

# Excavations, Surveys and Heritage Management in Victoria

Volume 10

2021



Excavations, Surveys and Heritage Management in Victoria  
Volume 10, 2021

*Edited by*

Deb Kelly  
David Frankel  
Susan Lawrence  
Caroline Spry  
Elizabeth Foley

*with the assistance of*

Ilya Berelov  
Shaun Canning

*Front cover:*

*Participants at the zoom webinar panel discussion by Traditional Owners at the 2021 Colloquium. Top row: Darren Griffin, Liz Foley, Dave Wandin—Wurundjeri Woiwurrung; bottom row: Racquel Kerr—Dja Dja Wurrung, Tammy Gilson—Wadawurrung, Ben Muir—Wotjobaluk and Jardwadjali. (Screenshot by Caroline Spry)*<sup>e</sup>

*Excavations, Surveys and Heritage Management in Victoria Volume 10, 2021*

Melbourne

© 2021 The authors. All rights reserved.

ISSN 2208-827X

# Contents

Editorial note	5
<b>Papers</b>	
Talking heritage: tracking change in a decade of discussion about local archaeology Caroline Spry, David Frankel, Susan Lawrence, Elizabeth Foley and Deborah Kelly	7
10 years of the Victorian Archaeology Colloquium: A retrospective panel and oral history of archaeology and cultural heritage management in Victoria Caroline Spry, Ilya Berelov, Shaun Canning, Mark Eccleston, David Frankel, Susan Lawrence and Anita Smith	17
Traditional Owner perspectives on archaeological research, cultural heritage management, and continuing cultural practice in Victoria over the past decade: A panel discussion at the 10 <sup>th</sup> Victorian Archaeology Colloquium Darren Griffin, Tammy Gilson, Racquel Kerr, Ben Muir, David Wandin, Elizabeth Foley and Caroline Spry	25
In the fine grain: Intimate materials and experimental archaeology on Wurundjeri Country today David Wandin and Angela V. Foley	35
Proximity of Aboriginal Cultural Heritage Places to fresh and salt water in the Bunurong Land Council Aboriginal Corporation Registered Aboriginal Party area: preliminary GIS analysis David Tutchener and Rebekah Kurpiel	47
Dynamic landscape, dynamic practice: Aboriginal dwelling beside the Carran Carran–Durt’yowan floodplains (Thomson River–Latrobe River, Central Gippsland) William Anderson, Paul Kucera, Jasmine Scibilia, Ben Watson, Michelle Negus Cleary, Fiona Petchey and Russell Mullett	53
The case of Dooliebeal and Wurdi Youang on Wadawurrung Country: Threats to, and spatial awareness of Aboriginal cultural heritage and landscapes within urban growth Heather Threadgold and Melinda Kennedy	69
Aboriginal stone sites and living spaces along the Victorian Volcanic Plains: A modelling system of incorporated natural resources and ‘Living Spaces’ determining non–nomadic settlements Heather Threadgold	75
The durability of silcrete flakes: An experimental analysis on the rate of use–wear formation for fine–grained silcrete flakes Grace Stephenson–Gordon	85

Collecting, storing and accessing archaeological science data produced during heritage management projects in the State of Victoria, southeast Australia Rebekah Kurpiel	95
Coghill's Boiling Down Works, Bulla Gary Vines, Zachary Carter, and Kim White	101
The Birds! Faunal analysis of 364–378 Little Lonsdale Street, Melbourne Christopher Biagi	113
Mapping Victoria's Second World War defensive air power and early warning system Daniel J. Leahy	123
Learning archaeology online: student perspectives on the most effective activities and resources delivered remotely Ian Walkeden, Maddison Crombie, Marcel Teschendorff, Melita Rajkumar, Elisa Scorsini, Lucinda O'Riley, Timothy McLean, Iona Claringbold and Rebekah Kurpiel	133
David Rhodes in memoriam Bianca DiFazio	143
<b>Abstracts</b>	
A new method for investigating the age of Aboriginal culturally modified trees in Australia Caroline Spry , Greg Ingram, Kathryn Allen, Quan Hua, Brian Armstrong, Elspeth Hayes, Richard Fullagar, Andrew Long, John Webb, Paul Penzo-Kajewski, Luc Bordes, Lisa Paton and Orange Local Aboriginal Land Council	145
Jacksons Creek Regional Parklands Cultural Values Study: RAP led investigations of the Sunbury Rings and Jacksons Creek corridor Delta Freedman, Caroline Spry and Jordan Smith	146
Reframing the pedagogy of Indigenous Australian archaeology within the classroom to transform student engagement within the discipline Georgia L. Roberts	147
The power of nails: Interpreting Chinese mining hut sites Paul Macgregor	148
A survey of the soda water industry in regional Victoria 1841 –1862 Cora Wolswinkel	149
Realising World Heritage listing of the Central Victorian Goldfields Susan Fayad	150
Archaeology of Printing at Metro North Zvonka Stanin	151

## Editorial note

The papers included in this 10th issue of *Excavations, Surveys and Heritage Management in Victoria* were presented at the annual Victorian Archaeology Colloquium held on-line via zoom webinar between 1 and 4 February 2021. This allowed even more than our usual number of people to register as participants, including some from interstate and overseas: their commitment and involvement testifies to the importance of this fixture within the local archaeological calendar. Many were fortunate to be able to meet in person, under appropriate protocols, for an outdoor boxed lunch at La Trobe University on 5 February.

We have taken the opportunity of celebrating our 10th anniversary by looking back over the last decade, both through a more formal analysis and through a less formal panel discussion of the history of the Colloquium and this publication. Another panel discussion transcript allows space for some Traditional Owners to reflect on particular examples that they feel have been of value in the complex process of cultural revival through a form of experimental (perhaps better experiential) archaeology.

The other papers published here deal with a variety of topics and approaches that span Victoria's Aboriginal and European past. While some papers report on the results of specific research projects others focus on aspects of method, approach, education and the social context of our work and approach. These all demonstrate how our Colloquium continues to be an important opportunity for consultants, academics, managers and Aboriginal community groups to share their common interests in the archaeology and heritage of Victoria.

In addition to the more developed papers, we have continued our practice of publishing the abstracts of other papers presented at the Colloquium, illustrated by a selection of the slides taken from the PowerPoint presentations prepared by participants. These demonstrate the range of work being carried out in Victoria, and we hope that many of these will also form the basis of more complete studies in the future. Previous volumes of *Excavations, Surveys and*

*Heritage Management in Victoria* are freely available through La Trobe University's institutional repository, Research Online <[www.arrow.latrobe.edu.au:8080/vital/access/manager/Repository/latrobe:41999](http://www.arrow.latrobe.edu.au:8080/vital/access/manager/Repository/latrobe:41999)> and through Open at La Trobe (OPAL) <<https://doi.org/10.26181/601a321a11c0d>>. We hope that this will encourage the dissemination of ideas and information in the broader community, both within Australia and internationally. We have also now set up a website for the Colloquium <<https://victorianarchaeologycolloquium.com>>

For the first time we have included an obituary to mark the passing of a member of our community: David Rhodes of Heritage Insight, a long-time supporter of our activities. Here we should also mention that we have also lost Ron Vanderwal who made important contributions to archaeology and the curation of heritage, although he was unable to participate in the Colloquia.

Once again we have been fortunate in the support given to the Colloquium by many sponsors: ACHM, Ochre Imprints, Heritage Insight, Biosis, ArchLink, Christine Williamson Heritage Consultants and Extent, while La Trobe University continued to provide facilities and a home for our activities, even if this year it was a virtual one. We would like to thank them, and all others involved for their generous contributions towards hosting both the event and this publication. Yafit Dahary of 12 Ovens was, as always, responsible for the catering, despite the limitations on her usual spread.

All papers were refereed by the editorial team. This year Deb Kelly managed this process and the sub-editing of this volume. Layout was again undertaken by David Frankel. Preparation of this volume was, like so much else in the last year, undertaken during the severe restrictions imposed because of the COVID-19 pandemic. We hope that 2022 will be a better year for all.

The presenters, editors and authors acknowledge the Traditional Owners of the lands and heritage discussed at the Colloquium and in this volume, and pay their respects to their Elders, past, present and emerging.

# Aboriginal stone sites and living spaces along the Victorian Volcanic Plains: A modelling system of incorporated natural resources and 'Living Spaces' determining non-nomadic settlements

Heather Threadgold<sup>1</sup>

## Abstract

*Drawn from the authors recently completed PhD thesis 'Gulidjan Country Stone Sites and Living Spaces' (Threadgold 2020), this paper outlines Chapter four, 'Living Spaces' that provides explanation and development of a conceptual model of living spaces. The model describes the multifaceted understanding of how stone sites present the initial layering of living spaces. The author has developed a simplified method and model that describes living spaces as housing, associated natural resources and industry, knowledge sharing and cultural places based upon extensive fieldwork, Traditional Owner input and anthropological / landscape architectural research. The focus is on relaying the definition of living spaces as a practical understanding of people and space and the notion of semi-permanency and permanency. The model is based on the combination of collective categories of immediate stone sites, then the layering of natural and manipulated landforms, waterways and housing. The theory is explained in this paper using examples of traditional Aboriginal living spaces observed in colonial documents of G A. Robinson's Journey throughout the Western District (Presland 1977, 1980) incorporating Gulidjan, Wadawurrung, Djab Wurrung and Gundjimarra Countrys.*

## Introduction

This paper outlines the explanation and development of a conceptual model of living spaces. The aim is to create a multifaceted understanding of how stone sites present the *initial* tangible layering of living spaces. The author has developed a method and model to describe living spaces as housing, along with associated natural resources and industry, and knowledge sharing and cultural places. The focus of this paper is relaying the definition of 'living spaces' as a practical understanding of people and space and the notion of semi-permanency and permanency in southwest Victoria. The model is based on tangible evidence of stone sites as evidence of spaces of living (Threadgold 2020), the layering of natural and manipulated landforms with the incorporation of flora and fauna, stone sites, scarred trees, waterways, and housing.

<sup>1</sup> Faculty of Science and Engineering, School of Architecture and Built Environment, Deakin University, Waterfront Campus, Geelong Vic. 3220.  
<heather.threadgold@deakin.edu.au>

The living space model aims to characterise the many ways Aboriginal people interacted with landscape at a range of spatial scales. It looks at stone sites, interpreted as dwellings. This is extended by the factor of one or two landforms, waterways and/or landscapes associated with the localised aspect of the immediate site. A regional extension of the localised aspect extends the living space, incorporating further layers of landforms, waterways and/or landscapes that may incorporate more stone sites and/or living spaces. This is explained using the authors model and illustrated using G A. Robinson's Journals (Presland 1977, 1980). The concept of 'living space', which will now be explored, is important to the approach.

## Living spaces

'Living spaces' is a term defined by the author and developed from almost 20 years of learning and interpreting Aboriginal Manipulated Landscapes (AML) which refers to the modification of landscapes in order to facilitate sustainable resources (Gammage 2011). The term 'living spaces' stems from the teachings of Louis Lane (1984, 1991), former archaeologist, and anthropologist and her definition of 'living-stations'. It also expands upon Porter's (2010) description of 'lived' spaces. Porter's (2010) definition indicates a space in the past with the term 'lived', promoting Aboriginal connection to Country as pre-colonial, but taking away the contemporary connection that exists and survives today. Lane (1984, 1991) explains how living-stations incorporate a purposeful residential space positioned within natural landforms, near to water and diverse natural resources, over a long period of time. Lane (1984:1) identifies two main contributors for living-stations: '1. Aliment i.e., food and water, and 2. Warmth i.e., the temperature of the immediate environment must be tolerable for the organism concerned'. Further to this, Lane (1991:1-2) reflects upon the fact that:

Living-stations were usually situated in places which afforded a variety of bio-communities so that a broad range of edible and materials resources were within easy travelling-distance of the inhabitants. Hunters would lope up to fifteen (15) kilometres to find fast game like marsupials.

In fact, the land is a resource for living; 'life came from and through the land and was manifested in the land' (Berndt 1981:2), with waterways providing



crucial support systems. Defining a singular aspect of Aboriginal settlement is impractical without considering the incorporation of practical and industrial uses as well as biocultural knowledge (Cahir et al. 2018), and intangible aspects of natural resources as living spaces. Most importantly:

Access is the key, accessibility to permanent fresh water, strategically allocated and reliable shelter, and practical and valuable resources utilised for industry for not just everyday use, long term availability and productivity of quality long lasting materials, for storing foodstuff, and trading goods (Threadgold and Jones 2018:5).

Alongside waterways, for instance, aquaculture activities such as stone eel traps are entwined with harvesting of water reeds used for trapping baskets, with sapling boughs used as fencing to hold the nets between the stone structures in place. While tending to the aquaculture system for months on end, food must be sourced and supplied, and housing structures maintained (Buith 2006). Short-finned eel is smoked by the natural method, utilising trees for smoking meat, and sun-dried methods for long-term use and trade; see example at Budj Bim (Buith 2006). Trade routes are ritualised as 'objects were traded only between one tribe and the next, never from one tribe, through a second tribe's territory, to a third tribe' (James 1978:71). Complexities on, and within, borders and boundaries are strictly adhered to and protect and define living spaces and allocated resources.

Housing structures are home to family groups, with perishable building materials utilised from nature, thus leaving evidence only of stone foundations. Stone arrangements and sites are intrinsic to meeting, learning, cooking, industrial use, and exchange and kinship formalities. Therefore, it is Lane's (1984,1991) definition of living-stations that resonates with the author and that presents a practical definition from the collated data and personal experience in the field for understanding living spaces. The term 'space', replacing 'Stations', is a term more suitable to the emphasis on landscapes in relation to homes. 'stations' is also associated with the colonial context of settler stations, and therefore is not appropriate. Furthermore, the term 'space' is derived from Tuan (1977:54) who speaks of the nature of space, place and geography, stating that:

Human beings require space and place. Human lives are a dialect movement between shelter and venture, attachment and freedom. In open space one can become intensely aware of place; and a solitude of a sheltered place; the vastness of space beyond acquires a haunting presence. A healthy being welcomes constraint and freedom, the boundedness of place and the exposure of space.

At times, archaeologists, and heritage advisors, as recorders of Aboriginal sites in Victoria, only recognise limited aspects of a living space and mostly associate with the tangible object or site, such as an artefact or stone arrangement, object or place (AV 2021a).

However, the broader perspective of a living space must be acknowledged inclusive of the following interrelated elements:

- Natural geological landforms, waterways, landscapes and resources.
- Aboriginal manipulated landscapes for utilisation as living spaces,
- Housing, food and water sources, aquacultural and agricultural infrastructure and industry, cultural participation, and meeting grounds.

The notion of living spaces contributes to a contemporary view that Victorian Aboriginal people were living on the land in a settlement situation, whether transient, semi-permanent or permanent. Do not, however, confuse transient with nomadic as this was not always the case in Victoria (Pascoe 2014; Doolan 1979). Settlement typology varies throughout Victoria from the coast to mountains, valleys, the Mallee, major river systems such as the Murray River, lagoons and volcanic landscapes. Housing is naturally adapted to sheltered spaces formed by dips and ridges shaped in the landscape. Fresh water is essential and the proximity of game or aquatic life, along with plant resources, provide family groups with reliable and diverse food sources, with riverbeds, lake foreshores and lunettes providing immediate resources for cooking and gathering (Threadgold 2020). Close vantage points allow for protection with the ability to watch for approaching friends or foes. Living spaces extend well beyond basic supplies in order to survive; there are complex and intrinsic layers to the spaces.

The term 'living spaces' can be linked to some aspects of Harry Laurendo's discussions on 'intensification' (Barker et al. 2006:107), that encapsulates his argument of the concentration of natural resources and collective economic activity aiding the viability of sustaining Aboriginal population growth during the time of the Late Holocene epoch around 11,700 years ago. The concept developed by Lourandos (1976, 1997) *Aboriginal settlement and land use in south-western Victoria* raised attention that Aboriginal people being viewed as hunter-gatherers to being considered 'settlers' at that time. This argument is also supported by Pascoe (2014) in his book *Dark Emu Black Seeds: Agriculture or Accident?* Pascoe (2014) identifies Aboriginal participation in complex agriculture and aquaculture systems based on a review of existing evidence. Recognising their application of landscape manipulation, in conjunction with human and animal feeding grounds as well as, harvest technologies that sustained Aboriginal groups in the Western District region. Pascoe (2014:48) focuses on the industrial association with living spaces, emphasising that 'Australian sovereign nations cultivated domesticated plants, sewed clothes, engineered streams for aquacultural and agricultural purposes, and forged spiritual codes for the use of seed in trade, agricultural enterprises, marriage and ceremony'.

Buith (2006:9) describes the four-fold approach taken by Lourandos (1976, 1997) in pursuing the definition of intensification:

three approaches were archaeological, acquiring

data through primary research at a landscape level, an individual feature level, and a bio-molecular level respectively. A fourth approach was the inclusion of ethnographic information, past and present. Overall, the determination of relationships between the geomorphology, the structures and the topography were considered essential.

The fourth approach taken by Lourandos (1976, 1997) also contributes to the notion of living spaces. It is an anthropological and landscape architectural approach through an Aboriginal lens that the author wishes to pursue in expanding upon 'camps' to living in the landscape and Aboriginal manipulation as long-term settlement. An anthropological perspective draws out the human aspect of settlement and highlights the lack of Aboriginal perspective in prior works who have intruded upon Aboriginal living spaces without considering or asking about this perspective. In his book *The Biggest Estate on Earth*, Gammage (2011) takes the theory developed by Lourandos (1976, 1997) further, touching on the popular belief of Aboriginal exploitation of the environment, with an emphasis on the clearing of land by Aboriginal people. Gammage (2011) explores the use of Aboriginal fire and manipulation. However,

the complexities of Aboriginal manipulation to landscape, on a practical level involving the utilization use of natural spaces, is vastly more complex than the idealism and romanticism that Gammage (2011) portrays from a European context. His argument of exploitation fails to appreciate the broader context of appreciating Aboriginal cultural relationship to Country/landscape and living spaces (Threadgold and Jones 2017:4).

In turn, 'the concept of [establishing] 'estate' as coined by Gammage (2011), along with the perception of ownership, misrepresents Aboriginal connection to, management of, and requirements of law of the land' (Threadgold and Jones 2017). In addition, 'farming' (Gammage 2011; Pascoe 2014) is a European word and concept and does not exist in Aboriginal language vocabularies. Neither is exploitation part of Aboriginal culture. Langton (Barker et al. 2006:139) explains that every living and natural aspect of land, water, air and fire is sacred; 'in the cosmologies of Australian Aboriginal peoples, water is a sacred and elemental source and symbol of life'. Trees and their uses are monitored. James Dawson (1881:21), a 19th-century observer of the Gulidjan people in the Western District, recorded that 'each man has an exclusive right to a certain number of trees for the use of himself and family'. Dawson (1881:21) also documented 'the aborigines exercise ... a wise economy in killing animals. It is considered illegal and a waste of food to take the life of any edible creature for pleasure alone', thus, animals are totemic attachments to individuals and clan identities and are sacred and protected by relevant Aboriginal guardians. Defining these complexities using examples of living spaces is outlined in the following section.

### Author's model of living spaces

To introduce the methodology of the living space model developed by the author, the following framework of the visual model as an interpretation of a three-tiered model of co-existing landscapes, landforms and living as *immediate, localised and regional*.

**Figure 1** presents the model of living spaces as proposed by the author, which comprises three layers, *immediate, localised and regional*. The sites in **Figure 1** are based on real sites, one on the stony rises, the other on the lunette of a lake on Gulidjan Country. These *immediate* sites (dark circles in **Figure 1**) are indicated by measurements with a diameter in metres. The waterway and lake near the immediate sites are within 100 m of the vicinity of settlement and, in the model, are indicated as the *localised* area of the living space which incorporates one or two landforms including water. The outer circle in the model is the *regional* perspective of the living space incorporating various landforms inclusive of diverse resources within kilometres of the sites and from the perspective of settlement use. Examples here are the craters, grassy plains, and scattered trees.

The following example (see **Figure 2**) of stone sites recorded by Rowlands and Rowlands (1966) further explains definition the *localised* and *regional* aspects of living spaces with an ethnographic perspective.

Rowlands and Rowlands (1966:356–357) recorded a complex living space in the Western Australian desert that incorporated a stone arrangement near a campsite with rock wells and rock holes, a large standing rock marker and cairn with the arrangement strategically hidden from the campsite:

The arrangement described here was found on a field trip by the authors in 1964 ... The aboriginal name of this site is Tjituruba. The ceremonial ground is situated close to the well and rock holes. It lies on a low ridge on the northwest side of a flat-topped hill, a few miles east of the Dovers Hills. The ridge is covered with very light-coloured rounded pebbles ... these have been flattened into the ground, presumably by the stamping feet of many aborigines over a long period of time ... Larger stones have been placed in lines and curves over this 'paved' area. [There is a] mound [on the] highest point of ridge about 400 yards [365 m] southeast of the mound, there is a rocky watercourse in the side of the main hill, where the two rock holes are situated. Near the well, and only a few yards from the edge of the stone arrangement, is a large rock projecting about five feet [1.5 m] out of the ground ... The stone arrangement is completely out of site [sic] from the campsite on the flat to the west.

The localised areas of Tjituruba are related to the immediate sites of the camp area and the stone arrangement. In relation to the camp area, the localised area incorporates the watercourse and the hill to the left which includes the flat area providing fresh water and resources including shelter with the hillside. The localised areas of the stone arrangement include the ridge, well



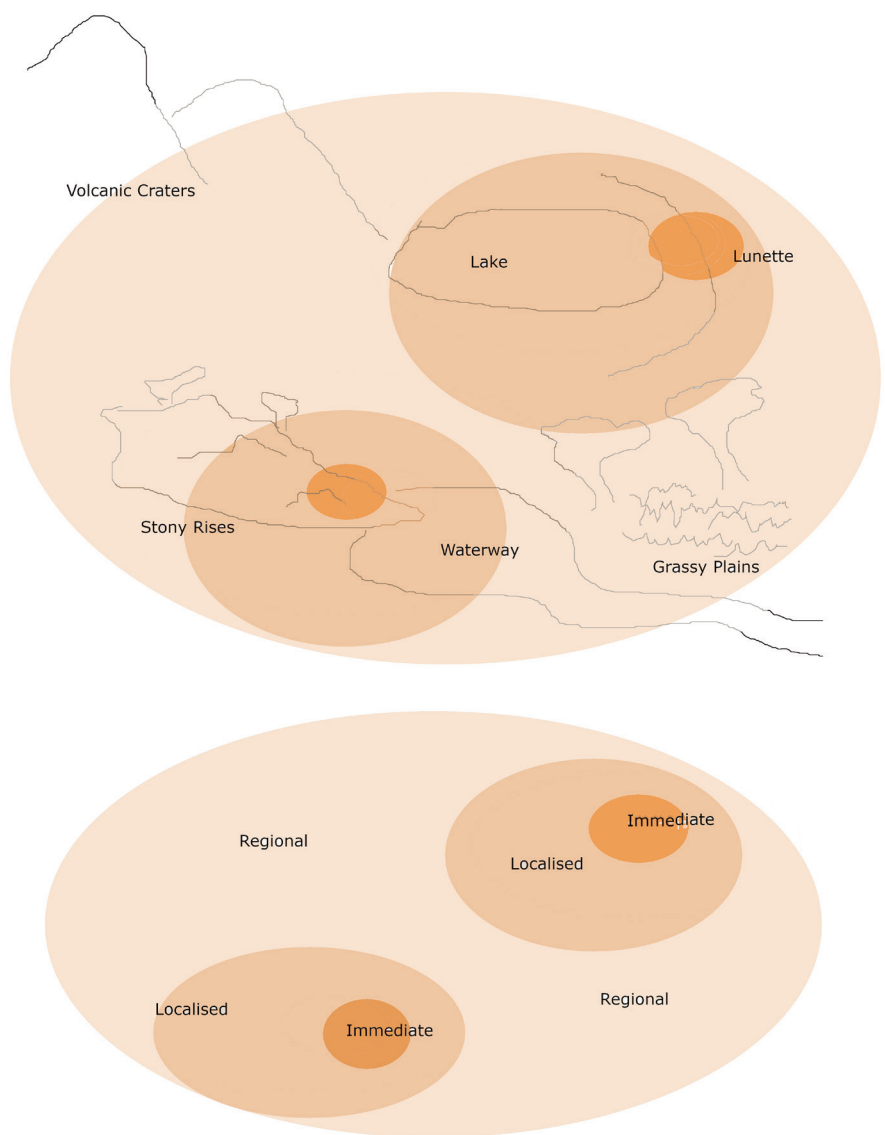


Figure 1. Model defining immediate/localised/regional aspects of living spaces. (Drawing Threadgold 2021).

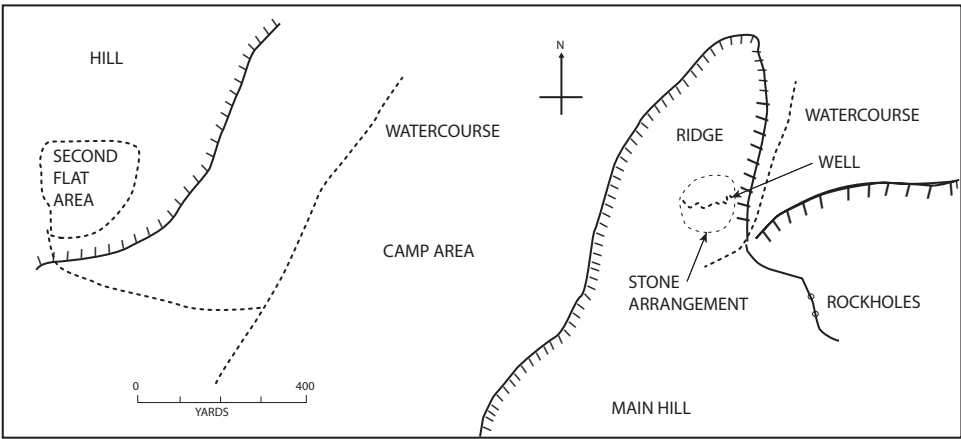


Figure 2. Tjituruba living space in Western Desert. Source: Rowlands and Rowlands (1966:356)

and rock holes which are related to the watercourse and provide long-term fresh water and shelter, resources and habitats from the ridge. The regional aspects of the two sites are the combination of the entire aspects of the two sites including the main hill which must be related as an entire living space as pictured below( see Figure 3).

### Housing/ovens and living mounds: immediate living spaces

Aboriginal housing typologies recorded throughout Western Victoria vary mostly due to landscape variations and the era in which they were observed. The speculation is that housing was built according to seasonal movements, which is evident by archaeological evidence from sites such as coastal middens. Yet coastal middens are very different from house and oven sites inland, often termed 'living mounds' (Lane 1984, 1991), 'oven-mounds' (Macpherson 1884), 'Aboriginal mounds' (AV 2021b) or 'mound sites' (Dawson 1881; Coutts et al. 1976). The discussion of oven typologies also raises the contested debate of the use of inland ovens as being either for cooking or 'camps' or for both. The focus here is on presenting permanency and housing and defining shelters, camps and ovens as *immediate living spaces*.

### Housing

Builth's (2006) research on Gundjitrara Country at Budj Bim defines stone house foundations including the complexities of rooms, doors and storage spaces. Builth (2006:9) states that

there has been a dearth of archaeological research into past Australian Aboriginal ethno architecture and its meaning in southern temperate regions. Aboriginal architecture incorporates domestic places and specific activity zones, including cooking sites and storage areas.

Yet why is it that Aboriginal architecture is not entirely understood as permanent, or continuity of occupation? A cold winter climate is one reason for permanency, another being abundant natural resources available all

year round. As stated by Memmott (citing Dennis Foley of Warringah, 2007:187), 'the same structure would be used by the same family for many, many years', with this indicating permanency or semi-permanency. Dawson (1881:10), in recounting observations of permanent housing as 'habitations, wuurns,' goes further, describing sizable accommodations 'housing a dozen or more and up to fifty or more persons, and for generations'. This notion of settlement and housing in terms of 'towns' is outside the realm of the Western ideology of 'town' structure, instead sitting within the natural formation of landscape (Builth 2006) and being subtle in terms of identification. Simplified living is not without necessities and long-term stability over millennia. Pascoe (2014), when describing 'storage and preservation,' mentions 'stockpiling' meat and grain for ongoing use.

Permanency is not only attainable via architectural typology, but also through the locality of habitations and the resources available. Where stone is available (mainly volcanic basalt plains), foundations are present, whereas coastal habitats and otherwise are less well known when they require wood, bark and dense plants and creepers such as coastal spinach (Gammage 2011). The identification of traditional housing typologies is commonly misinterpreted, mistakes recorded with accompanying imagery, fuelling a misconception about permanent living. Temporary shelters were utilised and observed in the post-colonial era as permanency was not an option for Aboriginal people who were forced into assimilation by displacement (James 1978).

Memmott (2007) acknowledges stone house foundations as part of structures across Australia; however, his pictorial examples mostly perceive vegetation-based housing made from wood, bark, leaves, etc. Danger lies in inferring from case studies drawn from examples spread throughout different parts of Australia, but without taking into context local variation in landforms and climate as well as the availability of localised materials for structural use. Memmott's (2007) work is too broad in context. Even comparisons of game or bird hides can be disconnected without the cultural aspects in relation to specific landforms and natural

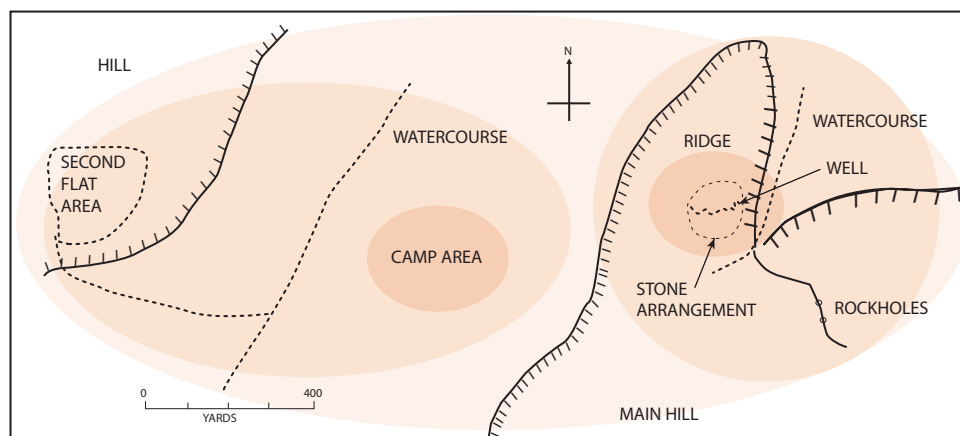


Figure 3. Tjituruba living space using author's model.: Adapted from Rowlands and Rowlands (1966:356) (Drawn by Threadgold 2021)

resources. Memmott's (2007) housing examples also represent colonial impacts and are mostly temporary housing as the Aboriginal people, at that time, were being displaced, with non-traditional living spaces observed as family groups 'camped' together after being shifted from their land. When Dawson (1881) describes camp being set up for a great meeting, the shelters he mentions are in relation to a temporary stay, up to three months, and could be termed semi-permanent. The recording of 'camps' misinterprets the meaning of why Aboriginal people were in that particular space at that time and whether an existing settlement was already there which people were visiting. A brief set of housing typologies are described in Robinson's observations outlined below.

### Ovens and living mounds

The understanding of Aboriginal ovens is fraught with contradictory meanings as the debate between their use for cooking and living ensures ongoing confusion. In 1868, an argument took place via newspaper correspondence between James Dawson, a settler of Camperdown and Aboriginal sympathiser, and other settlers throughout Victoria. The discussion involved the use and understandings of Aboriginal oven sites and mounds. Dawson (*The Argus* 9 Sept 1876:103) presented the following information from his observation of groups adjacent to Gulidjan Country:

Native mounds, so common all over the country...were the sites of large, permanent habitations, which formed homes for many generations. The great size of them, and the vast accumulation of burnt earth, charcoal, and ashes which is found in and around them, is accounted for by the long continuance of the domestic hearth, the decomposition of the building materials, and the debris arising from their frequent destruction by bush fires. They never were ovens, or original places of interment, as is generally supposed, and were only used for purposes of burial after certain events occurred while they were occupied for sites of residencies—such as the death of one or more of the occupants of the dwelling at the same time, or the family becoming extinct.

An old settler wrote a response to Dawson in *The Leader* (25 April 1868:20) stating that his 'observations of this subject extend over a period of twenty-eight years' near the Murray River and that:

As a general rule, the blacks do not use their "cooking mounds" as sites for their camps; an exception to this exists, however, on the large, inundated reedy plains of the Lower Murray, where these ovens are more numerous, and much larger, than any we have seen in other parts of Australia.

The term 'blackfellow oven' was coined by landowners in the 19<sup>th</sup> century for inland ovens alongside freshwater sources. Reverend Peter MacPherson (1884:3) at Meredith explained that he counted about 40 oven

mounds 'in a space of about 14 miles by 10 (4.2 km by 3 km)' and noted that oven mounds were up to '20 or 30 feet (6.1 m or 9.1 m) in diameter, and 1 or 2 feet (0.3 m or 0.6 m) thick in the centre' and that 'the stone oven itself varies in size from 4 to 9 feet (1.2 m to 2.7 m) in diameter'. But were these foundations of housing? His description continued as follows:

the oven bedded in the ashes contains about sixty stones, mostly small, not much larger than a man's double fist. The ring of stones is 18 feet (5.4 m) in diameter, thus leaving a space of about 2 feet (0.6 m)] between the outer edge of the mound and the circle of stones. About 150 stones formed the circle, mostly small in size, very few of them being as large as a man's head.

He said that 'the necessity for ready access to water explains at once why so many ovens are to be found along the banks of creeks and rivers, as well as by the margins of lagoons and lakes' (MacPherson 1884:2) between the high and low points.

Oven sites are, in fact, multipurpose and different landscapes present variations of their use. Ovens can be located on lunettes (sandy deposits built up over a long time), usually on the east side of a water body such as a lake system (Haw and Munro 2010; Massola 1969). Oven sites, such as the ones described here, are organised for immediate cooking with resources available from the water source, such as birds, shellfish, fish and eel. Lunette sites are more often temporary for seasonal use only when the water body is seasonal; otherwise, they are permanent. It can be argued by archaeologists that it is difficult to determine living sites as refuse such as food remains are rarely preserved. However, lunette sites in this area often preserve stone or clay balls that were used as heat retainers in cooking ovens. On Gulidjan Country, 'the material used for fuel was the coarse kind of peat or turf forming at the edge of lakes which are situated at some places in the regions called The Plains. Quantities of long grass are also available' (MacPherson 1884:6). Oven sites are associated not only with water resources, but also with locally collected food sources of animals, plants and birds that are inclusive for the purposes of living and, when required, of meeting. Oven mounds, or living mounds, are earthen mounds similar to lunette sites only relying on earth, not sand. Aboriginal Victoria (AV 2020b, 2020c) describes layers of Aboriginal mounds, inland and freshwater:

Aboriginal mounds are places where Aboriginal people lived over long periods of time. Mounds often contain charcoal, burnt clay or stone heat retainers from cooking ovens, animal bones, shells, stone tools and, sometimes, Aboriginal burials.

Also mentioned by MacPherson (1884:6) were 'circles of stone around the mounds,' with 'some of the stones also present[ing] the ghastly white appearance of having been subjected to great heat'. Examples of this were observed during site assessments in the current study. And 'when there is no stone available it is said that the aborigines [sic] were in the habit of baking clay into a course [sic]

kind of brick or pottery and using it as a substitute for heating purposes in their ovens' (MacPherson 1884:6).

### Landforms, landscapes and industry: localised and regional living spaces

From the 1930s, archaeologists and other recorders of Aboriginal stone sites began to describe site details and surrounds by drawing sketch map diagrams. This methodology was utilised in the current study by the author when undertaking site assessments designed to ground-truth the living spaces model, by categorising places into *immediate* sites and the *localised* and *regional* aspects. The living space model is useful not only for living spaces, but also for the extension of stone sites that may not incorporate living but may instead be for ceremony, cultural practices or meeting purposes. Such sites may be an extension of a nearby unrecorded living space, and this is most often found to be the case when an understanding is gained of the localised information supplied or when visiting the site.

In Victoria, Smythe (1878:34) described the country to the east of Lake Bolac on Djab Wurrung Country, north of Lake Corangamite, as one large living space encompassing settlement, water sources and natural resources in a regional perspective:

the wide, treeless basaltic plains which stretch from the River Wannon on the west of the River Moorabool on the east and Mount Cole on the north of the southern shores of Lake Corangamite on the south—an area of 8,000 sq. miles (259 km<sup>2</sup>)—were occupied by numerous and small tribes. The banks of all the lakes, rivers, and creeks were frequented by them; and the ancient mirrn-yong heaps and the low walls of stone erected for shelter or other purposes are still to be seen in many parts. The plains were the resort of the emu, the wild turkey, and the native companion [brolga], and the lakes and swamps were covered with wild fowl.

Consistencies in primary evidence begins to present the characteristics of complex Aboriginal living spaces. High points in the landscape, such as hills and mountains, along with access to water, hidden or sheltered places with the use of naturally formed landscapes, as slopes, plains and ancient lunettes, are entwined and provide the availability of materials, food, shelter and fresh water for volcanic landscapes. These consistencies are the ingredients for living spaces within the case study of the Gulidjan and the related site assessments.

### Examples of living spaces in G. A. Robinson's journals.

The following descriptions of Robinson's travels highlight living and industry. Observation and mapping places witnessed by Robinson are collated by the author using icons to visualise the extent of living spaces in the Western District.

West of Lake Bolac on a sweeping bend of the

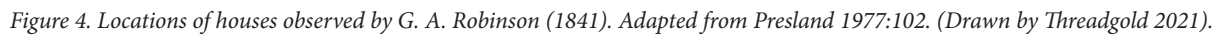
Hopkins River at today's site of Wickliffe, lies Lake Buloke, where Robinson (Presland 1977:14), on 1 April 1841, saw 'a vast number of old native encampments and huts, called in the language of the country *Worn*'. At 'the top of the sand bank and at the base of the bank on the edge of the lake, were the sites chosen' (Presland 1977:14) for this housing, described in the context of the natural localised landscape. Massola (1969:78) confirms the same site as a 'large camp site on the sand ridge at the southern edge of a drained swamp', with further large mill stone sites nearby connected to Lake Bolac for food preparation and eel harvesting. Mitchell (1961) also confirms this as a living site at Lake Bolac with industrial aquaculture and seed milling, stating that, 'at its southern end there is an outlet for flood waters [where] a weir has been built ... a favourite camping place for the natives'. Coutts et al. (1976) confirm that the site contained stone arrangements at the north-eastern end and southern edge of the lake.

On 16 April 1841 at Black's River at a place Robinson named '*Narroget*' (now recognised as Naroghid), he 'passed a deserted *elengermat* native camp of nine huts of recent construction; each hut was large enough to contain seven or eight persons (adults). They were made in [the] form of a cupola with bark and sods over them with a doorway'. Similar housing was described as a 'cupola' design (rounded roofed design as depicted in Robinson's sketches during his travels through Western Victoria), with the different materials used for walls and roofing most likely available in the immediate region. On 21 April 1841, Robinson described how 'the native houses were well constructed' (Presland 1977:44). In various forms, but principally a half cupola, their construction was described: '[a] strong and sometimes neat framework of sticks are first made, then a covering of bark and turf laid over the whole with the grass side downwards. These are warm and durable and are enough to prevent a native weapon from penetrating'.

On 2 May 1841, Robinson mentions that, in the Lockaber Gully at the Merri River in '*Mane.meet* nation' (Presland 1977:82) (modern-day Minhamite) 'there were a large number of huts on the river when they first came'. This large settlement possibly comprised various family groups. Further along the 'Merri river [near] mount rouse [sic] ... at the springs and water courses, the natives had their fixed residence or villages or homesteads' (Presland 1977:73). On 22 June 1841, Robinson 'visited *Mingbun's* hut and sketched it', describing the housing as 'two apertures, lagged and turfed' (Presland 1980:70), when Robinson was near the foothills of Mount William. Massola (1969:76) confirms camps 'on the southern edge of Lake Muirhead, and on several of the smaller swamps'. An extensive eel aquaculture site with ovens was located here (Figure 4).

Figure 4. is a version of the Presland's map (Presland 1977) that provides a visual representation of housing as a symbolic icon. This presents impact of the extent of settlement This shows the large extent of Aboriginal settlement and introduces the incorporation of living spaces as a visual context for cultural mapping.





Settlement along the Hopkins River was utilised to manage eel-trapping engineering. Materials used for the weir and eel traps came from the forest, with reeds from the waterways. This living space is connected to the waterway region of the Budj Bim/Lake Condah system to the north from the source at Mount Eccles (which was originally named Mt Eels in colonial times as recorded by Robinson (Presland 1977). Massola (1969:36) mentioned falls on the Hopkins River where 'the Aborigines congregated at these falls in their hundreds during the eeling season, when the eels travelled upstream and were trapped in their thousands at the foot of this and the not far away Black's Falls on Emu Creek'. Hotchin (Coutts et al. 1976:119) explained that the use of this area was due to a 'bed of a section of the Hopkins River which drains the central Western District'. Industrial stone sites for use in aquaculture on the Hopkins River up towards Wickliffe provided for plenty of available food for family groups living in the area, along with forested areas, grassy plains. Robinson mentioned in April 1841 that:

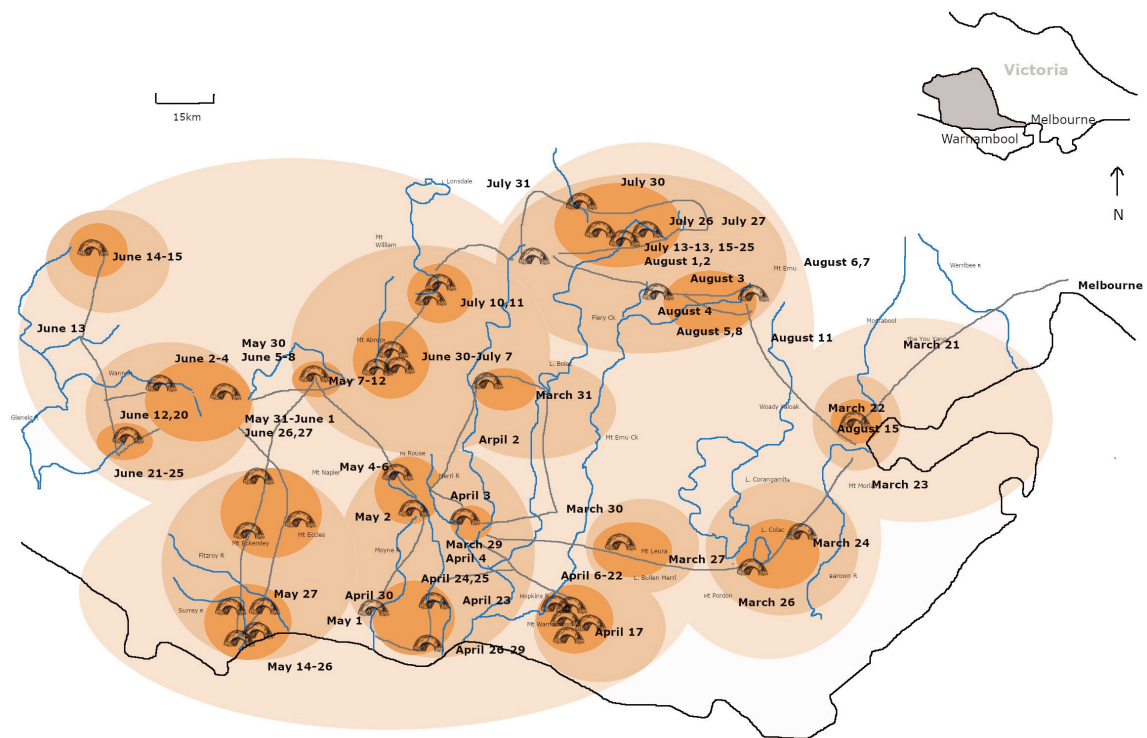


Figure 5. Living spaces based upon the observations of G.A Robinson (1841). Derived from Presland (1977:102) (Drawn by Threadgold 2021)

the aquatic environment—including creeks, lakes and swamps—could have provided a variety of edible plants, eels, shellfish, crayfish, birds and scale fish. The other two environments—grassland and savannah woodland—could have provided reptiles, emu and other birds, wallaby, kangaroo, possum, bandicoot, insects and the roots, fruits and flowers of numerous food plants, including the daisy yam (Hotchin 1980:122).

By re-visiting Robinson's descriptions and maps and incorporating a visual representation of the extent of Aboriginal living and industry, the symbolic process of identifying the prior underestimation of semi-permanent and permanent settlements is highlighted in the map below (Figure 5). Before leaving this discussion, the author would like to point out that the perception of land, or Country, is very different for Aboriginal people and most importantly, the intangible aspects are intrinsic to place, localised, regional and beyond, while the teaching of stories, morals, law and lore maintain 'the memories and stories associated with their country over many generations' (Russell 2012:402).

## Conclusion

Once Robinson's journey and observations of living spaces are mapped using the authors model system, the visual outcome summarises the extent of the embodiment of housing and the use of landscape for living. Every second day, on average, in his 1841 travels, Robinson observed

structural housing and, on each occasion, an extension to long-term use of natural resources was prevalent, with this aspect only touched on here. The family group population was found to be extensive throughout the district as with other parts of Victoria (Haw and Munro 2010). Berndt (1981:2) described 'land as a resource for living—life came from and through the land and was manifested in the land'. How we associate ourselves with land is how we maintain that relationship (Tuan 1976) and to maintain relationships between landscapes as resources, long-term living must be part of this process (Pascoe 2014). With lack of evidence of living structures in the form of identified buildings, an element of visual interpretation such as the authors model system aids in highlighting historic and Aboriginal oral history, literature and knowledge in identifying the extent of living spaces throughout the Western Volcanic Plains region.

## Acknowledgments

The author would like to acknowledge all Wadawurrung, Gulidjan and Gunditjmara Traditional Owners and elders, past, present and future on which the Countrys are mentioned and to those who are part of the process in aiding in self-determination for all Aboriginal and Torres Strait Islanders. The author would like to pay special acknowledgement to the Collopy Family and extended families Gulidjan, Gadubanud, Djab Wurrung and Kirrae Wurrung Traditional Owners and to Wadawurrung Traditional Owners Melinda Kennedy and Gareth Powell



## References:

- Aboriginal Victoria 2020a *Aboriginal Culture and Heritage*, Organisation/Dept. Retrieved 5 June 2021 from < <https://www.aboriginalvictoria.vic.gov.au/aboriginal-culture-and-heritage> >.
- Aboriginal Victoria 2020b *Fact Sheet: Aboriginal Mounds*, State Government of Australia. Retrieved 5 June 2019 from <<https://www.aboriginalvictoria.vic.gov.au/fact-sheet-aboriginal-mounds>>.
- Aboriginal Victoria 2020c *Fact sheet: Aboriginal stone flaked tools*, State Government of Victoria. Retrieved 3 March 2020 from <<https://www.aboriginalvictoria.vic.gov.au/fact-sheet-aboriginal-flaked-stone-tools>> freshwater middens>.
- Barker, B., B. David and I. McNiven (eds) 2006 *The Social Archeology of Australian Indigenous Societies*. Canberra: Aboriginal Studies Press.
- Berndt, R. M. (ed) 1981 *Aboriginal Sites, Right and Resource Development*. Perth: University of Western Australia Press.
- Builth, H. 2006 Gunditjmara environmental management: The development of a fisher gatherer-hunter society in temperate Australia. In C. Grier, K. Jangsuk and J. Uchiyama (eds), *Beyond Affluent Foragers: Rethinking Hunter-Gatherer Complexity*, pp. 4–23. Oxford: Oxbow Books.
- Cahir, F., I. Clark, and P. Clarke 2018 *Aboriginal Biocultural Knowledge in South-eastern Australia: Perspectives of Early Colonists*. Melbourne: CSIRO Publishing.
- Coutts, P., D. Witter, M. McIlwraith, and R. Frank 1976 *The Mound People of Western Victoria: A Preliminary Statement' Records of the Victorian Archaeological Survey, No. 1, April 1976*, Revised Edition. Canberra: Ministry for Conservation Publication.
- Dawson, J. 1881, *Australian Aborigines*. Melbourne: George Robertson.
- Doolan, J. 1979 Aboriginal concept of boundary. *Oceania* 49(3):161–168.
- Gammage, B. 2011 *The Biggest Estate on Earth*. Crows Nest: Allen & Unwin.
- Haw, P. and M. Munro 2010 *Footprints across the Loddon Plains*. Boort: Boort Development Incorporated.
- Hotchin, K. 1980 Aboriginal stone alignments. *Records of the Victorian Archaeological Survey* 6:122–145.
- James, K. 1978 *Aborigines in the Werribee District*. Werribee: Werribee District Historical Society.
- Lane, L.N. 1984 *The Sheltered Cup*. Unpublished manuscript. Deakin University Special Collections Library.
- Lane, L. 1991 Jerringot living station, Wathaurung territory: no. 53, Unpublished manuscript. Geelong Heritage Centre.
- Lourandos, H. 1976 Aboriginal settlement and land use in south-western Victoria. *The Artefact* 1:174–193.
- Lourandos, H. 1997 *Continent of Hunter-Gatherers*. Cambridge: Cambridge University Press.
- MacPherson, P. 1884 *The oven-mounds of the Aborigines in Victoria*. NLA. Retrieved 1 April 2017 from <<http://nla.gov.au/nla.obj-344468367>>.
- Massola, A. 1969 *Journey to Aboriginal Victoria*. Adelaide: Rigby.
- Memmott, P. 2007 *Gunyah, Goondie and Wurley: The Aboriginal Architecture of Australia*. St Lucia: University of Queensland Press.
- Mitchell, S. 1961 Victorian Aboriginal axe stone. *Victorian Naturalist* 78(3):71–75.
- Pascoe, B. 2014 *Dark Emu Black Seeds*. Broome: Magabala Books.
- Porter L 2010 *Unlearning the Colonial Cultures of Planning*. London: Routledge.
- Presland, G. 1977 *Journals of George Augustus Robinson: March–May 1841*. Melbourne: Ministry for Conservation.
- Presland, G. 1980 *Journals of George Augustus Robinson: May to August 1841: Extracts of manuscripts held in the Mitchell Library, Sydney*. Melbourne: Ministry for Conservation.
- Rowlands, R.J. and J. Rowlands 1966 Aboriginal stone arrangements in the Western Desert of Australia. *Mankind* 6:355–358.
- Russell, L. 2012 Remembering places never visited: Connections and context in imagined and imaginary landscapes. *International Journal of Historical Archaeology* 16(2):401–417.
- Smyth, R.B. 1878–1876 *Aborigines of Victoria Volumes 1 and 2*. Melbourne: George Robertson.
- THE ARGUS
- THE LEADER
- Threadgold, H. 2020 What the Stones Tell Us: Gulidjan Living Stone sites as Living Spaces. Unpublished PhD thesis, School of Architecture and Built Environment, Deakin University, Geelong.
- Threadgold, H. and D. Jones 2017 What the Stones Tell Us: Challenges facing Aboriginal stone installations and metropolitan urban expansion. Unpublished report prepared for the Eighth State of Australian Cities (SOAC) Conference Adelaide.
- Threadgold, H. & D. Jones 2018 What the Stones Tell Us: Aboriginal stone sites, Indigenous landscapes and country's in the face of urban sprawl. Unpublished report prepared for the 14<sup>th</sup> Australasian Urban History Planning History Conference Melbourne.
- Tuan, Y. 1976 Geopietiy. In D. Lowenthal and M. Bowden (eds), *Geographies of the Mind*, pp.11–39. New York: Oxford University Press.
- Tuan, Y 1977 *Space and Place: The Perspective of Experience*. Minnesota: University of Minnesota Press.