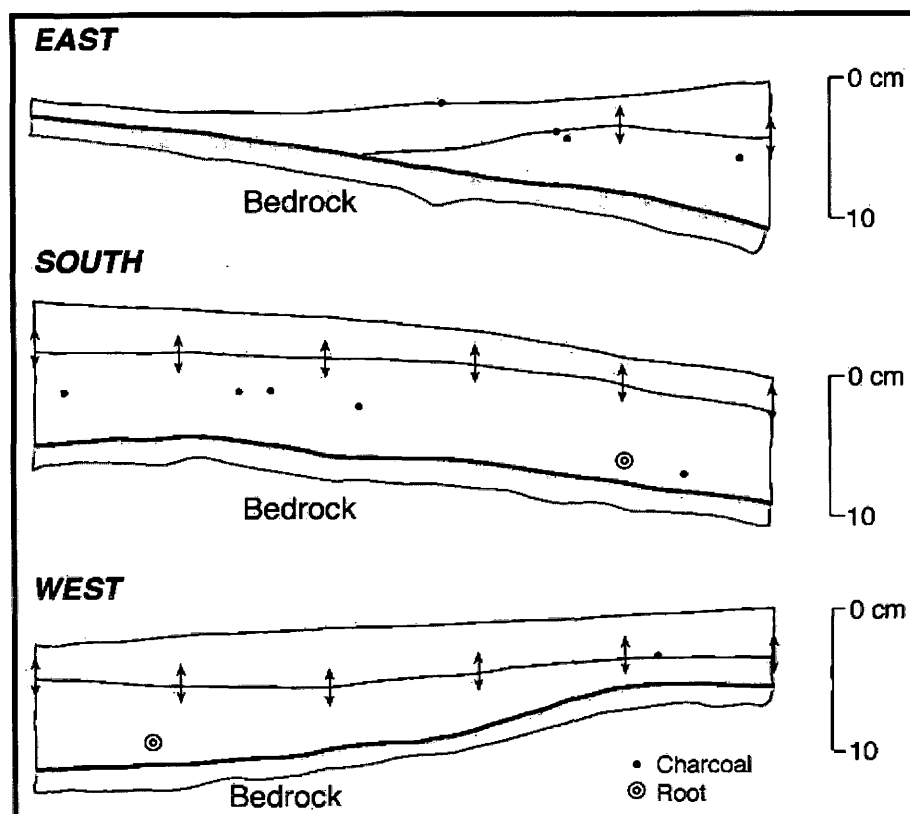


Figure 7: East, south and west section drawings of the excavated square

XU	SU	Volume of excavated sediment (l)	Weight of excavated sediment (kg)	Leaf litter & rootlets (g)	Charcoal (g)	Flaked stone artefacts (#)	Flaked stone artefacts (g)
1	1	0.5	1	24.5	1.2	0	0
2	1-2	3.5	4.75	15.2	8.5	1	<0.1
3	1-2	3.0	4.25	9.1	11.4	1	1.1
4	2	3.0	4.5	11.9	14.0	0	0
5	2	2.0	2.25	15.3	0.1	0	0

**Table 3. Excavated materials, by Excavation Unit**

### Conclusion

I conclude that a small group of people, including at least one adult and perhaps restricted to a single individual adult male, very briefly camped at Hand Shelter about 650 years ago. During this time, the occupant(s) used some of the stone tools they were carrying with them, probably in the maintenance of a wooden implement(s). The total absence of hearths and food remains at the site indicate that their stay was not long, and that the range of activities undertaken was very limited. The site certainly did not serve as any form of base camp, but rather as a transient shelter, possibly for an overnight stay or for a short break during travels across the mountain-top. This isolated occupational and stencilling event at Hand Shelter took place during a time when Ngarrabullgan ceased to be commonly used. Around 650 years ago all of the sites previously used on the mountain ceased to be used, indicating a period of abandonment that has been interpreted to signal the onset of a new set of Djungan Dreaming beliefs focused on the spirit Eekoo (see David 2002 for details).

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# Late Lapita colonisation of a high island in Western Polynesia: the case of 'Eua Island, Tonga

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**Abstract:** One of the major issues under discussion is the initial spread and subsequent intensification of Lapita settlement in Polynesia. The paper presents a brief account of the findings of a test excavation on 'Eua, Tongan Islands and provides the first  $^{14}\text{C}$  dates for the location. This allows us to compare its settlement with neighbouring Tongatapu, and permits us to postulate that settlement of high islands in the Tongan Group is later than that of the more accessible low island.

## Introduction

Much of the literature on Pacific prehistory focuses on the initial colonisation of island groups, placing emphasis on the nature and speed of the geographical spread of sites. Of likewise importance however, is the understanding of subsequent colonisation moves in an already partially occupied area, as this may explain parameters governing further expansion.

The sites of the Lapita culture are predominantly shell-midden refuse dumps, located near the seashore. Jennings (1980:3) summarising previous data, has presented a series of criteria for such sites: (1) they should be located on an islet; (2) not more than 10m inland from mean high-tide line; (3) where there is a shelving sand or coquina rock-beach lacking coral heads; (4) that extends some distance out on the reef. Further, (5) the site should lie on a low basalt knoll or promontory with a thick mantle of soil; (6) be elevated from 1.5 – 5.0m above present mean sea-level; (7) where the reef is ~1.0km in width and where there is a deep passage through the outer barrier reef. Lepofsky (1988), apparently unaware of Jennings's list of criteria, conducted a comprehensive but not exhaustive survey and analysis of the natural environments of Lapita sites along the lines of rigid site - catchment theory principles. She has added a few interesting observations, namely: (8) that most of the sites have a fresh water source nearby; (9) and that all sites have access to arable land within 1.0km distance.

The settlement pattern as reconstructed for the early Lapita settlers should be thought of as intentional. Given their

social and cultural background and their needs, the settlers were forced to adopt this pattern and had not much choice in the matter. Let us look at this from a logical point of view. Take a canoe-load of people, say twenty-five, arriving at a previously uninhabited island. Arriving in their canoes, they had to find a passage through the reef. Moreover, their need to travel was not over, as they had to keep in contact with the parent population if they did not want to be stranded. Thus placing the settlement at a location near a reef passage was necessary. Since they did not want to keep on living on their canoes, settlements had to be built. However, there were constraints upon where. Upon arrival they would be confined to the shore, as the island was probably heavily forested. Forest clearing is a painstaking exercise and would not have been conducted for its own sake. Locations would be ruled out therefore where the rain forest approached the shore. Small offshore islands, however, were likely to be sand cays or derivatives, allowing only a coastal-fringe type of vegetation, which could be easily cleared. Rocky or cliffed shores and those with extensive mangroves at the back of extensive mud or sandflats were also unsuitable, as the settlers could not beach their canoes at all or only during high tide, thus restricting their movements. Thus some sort of sandy beach next to a deep-water passage was required. As the newcomers were horticulturalists, they were interested in locations where arable land was within walking distance. In addition, sources of timber suitable for the construction of houses and canoes needed to be handy.

Spennemann (MS) could show that many early Lapita sites at the time of settlement were situated in an embayment

at the leeward shore of a larger island, which provided protection against the pounding ocean swell and ensured calm and navigable waters near the anchorages/berthing places. The entrance to the bay itself was usually blocked off by smaller islands, which in turn provided protection during the cyclone season, when the wind and wave patterns were likely to shift. The small islands would also effectively break any cyclonic tidal surge. If the settlement was located on an island in the bay, it was located on its rear, away from the ocean and facing the main island. This could be shown for the sites on Tongatapu (Tonga), as well as Avunatari on Malo (Hedrick 1983) and Erueti on Efate (Garanger 1972:26; fig.8), both in Vanuatu; Naigani in the Lomaiviti group of Fiji (Best 1984:fig 2), Yanuca on Viti Levu, Fiji (Best 1984), and Mulifanua on Upolu, Samoa (Leach & Green 1989). Frimigacci's (1980) reconstructions for some of the sites on New Caledonia indicate similar conditions.

This settlement pattern is predicated on the need of the Lapita people to have a secure anchorage at their disposal. Whatever the models advanced to explain the spread of the Lapita culture, most of them include close contacts between individual settlements, at least during the initial colonisation period, when overall population densities would have been small and new colonies most at risk. During that time the canoe would have been the single most valuable item of the entire material culture as large ocean-going specimens took two years or more to build and their destruction in a disaster would have cut off the settlement from independent contact with the outside world.

### **The initial colonisation of Tonga**

Several Early and Middle Lapita sites are known from Tungua, Lifuka and Foa in the Ha'apai group (Burley *et al.* 1995; Dye 1987; Shutler *et al.* 1994; Spennemann, unpublished fieldnotes; for chronology see Poulsen 1987 and Spennemann and Head 1998). These sites, comprised of shell middens containing decorated pottery, are in the main situated on dune systems or old shorelines. It seems that at the time of occupation all sites were located at the shore. Few surveys have been conducted on Vava'u and fewer reports have been published. Pottery has been recorded by Davidson (1971) and the author (Spennemann 1987b: II 104-267). Although some decorated pottery has been found the numbers of sherds are too low to allow for sequencing the sites. Again, the sites containing the decorated sherds are located near the present shore or along an old shoreline. The Lapita sites of Niuatoputapu are clustered within a narrow band along an old shoreline around the inner core of the island (Rogers 1974; Kirch 1978; 1988). The distribution of the pottery seems to be more or less continuous, without any clear-cut clusters.

On Tongatapu, five sites of the Early and twelve sites of the Middle Lapita Period have been found so far (Poulsen 1987; for revised <sup>14</sup>C chronology see Spennemann and Head 1998). All are located at the northern shores and with the exception of one Middle Lapita site, all are

located along the shores of present Fanga 'Uta lagoon. The selection of Fanga 'Uta lagoon as the prime initial settlement area on Tongatapu is predetermined by the environmental configuration of Tongatapu.

Throughout the better part of the year the entire southern and southeastern coast of the island is exposed to the tradewinds and a strong southeasterly swell, factors which make the safe navigation of large canoes a complicated affair. In addition, the fringing reef is very close to land and virtually no passages exist. Given the nature of the cliffed shoreline, very few protected pocket beaches exist, and these are also very limited in their dimensions. Similar conditions prevail along the northwestern and northeastern shorelines. Leeward and thus protected areas exist along the northern shore, including Fanga 'Uta Lagoon. Geomorphological studies have shown a higher than present sea level (approx 1.5m above present MSL) at the time of initial settlement of Tongatapu (Taylor 1978; Spennemann 1997). At that time the shore *west* of Nuku'alofa is likely to have resembled present conditions, that is, extensive intertidal sand and mudflats protected by an extensive fringing reef, greatly impairing navigation by canoe. The *only* area on Tongatapu, where channels of sufficient (canoe) navigation depth existed regardless of tidal conditions was at the Fanga 'Uta Lagoon, which was then an open bay (Spennemann 1997). Because of easier access, the western sector of the bay would have been favoured. The islets located across the western sector would have provided protection during the approach of cyclonic wind systems, when wind and waves came from the north.

The environmental setting of the early sites on Tongatapu closely resembles that of other early Lapita sites described above. What about neighbouring 'Eua, a volcanic island 8km to the east of Tongatapu? 'Eua possesses only a narrow fringing reef and does not offer the optimal conditions preferred by the Lapita people in the early period. The question of whether early sites exist on 'Eua is of great importance for our understanding of the systematics of Lapita settlement of the Tongan Islands. The Late Lapita period on neighbouring Tongatapu is a period when large scale cultural change took place, when the settled area expanded, new settlements were founded and some settlements were relocated from the coast into the interior (Spennemann 1991). It is of utmost interest to know whether the initial settlement of 'Eua is connected with this Late Lapita expansion or whether 'Eua was settled earlier.

### **'Eua Island**

The island of 'Eua (21°22'S, 174°56'W) covering 87.4 km<sup>2</sup> is dominated by an eastern ridge rising to a maximum of 312m. 'Eua has a complicated geological sequence. A volcanic base is capped by a layer of marine limestone, which in turn is overlain by volcanic tuffs. Tectonic uplift, which occurred in various stages, has produced three major coral limestone terraces. Most of the soils of 'Eua, like those on Tongatapu, are of Quaternary

age, derived from Andesitic ash showers and originating from an unknown volcanic source, probably a submarine vent north-west of Tongatapu (Cowie 1980).

The habitable and arable area on 'Eua is confined to the terraces, mainly the large third terrace, and consists of two large parts, one north and one south of the river. Following this distribution of habitable land, all communication is oriented north-south, rather than east-west. 'Eua has one river, the Lakatoa, which flows to the west and which is fed by numerous creeks originating in the eastern ridge. A few additional creeks originate in the eastern ridge and drain in small lakes in the central valley. The river and its tributary creeks form a barrier, which can only be crossed easily at three points, one of them at the river's mouth at Ohonua. If early Lapita sites exist on 'Eua, the only likely spot on the entire island they can be expected is the area around Ohonua, because a passage through the fringing reef is an imperative feature for the location of Lapita settlements.

#### *The Ohonua area*

The area around Ohonua is dominated by the Lakatoa river descending from the eastern ridge. It cuts into the landscape forming a deep gorge in the coral limestone, with cliffs rising to approximately 20m to 25m in height. The area of the township of Ohonua consists of a regular sequence of terraces. The area directly at the coast forms the 250-m wide, flat first terrace demarcated by the 7-m contour. The land then rises for 40m to the second terrace, located some 700m from the shore. This terrace leads to the large third terrace, which is defined by the 70-m contour. Taylor (1978) was able to identify two formations near the shore, the 130,000 year-old *Lakatoa formation*, which is 7m above the present high water level (HWL) and the 6000 year-old *Ohonua formation*, which is 2.2m above the present HWL. The latter ties in closely with a similar formation visible on Tongatapu, dated to approximately the same time period.

The marine resources available at Ohonua consist of fish and molluscs (including sea urchins and sea cucumbers). The reef is a short distance from the shore, offering a reef flat, but no distinct lagoon. Thus the shellfish species encountered today are mainly rocky shore species. Sandy bottom was only seen in small patches. The passage in the reef allowed the people to exploit both reef and off-shore fish.

#### **State of previous archaeological research on 'Eua**

Previous archaeological research undertaken on 'Eua Island has been very limited. McKern's (1929) research in 1920/21 mainly encompassed an archaeological assessment of outstanding field monuments, such as *langi* and fortifications. Other sites were recorded to a lesser extent. On 'Eua, McKern apparently test excavated two rock shelters (TE-Oh-1 and TE-Oh-2) on the banks of the river very near its mouth at Ohonua. One of the sites (TE-Oh-1) contained numerous undecorated sherds, indicating that it was probably used during Late Lapita

times. The other rock shelter also yielded pottery, but to a lesser extent. The faunal remains encountered included shells and a few bones of fish and small land animals. Other archaeological material deriving from 'Eua held in overseas and Tongan collections is fairly limited. It includes stone adzes, pottery, and a few human remains.

#### **The 1987 fieldwork**

A site survey was conducted on foot at the end of February 1987 to assess the implications of a proposed harbour development (Spennemann 1987). A total of ten sites was encountered, mainly pottery bearing middens (2), sitting mounds (1), burial grounds (1), rockshelters (5) and other middens (1). The area of Ohonua township is very much modified by recent developments. Various houses have been built on foundations of concrete pillars or complete poured concrete floors. Other houses have been erected on levelled ground, modifying and destroying previous patterns. No house-mounds or similar structures were encountered in the survey area.

#### *Pottery-bearing middens*

The two pottery-bearing shell middens found (sites TE-Oh-4 and -10) were located on both sides of the river, well above high tide mark. Site TE-Oh-10 is an eroded pottery-bearing midden with only a very thin layer of cultural deposits intermixed with the topsoil, and overlying a base of coral limestone. Site TE-Oh-4 is a clearly defined midden measuring some 30m by 15m, with a cultural deposit of up to 0.5m thick. The midden has been cut by the present day road running to the bridge and it was originally larger in extent.

#### *The rockshelters*

Besides the two rockshelters already mentioned by W. C. McKern three further rockshelters were noted. All them were covered with recent midden debris such as tin cans. No test excavations were undertaken in them, since they were not threatened by the harbour development.

#### *The sitting mound ('esi)*

Directly opposite the jetty is a three-tiered stone-lined platform, a sitting mound ('esi) site TE-Oh-5. The 'esi sits on a small mound measuring approx. 0.5m in height. The top surface of the third tier is slightly mounded as well. The structure is severely damaged on its northern side, where it has been partially cut by the road leading to the jetty. The bottom two tiers have been destroyed. Villagers pulling out the curb stones for use as seats and the large *Toa* tree that is growing on the structure, have caused further damage.

#### *Other sites*

One other midden site was seen (TE-Oh-3), which had already been noted during the reconnaissance survey in 1986. This midden is situated on the southern side of the river, and there is an old beach deposit on both sides of the road in which recent midden material has been deposited.

### Excavation of site TE-Oh-4

Since site TE-Oh-4 (UTM: 1K GS 12535/38450) was already severely damaged, and only a small portion was left, it was decided only to clean the exposed western profile already cut by the road leading to the bridge, and to take one column sample at an undisturbed spot located centrally in the midden.

The stratigraphy as displayed in the profile showed one thick midden layer. It was not clear whether the midden layer could be split into two, which included a bottom one with more stones than the top one. Analysis of the midden samples (collected as a column sample in arbitrary 5cm spits) has shown that the midden layer can be split into three sub-layers. The midden deposit is capped by a 50mm to 100mm thick layer of topsoil. The midden rests on a 0.20m thick layer of volcanic ash derived subsoil (Hango soil; Wilde 1984). Some midden material has been incorporated in this subsoil, most likely by trampling. This volcanic ash layer overlies a deposit of clean yellowish sand, which originates from an old beach. No cultural material was found in this layer, which was also bulk sampled.

Towards the north the midden deposits sit on a small soil mound, which contained almost no midden material. A hearth was visible in the profile. The function of this soil mound remains unclear, but it seems possible that a house was erected on top of the mound, as is documented for the classical Tongan period on Tongatapu, and that the midden is directly associated with the mound. The archaeological finds recovered from site TE-Oh-4 during the excavation and previous surveys are fairly limited. They consist mainly of pottery and one very small, fully ground stone adze. It is the smallest adze in the entire known adze series from 'Eua. All pottery found is undecorated, and the rim types belong to the chronologically late group.

Analysis of the midden deposits indicates that the Lapita people living at Ohonua kept pigs and chicken as domestic animals. We can only speculate about the existence of dogs, since no dog bones have been found, nor do any of the other bones show evidence of being chewed or gnawed by dogs. Besides chicken and pigs, there are wild birds (passerines) possibly taken for their plumage rather than their meat. It is unclear whether the regular occurrence of rat bones in the sample indicates that rats were also part of the diet.

The analysis of the fish bones revealed that mainly inshore or reef species were exploited. The occurrence of some bones of *Carangidae* ('trevally') indicates that pelagic fish were taken as well. All fish species/families represented in this sample can be taken by two general methods, netting and trapping, both of which leave no traces in the archaeological record. The other heavily exploited marine resource was shellfish. Given the nature of the environment, mainly rocky shore species were collected. These species are still exploited today, although

some other sandy bottom species also occur in the midden, which can no longer be found on 'Eua today.

The distribution of shellfish species indicates a changing environment in the vicinity of the site (Spennemann 1987 for shellfish data; Spennemann 1997 for environmental change implications). We may envisage a bay with some areas of sandy bottom at the beginning of the occupation. At a later stage more rocky shore species were exploited, possibly indicating a drop in sea level, or a tectonic uplift. These changes in the midden composition and environmental conditions correlate with events on neighbouring Tongatapu at about 700-500BC to 100BC). Based on the interpretation of the few rim sherds, the pottery from all layers seems to belong to a Late Lapita horizon (about 700-500BC to 200AD).

### Radiocarbon dates

In order to obtain absolute dates for the site, three samples have been submitted for radiometric age assessment to Beta-Analytcs. All three samples for radiocarbon analysis are shell samples from spits 5, 9 and 13. Their schematic stratigraphic position is shown in Figure 1.

Sample	Layer	<sup>14</sup> C Date
1	TOPSOIL	
2		
3	BUFFER	
4		
5	SUBLAYER I	2500±100 BP* (Beta-20575) cal BC 914 (811) 774
6		
7	BUFFER	
8	SUBLAYER II	
9		2070±100 BP* (Beta-20576) cal BC 197 (50) cal AD 70
10	SUBLAYER III	
11		
12	VOLCANIC SUBSOIL	
13	OLD BEACH	2500±90 BP* (Beta-20577) cal BC 914 (814) 781

**Figure 1:** Schematic stratigraphy of site TE-Oh-4, showing the position of the dated radiocarbon samples in relation to the assignment of layers, which is based on soil fraction size, faunal and archaeological material. Laboratory quoted ages are given.

The provision of standard results by Beta in 1987 did not take into account a correction for isotopic fractionation or the ocean reservoir effect. A  $\delta^{13}\text{C}$  value has been calculated for Tongatapu, based on the average of all measured  $\delta^{13}\text{C}$  values outside the lagoon. The mean of  $+1.69 \pm 1.07\text{‰ PDB}$  (n=10) is used as a substitute in those cases where no determination has been made

(Spennemann and Head 1998). Further, the dates need to be corrected for the ocean reservoir effect. A correction factor has been determined specifically for neighbouring Tongatapu, based on a modern, pre-bomb shell sample. The ocean reservoir factor for coastal, non-lagoon samples was determined to be  $270 \pm 70$  years (ANU-6421:  $\text{Age}_{1926} = 272.7 \pm 68$  years (Spennemann and Head 1998).

<b>2510 ± 115</b>	
<b>Beta-20576. Ohonua, 'Eua I.</b>	<b><math>\delta^{13}\text{C}</math>: 1.69±1.07‰</b>
<p>Shell sample (shell mixture, 22.6g) from site TE-Oh-4, Sample 9. The sample dates a Late Lapita midden horizon.</p> <p>Collected: D.H.R. Spennemann 1987; submitted D.H.R. Spennemann 1987.</p> <p><math>\delta^{14}\text{C}</math>: <math>-227.2 \pm 10.9\text{‰}</math>; <math>\text{D}^{14}\text{C}</math>: <math>-268.0 \pm 10.5\text{‰}</math>. The open sea average for Tonga: (1.69±1.07‰) was used as the <math>\delta^{13}\text{C}</math> value. Beta Analytics reported age (no <math>\delta^{13}\text{C}</math>): 2070±90BP.</p> <p>Ocean reservoir corrected age: 2240 ± 115 BP*.</p> <p>Calibrated age (CALIB 3.0): cal BC 197 (50) cal AD 70, cal BP 2147 (1999) 1880</p>	
<b>2935 ± 120</b>	
<b>Beta-20575. Ohonua, 'Eua I.</b>	<b><math>\delta^{13}\text{C}</math>: 1.69±1.07‰</b>
<p>Shell sample (shell mixture, 54.6g) from site TE-Oh-4, Sample 5.</p> <p>Collected: D.H.R. Spennemann 1987; submitted D.H.R. Spennemann 1987.</p> <p><math>\delta^{14}\text{C}</math>: <math>267.2 \pm 10.9\text{‰}</math>; <math>\text{D}^{14}\text{C}</math>: <math>-305.9 \pm 10.5\text{‰}</math>. The open sea average for Tonga: (1.69±1.07‰) was used as the <math>\delta^{13}\text{C}</math> value. Beta Analytics reported age (no <math>\delta^{13}\text{C}</math>): 2500±90BP</p> <p>Ocean reservoir corrected age: 2665±120 BP*.</p> <p>COMMENT: The sample, although taken from the midden horizon, dates a shell stemming from the underlying beach sand, layer 13. (c/f. Beta-20577).</p> <p>Calibrated age (CALIB 3.0): cal BC 914 (811) 774, cal BP 2864 (2760) 2724</p>	
<b>2940±115</b>	
<b>Beta-20577. Ohonua, 'Eua I.</b>	<b><math>\delta^{13}\text{C}</math>: 1.69±1.07‰</b>
<p>Shell sample (shell mixture, 16.9g) from site TE-Oh-4, Sample 13. The sample dates a shell from the natural beach sand underlying the Lapita site. (c/f. Beta-20577).</p> <p>Collected: D.H.R. Spennemann 1987; submitted D.H.R. Spennemann 1987.</p> <p><math>\delta^{14}\text{C}</math>: <math>-267.7 \pm 10.0\text{‰}</math>; <math>\text{D}^{14}\text{C}</math>: <math>-306.4 \pm 9.7\text{‰}</math>. The open sea average for Tonga: (1.69±1.07‰) was used as the <math>\delta^{13}\text{C}</math> value. Beta Analytics reported age (no <math>\delta^{13}\text{C}</math>): 2500±80BP.</p> <p>Ocean reservoir corrected age: 2670 ± 115 BP*.</p> <p>Calibrated age (CALIB 3.0): cal BC 914 (814) 781, cal BP 2864 (2763) 2731</p>	

**Table 1: Nafanua Series**

### Discussion

A date of cal BC 197 (50) cal AD 70 (Beta-20576) for the lower levels of the midden fits the expectations nicely, since the pottery also points to a date within the Late Lapita Period. The Nafanua series of  $^{14}\text{C}$  dates, however is not straightforward. The date Beta-20575, which is

stratigraphically younger than date Beta-20576 is as old as the stratigraphically oldest date Beta-20577. This inconsistency of the series can be explained by older shells having become incorporated in the younger layers. A contamination of marine shell samples can be ruled out.



### The early Holocene beach

The date received for the beach (Sample 13) is much younger than expected, given the other radiometric age determinations for the Ohonua area. Based on the limited exposure of the site, it was expected that the encountered

beach would belong to the raised terrace of the Ohonua formation (Taylor 1978:68), which had been dated to 5700 to 6100 BP (see Table 2). This is obviously not the case. It is thus likely that the dated beach is a younger storm beach, an explanation which is supportable given the location of the site.

Locality	LabNo.	Method	Height	Date (BP)	BP*
EUA-Av-1	I-9820	<sup>14</sup> C	0.5	6120±110	6280±105
EUA-A-1	LDGO 1406A	<sup>230</sup> Th/ <sup>234</sup> U	1	5700±500	

**Table 2: Radiometric results on the Ohonua formation, 'Eua. Dated are *Acropora sp. coral heads*. Height in metres above HWL. Dates after Taylor 1978.**

**Laboratories:** I - Teledyne Isotopes, Westwood, New Jersey; LDGO - Lamont-Doherty Geological Observatory, Palisades, New York.

### The 'ash' layer

To date, no absolute age determinations are available for the various ashfalls, which form the substrate for almost all soils on the Tongan Islands. The current published dates, between 5000 and 10000 BP for the last ashfall, all derive from the state of decomposition of the ash (Orbell 1977a, 1977b) than to direct or indirect scientific dating. The sequence excavated at TE-Oh-4 offered the first opportunity to date the last ashfall, since the volcanic ash layer is bracketed by two radiocarbon dates of the beach sand underneath and the midden deposit. However, the age bracket provided for the ash layer, that is, between cal BC 197 (50) cal AD 70 and cal BC 914 (813) 777 (weighted average samples 5+13), provides for a time period for which there are several other sites on Tongatapu. Since in all but one site (TO-Pe-5; Poulsen I 33-34), ash or clay layers are absent in the archaeological deposits of Tongatapu, and since ash falls on Tongatapu are thought to have come from the west, it would appear that the soil layer at TE-Oh-4 is not an ash deposit but a layer of slopewash deposited by an large-scale erosion event further upslope. The absence of humus content in the alluvial layer, as well as its overall homogeneity suggests that the erosion event was rapid.

### Conclusions

Based on the attribute analysis of pottery recovered from site TE-Oh-4, as well as the pottery found by McKern (1929) at TE-Oh-2, and by the present author at TE-Oh-10, the initial settlement of 'Eua occurred during the late Lapita period. This is confirmed by the <sup>14</sup>C dates available for TE-Oh-4. Even though 'Eua is the only source of volcanic rock close to Tongatapu, it seems the island was not settled prior to 2000 cal BP. The erosion event represented in the stratigraphy of site TE-Oh-4 could indicate land clearance above the Ohonua area, and thus indicate slopewash, or it could be the result of landslide generated by seismic activity.

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## EDITORIAL

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Yolande Kerridge

### NOTES FOR CONTRIBUTORS

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