Archaeological Aspects Of Aboriginal Settlement
Of The Period 1870-1970
In The Wiradjuri Region

by
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Preface

Development of this Research Topic

My interest in the archaeology of landscapes was sparked in 1978 during research on the rural buildings of Lithuania which included a sketch plan (fig 1.2) and analysis of the layout of the birthplace of Antanas Mikaila drawn from memories and oral accounts (Kabaila 1980: 49-54).

Many years later I chanced upon the investigative technique of correlating surface surveys with pictorial records and oral accounts to produce a re-creation, on paper, of the layout of Warangesda Aboriginal Mission as part of an Honours thesis in Archaeology in 1993. At the end of an initial field visit, I produced a hypothetical plan of the former mission. This was inferred by combining evidence on the ground with features shown in a 19th century newspaper illustration of the mission. I posted the plan to the regional state archaeologist, who replied saying that local oral tradition confirmed the drawn layout. Six months of detailed comparison of written records with surface survey and oral history followed, producing a detailed physical reconstruction with "snapshots" of the mission (fig 6.2) at various stages of its growth and decline (Kabaila 1993). The techniques developed at Warangesda were then used in conjunction with recollections of former inmates and staff to record the layout of the Cootamundra Aboriginal Girls' Home (fig 1.3), a study carried out for the Australian Institute of Aboriginal and Torres Strait Islander Studies (Kabaila 1994). On the advice of Isabel McBryde, I then prepared a plan to extend the line of inquiry beyond Warangesda and Cootamundra to other places within the Wiradjuri region as a whole, which already had been studied chiefly from an historical and political standpoint by Peter Read (1983, 1988). There have been two other recent works on the Wiradjuri of importance: a history of Narrandera by Bill Gammage (1986) and a thesis on boundaries at the time of "contact" by Ian White (1986). The present work is based primarily on survey and recording "in the field", carried out between 1993 and 1998. Data was initially compiled as artefact records (Appendix 1) and presented as a heritage place study in three fieldwork reports (henceforth these are referred to as Murrumbidgee; Lachlan; and Macquarie).1

This thesis therefore is an attempt to document the surface remains of Aboriginal settlements after European colonisation of the Wiradjuri region.

Wiradjuri country\(^1\) covers a large area ranging from 97,000 square kilometres (Tindale 1974: 201) to 180,000 (Horton 1994). Ideally one should carefully survey the entire region using detailed aerial photographs and teams of people who would return each year over several decades to progressively survey the whole area. However such an approach is not feasible and sampling is generally carried out.

Random sampling of areas within the region is possible but it could miss all the settlement sites, or the most important ones (Sanders et al. 1979: 18-19). Instead, a search through written records was the first guide, followed by interviews with Aboriginal people. There are times and places, as Flannery (1976: 136) had observed, "where knowledge is limited, and drawing a systematic random sample is the only justifiable procedure. In other times and places, with some prior knowledge, your instincts will tell you when you already have a really great site".

The main reasons for Aboriginal settlement site location during this period, discussed in later chapters, were government planning, "spontaneous" growth, and the drift into "fringe" camps of towns. Resources, which typically influenced site distribution, were proximity to a water supply, the presence of kinfolk and the attraction of towns. These were used by Aboriginal people mostly as a social, economic and subsistence resources in that they contained concentrations of containing people, employment and food supply. A few of the reserves were gazetted by the Aborigines Protection Board of New South Wales, later the Aborigines Welfare Board of New South Wales,\(^2\) on land where Aboriginal households were already camped. Even where such camps had not existed, new reserves were created which then became stopping places for Aboriginal households who absorbed the new reserves into their travel circuit. Many community settlements developed on or adjacent to official Aboriginal reserves recorded by government. The key documents for these are land lease documents in the so-called RAR and AR reels at the NSW Archives Office, and in the published summary of these archives, produced by the NSW Ministry of Aboriginal Affairs. All of the former settlement locations, known to living Aboriginal people, formed the list of places to be visited and investigated. Many are completely unknown to the local white community and may be forgotten by the new generation of Aboriginal people. Even finding

\(^1\) Country is used in this thesis in both the Aboriginal sense as further discussed, as well as in the less defined English language sense of "a tract of land".

\(^2\) In the text referred to as the Board.
toponyms is a significant step. Naming gives meaning; hence everything that is named is thought to exist, and that which is not named, may be non-existent. This is why the construction of a regional map showing a distribution of Aboriginal settlements, together with their local names, was a most important initial step.

The preparatory work required visits to as many communities as possible within the Wiradjuri region, with local Aboriginal people assisting in locating and examining artefacts. The wishes of these people were also canvassed to find out what roles such research might have both for Aboriginal communities and for the wider public. The Wiradjuri Aboriginal Land Council then appointed me to undertake a study under the National Estate Grants Program to identify sites of heritage significance in the region. This was a large survey and compilation project. Most of the work for this thesis is derived from this evidence, not from written sources. This research, with a reduced dependence on library facilities, led me to formulate a number of interpretations and techniques. The theory base included in this thesis is therefore a later layer, sometimes of further derived, "second level", interpretations.

For this thesis, the approach pioneered at Warangesda has been extended to combine evidence from human memory, written records, archaeological and field observation of archaeological and architectural features, to include a wide range of places in central New South Wales. While the "Wiradjuri region" is used to identify an area for study, it is not necessarily the extent of Wiradjuri speaking hunter-gatherers in pre-European times. The boundary used in this study is based on Tindale's estimate of Wiradjuri speaking peoples at the time of white arrival. Dislocation, resettlement and marriage links after European arrival took Wiradjuri descendants into areas outside the former language boundary, such as Redfern in Sydney and around Yass. Conversely, non-Wiradjuri people were resettled from Ngijyampaa and Paakantyi (Barkindji) areas of Carowra Tank and Menindee to Murrin Bridge, situated in the former Wiradjuri area. For these reasons such places are included in this study. Town housing for Aborigines after 1970 and Aboriginal corporation housing after 1983 are examined in the thesis, but not listed as separate settlements:

Table 1.1 Settlement overview (sites listed by river course)

<table>
<thead>
<tr>
<th>Location</th>
<th>Settlement type</th>
<th>Periods occupied (approx)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rye Park</td>
<td>Station camps</td>
<td>1830s-</td>
<td>little data, huts initially attached to stations, small farm blocks after 1861</td>
</tr>
<tr>
<td></td>
<td>and small farm</td>
<td>-1965</td>
<td>one of several small farming reserves, others at Brickoy's Creek and Blakney Creek</td>
</tr>
<tr>
<td></td>
<td>farms</td>
<td>1890s-1940s</td>
<td>reserve used by itinerant households</td>
</tr>
<tr>
<td></td>
<td>Flakeney Creek</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>reserve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Type</td>
<td>Dates</td>
<td>Details</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Yass</td>
<td>Early town camps</td>
<td>1870s-</td>
<td>little data, household camps, e.g. showground</td>
</tr>
<tr>
<td>Edgerton Station</td>
<td></td>
<td>1910-1916</td>
<td>managed station</td>
</tr>
<tr>
<td>*Oak Hill</td>
<td></td>
<td>1888-1910</td>
<td>government settlement, later community camp</td>
</tr>
<tr>
<td>*&quot;Blacks' Camp&quot;</td>
<td></td>
<td>1890-1912</td>
<td>community camp</td>
</tr>
<tr>
<td>*Hollywood</td>
<td></td>
<td>1934-1960</td>
<td>unmanaged government settlement</td>
</tr>
<tr>
<td>*&quot;New Mission&quot;</td>
<td></td>
<td>1955-1965</td>
<td>fibro housing cluster condemned 1960s</td>
</tr>
<tr>
<td>Cootamundra</td>
<td>*Aboriginal Girls Home</td>
<td>1912-1969</td>
<td>girls' removal and training institution</td>
</tr>
<tr>
<td>Brungle</td>
<td>*Brungle station</td>
<td>1890-1955</td>
<td>managed station, known as old mission</td>
</tr>
<tr>
<td>*Brungle camp</td>
<td></td>
<td>1935-1983</td>
<td>community camp next to old &quot;mission&quot;</td>
</tr>
<tr>
<td>*Penrith hut</td>
<td></td>
<td>1940s-1960s</td>
<td>one of several off-reserve household huts</td>
</tr>
<tr>
<td>*Tumut household camps</td>
<td></td>
<td>1940s-1960s</td>
<td>few known details, about 4 single household huts</td>
</tr>
<tr>
<td>Wagga Wagga</td>
<td>*Tintown</td>
<td>1935-1945</td>
<td>mixed race fringe camp</td>
</tr>
<tr>
<td>Grong Grong</td>
<td>*Grong Grong reserve</td>
<td>1884-1916</td>
<td>family farming reserve</td>
</tr>
<tr>
<td></td>
<td>Brokong Street</td>
<td>1985-</td>
<td>Aboriginal corp. claimed land</td>
</tr>
<tr>
<td>Narrandera</td>
<td>*Narrandera Sandhills</td>
<td>1916-1938</td>
<td>community camp under local grazier patronage</td>
</tr>
<tr>
<td></td>
<td>*Hill 60</td>
<td>1930s-1940s</td>
<td>privately purchased blocks, self-built huts on former poor whites' area</td>
</tr>
<tr>
<td></td>
<td>*Woolscour</td>
<td>1930s-1940s</td>
<td>community camp, stock watering reserve</td>
</tr>
<tr>
<td>Darlington Pt.</td>
<td>*Warangesda</td>
<td>1879-1884</td>
<td>missionary founded and managed settlement, later a govt. managed station</td>
</tr>
<tr>
<td></td>
<td>Old people's camp</td>
<td>1879-1925</td>
<td>river side camps outside Warangesda boundaries</td>
</tr>
<tr>
<td></td>
<td>*Police paddock</td>
<td>1925-1965</td>
<td>unmanaged government settlement, reused irrigation worker huts, nearby household camps.</td>
</tr>
<tr>
<td>Leeton</td>
<td>*Wattle Hill</td>
<td>1940-1965</td>
<td>community camp, former cannery worker camp</td>
</tr>
<tr>
<td>*Griffith</td>
<td>Wakaden St, Condo Lane, Pines, Scenic Hill, Golfcourse, Tharbogan, Old Tip, Willows</td>
<td>1940-1955</td>
<td>small town camps</td>
</tr>
<tr>
<td></td>
<td>Frogs Hollow</td>
<td>1940-1955</td>
<td>community camp on land loaned by a farmer</td>
</tr>
<tr>
<td></td>
<td>Three Ways</td>
<td>1935-</td>
<td>unmanaged government settlement</td>
</tr>
<tr>
<td>Cowra (Erambie)</td>
<td>Early town camps</td>
<td>1860-1890</td>
<td>little data, small camps, e.g. showground</td>
</tr>
<tr>
<td></td>
<td>*Erambie reserve</td>
<td>1890-1965</td>
<td>managed government settlement, later unmanaged, then Aboriginal owned</td>
</tr>
<tr>
<td></td>
<td>*Ryan's Place</td>
<td>1920-1965</td>
<td>riverside camping reserve under railway bridge</td>
</tr>
<tr>
<td></td>
<td>Bag Camp</td>
<td>1930-1940</td>
<td>depression era mixed race camp</td>
</tr>
<tr>
<td></td>
<td>*Railway Gates</td>
<td>1920-1940</td>
<td>several of the off-reserve household camps of people ejected from or not admitted to Erambie.</td>
</tr>
<tr>
<td></td>
<td>Jack Iron's hut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goolongong</td>
<td>*Goolongong reserve</td>
<td>1890-1965</td>
<td>community camp</td>
</tr>
<tr>
<td>Forbes</td>
<td>Forbes reserve</td>
<td>1890-1915</td>
<td>small river side camp, closed by town council</td>
</tr>
<tr>
<td>Condobolin</td>
<td>*Condobolin reserve</td>
<td>1903-</td>
<td>government settlement, later Aboriginal owned and renamed Willow Bend</td>
</tr>
<tr>
<td></td>
<td>Soup Kitchen</td>
<td>1930-1967</td>
<td>meths drinking camp off reserve boundary</td>
</tr>
<tr>
<td></td>
<td>*Murie</td>
<td>1935-1965</td>
<td>community camp</td>
</tr>
<tr>
<td></td>
<td>Early town housing</td>
<td>1957-</td>
<td>4 clusters each of 4 Aboriginal rental houses</td>
</tr>
<tr>
<td>Euabalong</td>
<td>Euabalong reserve</td>
<td>1880-1955</td>
<td>unmanaged government settlement</td>
</tr>
<tr>
<td>Carowra Tank</td>
<td>*Carowra Tank reserve</td>
<td>1880-1924</td>
<td>possible early camp around small settlement, later managed government settlement</td>
</tr>
<tr>
<td></td>
<td>Trida</td>
<td>1920-1924</td>
<td>Menindee railway construction fringe camps</td>
</tr>
<tr>
<td>Lake Cargelligo</td>
<td>*Murrin Bridge</td>
<td>1949-</td>
<td>government settlement, later Aboriginal owned</td>
</tr>
<tr>
<td>*Wellington</td>
<td>Wellington Valley</td>
<td>1832-1845</td>
<td>mission on former military and convict settlement</td>
</tr>
</tbody>
</table>
Apsley Mission 1839-1848 mission privately run by Rev. Watson
Blake's Fall 1848-1866 mission privately run by Rev. Watson
"Blacks' Camp" -1910 community camp
*Town Common 1868-1970 community camp
Nanima 1910- government settlement, later Aboriginal owned.
Bell River Flats 1940-1970 one of several household camps on fruit and vegetable grower's blocks and on crown land

*Bushranger's creek 1950-1970 household camp
Orange The Springs 1930-1955 seasonal pickers' community camp
Dubbo Black Bridge -1935 small camp under rail bridge in town centre
Devil's Hole 1935-1955 riverside household camp
*Talbragar reserve 1890-1985 government settlement
Talbragar common 1890-1970 several off-reserve single household camps

Peak Hill *Bulgandramine 1892-1941 managed government settlement
Bulgandramine common 1892-1941 several off-reserve household camps
Bottom Hill 1941-1970 largest of 3 community camps, others Top Hill and the Flat

Whitton Park Road 1955- early housing, cluster on edge of town

Other small farming reserves Bridge Creek Eugowra 1890-1922
Crudine Creek Ilford 1899-1933 little data

Other small camping reserves Bogan Gate, Parkes, Bathurst, Ryolstone, Booligal, Hillston 1890-1940 little data, possibly small unmanaged reserves for household and community camps

Reason for the Research

After European settlement, Aboriginal people lived differently from the hunter-gatherers of the past. The thrust of historical archaeology in Australia has not generally dealt with the question of such groups except at the point of contact. Once the objects of European life had been incorporated into their material culture, there seems to be have been less attention paid to them. Aside from the continuation of the "noble savage" cultural stereotype, this is a methodological problem which cannot be readily solved. In such an historical archaeology the traditional archaeological tools are blunted considerably. For example the analysis by Murray (1993) uses the presence of contact and pre-contact Aboriginal tools to claim Aboriginal occupation of a settler's hut.

Concern for remnant communities has only grown in the last decade or so. No one has really investigated their material culture, except from the standpoint of continuation of traditional skills. There is a body of literature on remnant indigenous communities which mainly deals with the people's legal links with the land and which concentrates on incorporation of people into legal structures (e.g. Sutton 1998).

This thesis forms a necessary bridge across one of the gaps apparent in Australian historical archaeology, that is, the situation and settlements of the Aboriginal population in the 19th and 20th centuries.
In a thesis which revolves around such a social topic, it is customary to "declare one's motives and bias". Such a declaration would generally take the form of a theoretical policy statement. For example, the simple motive was the urge to interpret and elucidate events that otherwise would have remained ignored and opaque.

Regarding my motives and planned results, I have been consistently interrogated by various stakeholders of the Aboriginal story. People of Aboriginal descent wanted to be assured that I have some empathy for their position. Aboriginal community activists mainly wanted to know consequences of the research. White landholders wanted to know whether I was a spy sent to take their land by preparation of a land claim. People who depended on taking a political position on the Aboriginal story have been concerned lest I might "rock the boat" and upset comfortable arrangements.

My declared position to each of these has always been that I am not, strictly speaking, a stakeholder. As an outsider, I would try to be fair to all perspectives; as an archaeologist to interpret the story of the past for a future generation. Such an old-fashioned stance, namely that the discipline must be kept clean by avoidance of politics, may need a small defence. This stance, that of an uncommitted outsider, has distinct benefits for the research project. This stance has allowed each interviewed person to tell a story from their own perspective. The outside position, would be empathetic, but not over-sentimentalised towards perceptions of social and cultural loss. While this study aims to record and interpret some of the experiences of people who lived in Aboriginal settlements, it seeks to be more than an academic effort to present the data analysed according to archaeological methods. In order to shape their future, both black and white Australians need to understand their present situation accurately. Above all people need to know how things got the way they are. While attempting to shed clear light on the past so that prejudice is not free to make its own interpretations, this study deliberately does not intend reaching moral or political conclusions. These are left to the individual critical reader.

In listening to people in Aboriginal communities, I have been able to record some information about ways of life and places that have been lost. The experience of home-building and the attachment to place came through time and again: from written accounts of the missions at Wellington in the early 19th century; to Isabel Edward's memories of Warangesda in the early 20th century; through to the resettlement of people from community camps into towns in the last quarter of the 20th century. The suburbanisation of communities, the problems expressed by those subjected to stereotyping, and the generation gap between elders and youth are changes which need to be recorded (Lachlan: 12). Often
a sense came through that people wanted a chance to say the things they thought, or that they too were dealing with ideas still in the process of being formed and tried out.

While fulfilling a function of its own, this study is dependent on previously published historical and archaeological studies and owes a tremendous debt to such previous research. Henry Reynolds (1992) and Charles Rowley (1970) helped create a public concern for indigenous issues. Peter Read (1988) carried out extensive interviews and studies of the effect of government policies in the Wiradjuri region.

The Physical Imprint of People's Memories onto Landscapes

For this study, many conversations took place with a large number of people about places where they had grown up. A central subject of this study is therefore the physical imprint of their memories onto landscapes.

The 1970s was a period of emergence for the "new ethnography", more accurately called "memory ethnography", which depended on oral accounts of living informants (Schuyler 1978: 270). Two archaeological contexts proposed by Schuyler were the spoken word and the written record. Far from being "sources" of facts to be taken at face value, it was argued that such archives be treated by historical archaeologists as "artefacts" within a context (Schuyler 1978: 271, 275). He cautioned against treating what people write or what they remember as a source.

Are such oral accounts simply personal stories or are they valid as historical sources? This question, and the rules of historical evidence as they apply to oral accounts, have been considered and refined since the late 1950s (Vansina 1965, 1985). "The historical record deals with stable texts, permanent messages. But an oral account is only one manifestation, once, in a stream of renderings or performances. Can we accept the text as a valid rendering of an oral tradition?" (Vansina 1985: 32). Vansina took a how-to-do-it approach to considering these theoretical questions, recognising that oral accounts appear in a wide range of forms and within a wide range of settings. He approached oral tradition as any transmission by word of mouth over more than one generation (Vansina 1985: 28). Henige (1982: 2) challenged Vansina's definition by saying that all the community should agree before acceptance of an oral account. Versions that are not widely known are then considered as "testimony". Some oral accounts would be second or third hand information. In such cases, the researcher may be given an idealised account, a preferred situation, or a sanctioned event (Elkin 1975: Part 1). There is also "readback", the phenomenon by which oral informants internalise, mirror, and in some cases manipulate, the research they have
read and return them as oral history. For example, Peterson (1998: 31) describes a "readback" effect of Kabaila (1995) on Ngunawal people's oral accounts.

Despite such obvious difficulties, Bain Attwood (1994: 195-218), in a recent historical work regarding a family's experiences on Aboriginal settlements has mounted a convincing argument for oral accounts to be used as an historical tool. However, the wide range of oral accounts is likely to carry different meanings for different disciplines. Researchers from different fields will propose their own definition of useful oral account, depending on the problem their area of research is attempting to address. Some historians might stress knowledge shared by a community. Linguists may search for differences in language within the group. An ethnographic film-maker may look at the account as a form of art. Oral accounts therefore are multi-faceted and contain a complexities which must be considered when they become an archive. In the Wiradjuri region the oral accounts tend to be fusions of personal reminiscences, family histories, commentary on the present day and historical gossip. The sources of the accounts also are told from a mixture of eyewitness news, hearsay and more rarely, visions.

In a rethink of her own experiences in the Aboriginal history field, Goodall (1997: 80-1) observed ways in which oral accounts are not self-evident and unproblematic. People are expected to speak in a literal way, giving a factual account that is verifiable from other sources. However the literal meaning of an oral account is generally not its total meaning. Especially in the "interview" situation with a person from a different ethnic or social background (such as an Aboriginal person with a white interviewer), people tend to shape the ways in which they retell memories and rethink events. A major theme of Caging the Rainbow is that explanations of events reflect cultural frameworks, and that people's recollection of events is usually welded to their explanations for the causes of those events (Merlan 1998). Merlan's thematic example was a road building event that was remembered in terms of local Aboriginal mythology. Small children saw road work being carried out, and went back to their grandmother for an explanation. They then understood that what they had witnessed was the rainbow serpent being dug up, blasted out and removed from the town. The search for meaning of events among witnesses provides answers, but the answers will be drawn from a range of possibilities which "make sense" and which are consistent with expectations and experiences.

Recognising the complexity of oral accounts, I have not separated accounts out into types or drawn distinctions between them. The accounts are presented fairly much as they were presented to me, excepting that during transcription the account is translated from the
spoken to the written medium. The process of transcription is that the oral accounts are recorded on tape or written down as field notes, or both, then transcribed and edited.

The explanation of time as a dimension is one of the recurring issues in oral accounts. Many stories, especially those told by old people, interweave events from different times into a single narrative. For clarity, part of the process of interview questioning, transcription and editing is to place remembered events into a time scale.

It may be argued that oral accounts are transparent. There are, however, at least three ways in which people release themselves from the past by coping with painful memories, transforming the memories and in turn producing a transformed oral record. The first is through reconciliation of the present with a greatly contrasting past. Elderly survivors of persecution or political imprisonment are often free of the anguish and hatred that characterises reactions of the next generation to past injustice. The second is through denial, noted by Goodall as "minimisation" (1997:91) in which Aboriginal people wished to minimise what the interviewer saw as past injustices. The third way is to transform the remembered experiences. Murphy (1986: 175) argued that his interviews with Vietnam War veterans were best interpreted in a psychoanalytic way, as people coped with their most painful memories by transforming them into metaphors for actual events.

The oral record may be further transformed by human memory in two significant respects. Firstly, memories are highly selective. People tend to remember the non-typical events of their lives as flashbacks, and often these memories present small fragmented, transformed details outside of a clear time frame. In this respect, they are like much of the archaeological record: transformed, detailed, fragmentary, and generalised in time frame. Secondly, people tend to distort much of what they say to create an impression. This might be to emphasise their position of knowledgeability, importance in the community, respectability, ethnic integrity, or ordinariness. But the situation (that of recording human memory as a documentary source) is not entirely bleak. Written records, though greatly variable also, have set dates for many remembered events, and indications on the ground can provide a spatial fix on what had been a vague memory. Together, the three types of archive provide an intriguing mix.

It is not self-evident how this mix of data sources should best be reconciled into a single time frame. Two kinds of time scale appear to exist in oral accounts. The first is the "moving present", extending back within living memory, covering the immediate present and the near future. The second is "ancestral time", covering the whole of the remote past (Rahtz 1985: 31). It is possible to graft other time scales onto oral traditions, but this will
involve some distortion of the reality as perceived in the oral account. Other commonly used time scales, in their order of receding reality with reference to oral accounts, are: the linear time scale with dates from written records; the archaeological time frame (from say a radio-carbon date); and the geological time frame.

Many Aboriginal oral accounts showed a re-joining of different times and places, rather than any chronology of dates. This chronology has been observed (e.g. Merlan 1998: 66) to be defined by connections between people and place and the mode of knowing about them is the travelling mode. Interview questions for "about when did this happen?" are invariably invalidated by answering in terms of "a long time ago, when we were living at such and such a place".

The chronology for Aboriginal settlements might be represented on the linear scale. Fig 1.4 (upper figure) shows such a scale for the 200 year documented period from 1800 AD to 2000 AD, and how 10-year periods from two separate locations within the 200 year domain of data are the same in dimension. Increasingly, present day Aboriginal people show an easy familiarity with western measurements which emphasise human experience in terms of a fixed chronology. From the perspective of research from the written record, the linear frame is a device for plotting known dates and working out an event sequence. From the perspective of oral accounts and surface survey, the linear time frame is almost unsuitable. Most of the evidence and detail from these forms of data relate to the experiences of only the last one or two generations, with an increasing reduction of focus as one looks further back past living generations. There are of course other time scales, including the archaeological and geological scale, which like the linear scale can sometimes be grafted onto oral tradition.

One way of accommodating known dates in the written record with detail from oral accounts and surface survey is to adopt a non-linear time scale. Fig 1.4 (lower figure) shows the non-linear time scale adopted for this study and shows how 10-year periods from two separate locations within the 200 year domain of data differ in dimension. This particular scale happens to be based on a quadratic function, but could also have been based on a cube or exponential function, resulting in different grades of division between present and past time periods. The explanatory value of the scale used here is that it clearly separates time into two divisions. Firstly, there is the known past or moving present, the time after European arrival in the region. Secondly, there is the real but distant ancestral time of all the generations of Aboriginal hunter gathering people that preceded European arrival. The scale also reflects the reality of oral accounts and surface survey in that events of the second half
of the 20th century are clearly focused, but become increasingly compressed as one reaches four, five or six generations back into the 19th century.

The recording of human memory from conversations with people is similar to the other types of fieldwork in archaeology, surface survey and excavation, in that it essentially is not scientific. The essence of a scientific experiment is that it can be done again and the results replicated. Fieldwork is largely an unrepeatable experiment because field conditions vary greatly over time. This is one of the reasons why repeated visits to a site are useful in order to more firmly establish layout and to check earlier observations. Therefore, while a good explanation of the data is a welcome step, it should always be presented with the caution that alternative explanations may be possible. Alternative explanations for the data will always be sought by other researchers.

Research Questions

Archaeological survey has traditionally emphasised the individual fragments of evidence, small artefacts, as the units from which an interpretation is drawn. In addition to comparing individual household items, this study treats the settlement itself as an artefact, as a vehicle for telling the narrative of Aboriginal places during a century of change. Various historical and social questions emerged which have an archaeological aspect. This study examines such questions in the light of the archaeological evidence uncovered. These questions are outlined below:

- Which archive tells the "truth": written documents, oral history, or physical evidence from the ground? How different is the material evidence on the ground from what is in the official records? What types of documents or fieldwork might be suited to regional research of post-colonial Aboriginal settlements? (Chapter 2 - Research methodology for Aboriginal settlements).
- The study searches for the ethnicity of communities. How is Wiradjuri identity and distinctiveness to be appreciated within an archaeological time frame? Can Wiradjuri be archaeologically distinguished? (Chapter 3 - Who are Wiradjuri?).
- Why were Aboriginal settlements located where they were? Is the Wiradjuri region post-colonial settlement pattern unique or is it similar to other patterns of human settlement? How is the worldwide phenomenon of the drift into towns seen in the context of the Wiradjuri region? (Chapter 4 - Distribution of Wiradjuri settlement).
- Can the residue of household refuse left on the ground at Aboriginal settlement sites be organised as to reflect the lives of people? How is the daily life of the household to be
appreciated through these artefacts? (Chapter 5 - Household - Domestic refuse, daily life, adaptive technologies).

- Did people in these settlements have adaptive strategies that increased their chances of survival? Was European technology adapted to Aboriginal uses? How do settlements and the individual fragments they contain reflect strategies of communities to maintain basic daily human needs? (Chapter 5 - Household - Domestic refuse, daily life, adaptive technologies).

- The documented range and layout of Aboriginal places is interrogated for information on widely ranging social questions: Given the range of government control over Aboriginal places, what sort of range of places did this create? To what extent was there crowding on settlements? Did settlements physically reflect Aboriginal social organisation? (Chapter 6 - Community - Physical layout and living space).

- Did settlements provide sustainable living conditions? Why were separate communities formed? How did they maintain identity? How did they operate at the local, district, regional and inter-regional levels? (Chapter 7 - Region - Systems of settlement).

Chapters 5 to 7 progressively move from the empirical to the broad and regional archaeological approaches from the level of the individual artefact and household, to the community, groups of communities and region. Whatever reflections on social questions are included in the thesis, it is principally an archaeological work, and so its test will be whether the data can be analysed in the three dimensions described by Spalding (1977) and reiterated by Deetz (1991: 3): "First, space - where is it located? Second, time - how old is it? Lastly, form - what does it look like?".
Figure 1.1 Map of the Wiradjuri region (after Tindale 1974; Horton 1994; and Donaldson 1980)
Figure 1.2 Mikaila family farm. A typical medium-sized farm of the Dzukija region, Lithuania, circa 1900, drawn from Antanas Mikaila's memory, n.t.s. (after Kabaila 1980: 49-51)
Figure 1.3 Cootamundra Aboriginal Girls Home reconstructed layout (from Kabaila 1994)
Figure 1.4 Time scaling. Above - Linear scale. Below - Non-linear, quadratic scale for 200 year period of settlement from which 10-year periods from separate locations differ in dimension.
SECTION 1
THEORY AND METHODOLOGY
Chapter 1 Introduction
—Social Archaeology and Marginal Groups

This thesis is an examination of the archaeology of post-conquest Aboriginal settlement in the area generally believed to be that of the Wiradjuri at the time of European contact (fig 1.1). Its context therefore is one of colonisation and Aboriginal response, and the government's management of Wiradjuri. The archaeology is a collection of sites and distributions of artefacts—however memory and written records present the archaeologist with an overwhelming amount of data and opinion. Here we examine the theoretical positions adopted in archaeology and related disciplines towards the topics of this thesis are examined, and the position relative to this theoretical framework is outlined.

The thesis is about a marginalised Aboriginal group on the edge of European society and settlement. It is necessary to review not only the context of the Wiradjuri and the political situation they found themselves in after 1788 but also to examine social archaeological theories available for this analysis.

Context of the Topic—Approaches from Various Angles

Much of the context is found by approaching it from various angles including urban geography, anthropology, and the social sciences. Three organisational concepts have been coined in cultural anthropology to help formulate aspects of traditional Aboriginal society at different levels. These are band, clan, and tribe or country. Each has implications for the use of the term Wiradjuri region as examined in the next chapter. However these are social constructs and do not have generally agreed spatial or archaeological equivalents. By contrast, three organisational groupings adopted for the purposes of this work are archaeological, but with a social dimension. They are the household, community, and region. Each represents an approach at a different scale. This section examines aspects of this topic at the three levels of scale: studies at the household level; at the community level; and at the regional level.

The first scale for examining archaeology and social change is the individual household. It provides a "worm's eye view" and examines aspects of settlement at the most personal scale. Household archaeology is one area in which approaches from the social sciences have most recently been adapted to archaeological investigation (e.g. Bermann...
The household unit is also the basic archaeological building block of settlement studies and regional studies.

A household level investigation in the Wiradjuri region views details of daily life recorded in ethnography of the study. Of the three approaches, it also may be the closest to the Aboriginal perspective because many Aboriginal communities continue to operate at this level, the extended family. Archaeology of the individual household is therefore of considerable significance.

The second scale for examining archaeology and social change is at the level of the individual settlement. It provides a "man in the street view" and examines aspects of settlement at a community scale. There are two dangers with taking the regional view. The first is that it may not yield insights into community-level or household-level processes. The second is that we may see societies as more integrated and cohesive than they really were. The assumption of straightforward correlations between communities might even lead some research to propose the existence of ethnic units that do not exist (Gibbon 1984: 224). This second danger, that of confusing an analytical model for examining change in society with the actual structure and workings of that society, was pointed out by one of Redfield's contemporaries, Levi-Strauss (1953). Studies at the individual settlement level enable a closer view of particular communities. Most ethnography is written at the community scale or household scale. Community studies can view both the links between individual households and links between the community and the state or region. A linked network of settlements will also allow identification of patterns at a sub-regional level. Clearly, regional level explanation is incomplete.

A community level investigation of the Wiradjuri region would recognise that many of the significant changes are localised. Individual settlements grew and shrank, or were completely closed depending on the responses of the town community and the local government Shire Councils. For example, the changes of settlements at Yass and Carowra Tank are inexplicable unless such local phenomena are taken into account.

The third scale for examining archaeological aspects of settlement is the regional study. It provides a "bird's eye view" by examining aspects of settlement at a general level. Robert Redfield (1956: 28) detailed the regional approach as a distinct interpretive paradigm of change in societies. Elements of the archaeological record may be examined at a range of scales (such as settlement sites, household remains or individual artefacts) and viewed from a regional frame of reference (Bermann 1994: 4-5). Communities are treated as components of a settlement system, which had boundaries at particular points in time.
Households are examined as socially affiliated or socially ranked components of the community. Artefacts are examined as examples of inter-site variation, exchange networks, ethnic markers or as indicators of social differentiation. In some cases (e.g. complex societies), the significant processes of change are most likely to be sub-regional or regional in scope, linking individual communities (Johnson and Earle 1987). Carol Smith (1976: 4) summarised the view that explaining "significant" processes of change requires consideration of more than one settlement: "The generalisations that can be made from regional patterns of social organisation are clearly of greater comparative relevance than those drawn from community ... studies alone."

A regional scale investigation of the Wiradjuri might examine a number of examples of change. The first would be the wave of European settler expansion into the region during the 1830s, and its regional impact on the hunter-gatherer population. Government policies in respect of Aboriginal people were mainly enacted at the New South Wales colonial or state government level, and had effects throughout the region. The displacement of the Wiradjuri language by English towards the end of the 19th century and the gradual loss of Wiradjuri expressions and songs over the course of the 20th century can be seen. Present day descendants are all part-European and do not speak an Aboriginal language.

Themes in Social Archaeology

Four shifts in paradigm relevant to this study seem to be occurring. Firstly, there seems to be some erosion of assumptions about Aboriginal society as an unchanging tradition. There is increasing realisation that post-colonial indigenous people have come to live in ways quite different from traditional modes. This work is in the forefront of the change, in that it views Wiradjuri as present day people rather than as living relics of hunter-gatherers.

Secondly, over the last few decades there seems to have been a shift away from "etic" analysis, which interprets Aboriginal society in terms of imposed outside categories, to an attempted "emic" analysis, which is more acceptant of distinctions made by the members of that society. While at present this often finds expression in lip-service to "the Aboriginal perspective", there are also signs of a genuine shift towards taking the insider view of the Aboriginal world. This thesis is greatly guided by accounts of life and is part of the shift to emic analysis. Yet the use of conceptual tools in this work, such as community plans and models of settlement systems, clearly belong to etic forms of analysis that are firmly embedded in the discipline. Redfield argued that the problem is as much a conflict between
the inside view and the outside view, as a "tension", with an accompanying "obligation to manage correctly the relationship between them" (Redfield 1955: 82).

Thirdly, there seems to be a shift away from use of measurement and quantification, which found expression during the 1960s and 1970s as the "New Archaeology", for locating and describing social phenomena. There may be increasing realisation that phenomena and trends must first be visible to the naked eye, or at least felt intuitively, in order to justify substantiation by statistical or conceptual models. Yet the expansion of computing software and electronic survey equipment still seems to be drawing devotees to a form of "New Archaeology" which uses a battery of techniques to satisfy compulsive cravings for an unnecessary accuracy of measurement, or for the use of elaborate technology to perform simple logistic tasks. By contrast, much of the fieldwork on which this thesis is based resulted from a striving to be thoroughly versatile with simple tools of observation and recording in order to carry out difficult tasks of reconstruction.

Fourthly, there has been a decline of structuralist approaches related to an emphasis on the individual over the last two decades. The structuralist approach taken in chapter 7, in which groups of Aboriginal communities are conceptualised as settlement systems, goes against the trend.

The extent to which social patterns can be inferred from the physical traces of archaeology is a current, but somewhat open, question. Gibbon (1984: 406), in his review of social science approaches in archaeology, concluded that regularities must remain hypotheses, nor should people waste their time pretending that these hypotheses can be proven, because social laws do not exist. A detailed consideration of the strengths, weaknesses, innovations, and inevitable failures of social theory in archaeology is outside the scope of this thesis. Similarly, a detailed consideration of the moral position of the treatment of Aborigines would be the topic of a separate, non-archaeological, work. The archaeological approach used for this topic incorporates theoretical positions outlined in this chapter, but utilises an extensive and broad data base as the springboard for a non-judgemental analysis of the physical evidence.

Much of the analytical and theoretical discourse examined in this chapter has disarticulated what many archaeologists do intuitively. Theory does not have to be explicit in what people do. The archaeologist's process of isolating a problem, observation and organising evidence, and the "happy accident" of developing interesting explanations, involves a series of steps in which theory is implicit. Discrepancies that result in the process call not for rejecting either the intuitive or the statistical approach, but, instead, for
examining the assumptions that are part of each approach. The final quality of the archaeology will not necessarily be determined by the complexity of the theory. Confounding this topic with theory will not turn it into better archaeological analysis.

The potential level of interpretation for settlement sites can be extremely high, given that some have a significant pictorial, written and oral archive, as well as an archaeological one. Clearly, theory does indeed help to understand the Wiradjuri situation and therefore does have some explanatory value. Unfortunately, the level of interpretation available from a site is not as reliant on statements of theoretical framework and methodology, as it is reliant on rigorous application of the theory and method.

The internal complexity within the Wiradjuri region might make the reader forget that this is a global phenomenon. The Wiradjuri region is a small, but well studied, part of the global expansion of Europeans. They established colonies in Asia, and on the American, African, and Australian continents. This global aspect was stressed by Deetz (1991: 1-8) in his definition of historical archaeology as dealing with the worldwide spread of Europeans and their interaction with indigenous peoples. Colonial processes had similarities across cultural groups. Frederickson (1981) found that both Dutch and English had similar, "pre-rehearsed" interactions with native peoples.

The Wiradjuri study is not about a series of global comparisons. But the record of Aboriginal/European interaction in the Wiradjuri region, with its effects on changing settlements, undoubtedly has implications for other studies of colonial settlement and management of indigenous populations in various parts of the globe.

**Household Archaeology**

This section outlines theoretical frameworks in household archaeology (Bermann 1995; Gibbon 1984) and contrasts the position adopted in this study.

Domestic residue is generally visible on the ground and is common on settlement sites. Recent discourse regarding household archaeology has considered the extent in which physical residue reflects social patterns. This is much of the archaeological theoretical conundrum. Household archaeology provides a focus for approaches to the problem.

Social patterns cannot be directly examined from material residues, firstly because of the complex relationships between life and the physical remains of human activities. Secondly, although the residue of activities that took place in and adjacent to the house may be recognisable, there is often less information gathered in fieldwork about outlying areas of activity, outside the house site, in what would usually be regarded as "non-domestic
context". Some studies in household archaeology have been limited to house sites, examining only the part of the household's residue that lies in and adjacent to the house (Kent 1987; Seymour and Schiffer 1987).

The archaeological problem is that for practical reasons household archaeology can only excavate the material remains of dwellings and a small part of the items once associated with them. Aspects of household life therefore can only be inferred from a small sample of the domestic activity area. In recognition of inherent difference between the activities of a living household and the structures studied by archaeologists, Kent Flannery has proposed an archaeological unit called the "household unit", to refer to the "complex of structures and features resulting from a typical ... household" (Flannery 1983: 45). Flannery's theoretical answer to the problem is applied by Bermann who summarised it as follows: "Archaeologists do not excavate households. They excavate the material remains of dwellings and a small portion of the items once associated with dwellings ... We cannot directly examine change in household life. What we can examine are changes in a 'household unit' that does not represent all the dimensions of past household life" (Bermann 1994: 29).

Despite the practical impossibility of excavating absolutely all the remains of a household's activities, it is important to attempt to identify physical indicators of social zoning within archaeological sites. While the household unit is an abstract concept adopted for excavation archaeology, a term coined by Winter (1976: 25) the "household cluster", relates more closely to surface survey. A household cluster is the spatial equivalent of a household, detected by the concentration of house remains, features such as pits, and small artefacts in an archaeological site. Hypothetical household clusters (fig 1.5) were proposed by Flannery in the research exemplar The Early Mesoamerican Village (1976) and Clarke (1972) for a British Iron Age village. Such models will vary across communities and cultures.

Finding archaeological equivalents for social group boundaries at the community level presents a similar problem to the definition of the household cluster. Just as household cluster is an archaeological spatial equivalent for a living household, so "community plan", as proposed by Gibbon (1984: 150), is the spatial equivalent of a living community. The community plan is the arrangement of household clusters and community activity zones, along with pathways and empty spaces between them. Later chapters propose models for household clusters and community plans of Wiradjuri of the pre-European period and 1870-1970 period.
As working hypotheses, the household clusters are assumed to be material manifestations of past households and the community plan is assumed to be the material manifestation of the past community. These spatial units make it possible to then compare different household clusters, the relations between clusters, and the area sizes of settlements.

Household archaeology is one area in which the discipline converges with other social sciences. Some archaeological theorists consider the household as the basic unit of human societies (Stanish 1989; Wilk and Rathje 1982: 621). Despite a certain amount of disagreement on finding a fixed definition of the household, in this study dwellings were not joined but physically separate structures, and its population were the occupants of individual single dwellings.

Flannery and Winter (1976: 34) who found in surface surveys that some sets of artefacts in association appeared to be "activity sets", tool kits used for specific tasks, and that these could be used to define a small spatial unit in household archaeology, the "activity area". A number of archaeologists (Sheets 1992: 23-4; Stanish 1989: 11; Wilk 1991: 37) argued that archaeology is best equipped to study households in terms of these spatially identified visible residues. This approach recognises that there are many socially important but archaeologically obscure parameters, such as the familial composition or socialisation pattern of children. Yet even having located household residues and identified spheres of activity, there remains the process of interpretation. Since the archaeological record is a transformed one, the remaining problem is how to decipher such changes in material patterns and to use them to relate the changes in the underlying domestic system (Bawden 1990; Bermann 1994: 25). The extent to which changes in domestic residues reflect changes of significance in the household is a subject of recent debate.

One perspective considers households as highly dynamic, sensitive to local rather than societal, regional change. They are seen as rapidly changing adaptive units responding to localised, short term fluctuations in opportunities and constraints confronting the individual family (Netting 1979; Wilk and Rathje 1982: 619). From this perspective, variation in the household over time does not reflect the regional level processes of change.

A second perspective considers households to be a conservative and fairly stable form of social organisation. They are seen as structured by history, cultural values, and ideals, with rapid change occurring only under extreme circumstances. Such households would be expected to keep their particular form regardless of changing settings. Due to innate conservatism, the changes "at grass roots level" of such households would reflect real
societal change, at the regional level (Bourdier and Alsayyad 1989; Wolf 1984; Yanagisako 1979).

The third perspective (Wilk 1991: 38-9) considers that changes may occur in many parameters (such as changes in subsistence, residential mobility and building fabric), without altering domestic organisation. In the case of the Wiradjuri region, the changes in housing from fringe camp to suburban house might reflect societal processes of acculturation, whereas some aspects of the domestic organisation (such as patterns of storage, sleeping location and social activities) may remain unchanged. This approach recognises that different household parameters may change at different rates.

An analytical framework has been developed by Wilk (1988, 1991) which combines the three above perspectives. Households may preserve traditional cultural elements, while also undertaking adaptive strategies which link the household to local and regional change. The interplay of tradition and external pressures will determine which parameters the household will change. Concepts of culture change noted earlier (acculturation, assimilation, creolisation) may further assist in understanding the underlying processes of change in households.

To summarise, some of the issues of household archaeology relate to the difficulty of using material residues to reflect the lives of people, while other problems are concerned with the limitations of excavation. The archaeology of Aboriginal people in the period following European arrival ("contact" archaeology) has problems of its own. Nowhere is this more starkly illustrated than in Robson Bonnichsen's surface survey (1973) of a recently deserted native American camp, in which the version produced by archaeological inference was contrasted against an oral account by a former resident of the camp (fig 1.6).

The position of this study in household archaeology is notable for three reasons. Firstly, surface survey has been employed in fixing the locations of household clusters. In the Wiradjuri region Aboriginal settlements household clusters include residues outside of the immediate house site remains such as: dumps, gardens, horse yards, outhouses, and sheds. Secondly, on most settlement sites the recording of the house site has been complemented by a community plan, giving information on items of communal context such as: communal shelters, play areas, dance grounds, fighting rings, water sources, foot tracks or vehicular tracks. Thirdly, and most significantly for the ethno-archaeology, the Aboriginal people who lived at these places assisted with the surface surveys and site interpretations.
Fletcher (1995: xviii, 43-7), in a review of theoretical approaches to human settlement study, argues for inter-related but differing scales of exploration. There is no single accepted all-inclusive theoretical position. No single level of theory is sufficient for understanding all human behaviour. If our concern is the usefulness of research propositions, then any investigation must be divided into manageable parts. This can be done by concentrating inquiry at given levels and using a variety of explanations. Whalen (1981) similarly argues that if we are interested in the sources of change and the levels at which pressures for change operate, then we need to consider society at as many scales as possible. It is equally as important to identify where change does not take place, due to the survival of traditions which are resistant to change (Bermann 1994: 6). In this study the archive can be interpreted both as cultural change and as the survival of traditional ways. Each process—change, and resistance to change—is important. This study, though initiated from a regional approach, was mainly continued at other scales, including that of the settlement, household and individual domestic artefact. The combination allows a more detailed and complete understanding of social change than would any single scale of investigation.

**Territory, Overcrowding and Stress**

The question of how hunter-gatherer societies, such as traditional Aboriginal society, dealt with overcrowding and stress prior to European settlement has relevance to the historical settlement period which immediately followed. Urbanised societies had developed mechanisms for dealing with crowding and stress including the partition of land to individual owners, regulation of housing by planning authorities, and the judicial systems for dispute resolution. Hunter-gatherer camps relied on a pattern of social "fusion and fission" (Lee and DeVore 1968: 9, 156; Turnbull 1968: 135-7). "Fusion" (aggregation or congregation of people) occurred when people, who are naturally gregarious and social, collected to camp together. Distinct local communities existed which were much larger than the bands which hunted and gathered together at normal times. These could easily and peacefully come together for short periods (Pearson 1981: 76; White 1986: 32-3). Wiradjuri clans would gather with many other groups for short periods to share in ceremonies, such as initiations. Traditional or current animosities were probably set aside for the duration of the gathering. Yet in the normal course of hunter-gatherer life, these groups lived well apart, generally scattered in a low population density over a large land area. Notwithstanding the added stress brought by European arrival, the disputes in Aboriginal hunter-gatherer clans would at times involve a whole clan in a fight or small scale warfare with larger groups. Fighting
and short periods of communal life would then be followed by social "fission" (dispersion), by which the various groups separated into household camps. Thus, at a community level the permanency of cultural mechanisms to handle urban crowding did not exist, nor would they have been of any great use in hunter-gatherer society for the thinly spread pre-European population.

However, once descendants of these same Aboriginal hunter-gatherers were collected together into government settlements and camps, they were subject to a level of social crowding that led to a sense of overload and frustration. They had few traditional cultural mechanisms for countering the social friction of being forced together. Social fission then followed. The more fortunate households maintained a travelling mode, similar to the traditional one, moving constantly over the country familiar to them, the home range in which their relations lived. At other times it was not possible to move away, and there was little choice but to endure constant conditions of overcrowding and stress.

The sudden increase in social crowding brought about by new forms of settlement was relieved, in the short-term at least, by the intense use of alcohol. While decisions to use alcohol are made individually they have a cumulative effect on the social group. The tenacious and widespread use of alcohol is not just despondency due to "oppression" but also is a complex social solvent (Merlan 1998: 205). It may intensify social contact while simplifying social obligations. It allows people to cut themselves off, for short binge periods, from social obligations and physical surroundings. Alcohol provides the flux of a permissive environment which provides temporary relief for people who in earlier times would have simply moved camp. This use of alcohol can therefore be seen as a distortion of earlier cultural mechanisms, which maintained hunter-gatherer communities at the band level.

By examining the territorial needs of people, this thesis sheds light on Aboriginal settlements in the Wiradjuri region, and where in the continuum they lay between the two extremes: stressful ghettos and "human zoos", or spacious and exciting community "parks".

As a theoretical model of spatial behaviour, territoriality, the laying of claim to a geographical area, had become acknowledged in social theory of the 1960s from observations that the human is a territorial animal. By the 1970s it had become a fashionable concept and was being examined by direct observation in contemporary urban settings. The theoretical model (and other related concepts such as home range, personal space and jurisdiction) led to reappraisal of hunter-gatherer living patterns. Despite its proven applicability in contemporary urban planning (e.g. Newman 1972), the application of the
concept to past human living patterns faded as a topic of debate amongst social scientists as it became progressively bogged down by the shortage of applicable empirical data and in arguments about jargon. One key point was bound to be that people, when considered in groups or as individuals, vary considerably. Brower (1980: 182) recognised in the debate that the complication for examining territorial behaviour in people, as opposed to non-human species, is that the cultural rules and customs of each group modifies both the territorial needs and the display of territorial signs of that group. Fletcher (1995: 26), observed that measured interpersonal distances (personal space) tend to be different in different communities. For the purpose of comparing growth limits of settlements, two very generalised behavioural constraints were adopted. The threshold of tolerable population density of a settlement ("Interaction limit" or "I-limit") and the threshold of effective communication ("Communication limit" or "C-limit") largely replace finer-grained concepts such as population density and territoriality in Fletcher's model (1995: xxiii, 69-97). These are further discussed in chapter 6 through placement of Wiradjuri region settlements onto Fletcher's comparative scale. While generalised concepts, such as Fletcher's, are useful for viewing at a global scale, the smaller scales of community, household and individual, territoriality are important for the Wiradjuri region as they can be both ethnographically observable and archaeologically visible.

Types of human territorial behaviour were described by Brower (1965) and Altman (1975), but the 3-part typology employed by Morris (1978: 126-32) is used here. The extent of territorial behaviour, the defence of a limited space, is one way of gauging overcrowding at settlements. In a broad sense there are three kinds of human territory to be considered: community (so-called "tribal"), family (or household), and personal space. Each of the three kinds of human territory will be examined in relation to the Wiradjuri region in this study.

Crowding is relative to cultural norms, because societies differ in their experience of space and their use of space. Hall (1966) was one of the early researchers on human crowding to contend that cultures differ with regard to their use of space and the physical environment. In traditional Aboriginal society, for example, contact with strangers was regulated by many protocols. People had the option of moving from one camp to another, which could be located some distance from each other, separated by uninhabited space. Even when people lived close together in campsites without architectural features to divide them for extended periods, they had developed a system of regulating interpersonal contact which entailed the use of a complex etiquette system with an emphasis on treating elders
with respect, on emotional restraint, on speaking softly, and on avoidance behaviours with particular kin. These unspoken social codes appear to have permitted successful coping with crowding, at least for short periods of time. Aiello and Thompson (1980: 113) contend that in cross-cultural situations a distinction must be made between crowding and density. Density may be quantified as the numbers of people per room, people per household, number of square metres of housing per person, number of households per hectare, or number of residents per hectare. The extent of crowding can be estimated using density measurements, but since crowding refers to a psychological effect, it follows that overcrowding must also be assessed qualitatively by the extent of its damaging effect on people. Fletcher (1995: 69-91) measured the point at which people in a settlement reach their limit of being able to cope with the amount of interaction forced by crowding. A residential density plot from this study shows a wide cultural and temporal sample of different community settlement sizes. The theory also proposes thresholds which limit residential density for different economies, whether they be hunter-gatherer, agricultural, or industrial economies.

Camp Layout as a Reflection of Social Organisation

As early as the 1930s, Elkin (1931: 54) had proposed the theory that camp shelters were spaced according to social organisation. His search for hunter-gatherers in a pristine state of traditional life led him to describe "rules" for sharing of food and other material items, for rules of avoidance or reserve between junior members and elders and between specific relatives (Elkin 1938: 69-74). The theory resurfaced again in social theory developed in the USA in the 1960s, which maintained that camp layout was determined by "spatial and territorial" behaviour. During the 1970s in New South Wales, the architect Peter Myers (1975: 21) travelled to the fringe camp at Wilcannia to report on rehousing the community. He interpreted the layout as "family domains grouped according to present commitments to kinfolk" as evidenced by foot-tracks that radiated from these family domains to each neighbour's humpy (hut). His recommendation that each new house should be located where its new tenant's humpy stood, demonstrated a belief that the layout of the humpies may have supported the perceived local social organisation (Myers 1974: ii). Memmott (1991: 44), in a review of the history of the same settlement, also maintained that "sociospatial principles" applied to settlement layouts.

These principles are applied to an example in the Wiradjuri region in chapter 6.
Location of the Outsider in the Town

Much of this study is about the extent to which recent Aboriginal groups lived as outsiders in a colonised country. However the treatment of social groups as outsiders is not a new phenomenon. It is a recurring pattern in urbanisation and has been well documented from Roman times (e.g. Burnham and Wacher 1990). The outsider in a Roman town lived on the edge of the urban area, the "sub-urban" fringe. In this study "the suburb" is not always used in its present day sense of a neighbourhood but as the fringe camp of on the edge of the official settlement. Another phenomenon of urban social geography treating the position of the outsider is the ghetto. Both the suburb and the ghetto will be dealt with in this section.

This section will begin with a generalised description of ways in which colonising powers have dealt with "the problem" (for the colonising power) of local people. The Roman example is then cited as a classic example of this general pattern.

When a colonial power arrives into a new area, it sets up settlements. For example, the Spanish established towns in South America that had churches, central market squares and seminaries, that is, they placed idealised copies of the Spanish town onto the South American landscape. Similarly town planning in New South Wales was based on the English model.

Firstly, the colonised people are subjugated by the colonising power. In the Wiradjuri region of New South Wales this occurred as the pastoral frontier advanced along the river systems during the 1830s. Local people always remain some sort of a threat to a colonising power, due to continuing active or passive resistance. The choices are either to build fortress towns to keep the local people out, or allow the subjugated local people in as dependents. Pastoral station owners in colonial New South Wales had that choice: shoot local Aborigines on sight and live in fear, or trade with Aboriginal groups, using them for a range of services and treating them as part-dependent.

Once a town is imposed onto the landscape, it becomes a magnet for all local non-urban people, who may not fully understand the nature of urbanisation, but who are attracted by the concentration of new people and goods that appear in the town. What happens in these situations is that some of the remaining local people who may have been either hunter-gatherers or farmers, then move in closer to the town. Then others join them in a chain migration. As time goes on, these people, who live culturally divided from the rest of the population, progressively settle on the edge of the town, into a separate sub-urban area. There they live geographically and ethnically separated from the town.
situations they may actively try to assimilate into the dominant community. In some cases, though not all, later generations of these local people may intermarry with urban folk as the two groups assimilate into one. However, these small communities may remain isolated, non-integrated and feared.

The other strategy employed by an urban community with respect to managing the remaining local people is to contain and control them in enclaves. If the local people are perceived as sufficiently different, then the colonial power may also attempt to wipe out these differences, and train the local people to conformity. The ghetto, the reservation, the mission, the removal of children for training, the prohibition of local language and belief are all examples of this pattern of colonial occupation. It has existed in a wide range of historical time frames and places.

One of the earliest archaeological examples of the location of the outsider in the town is in Roman Britain where towns and forts were built which kept indigenous people out. These also attracted groups of indigenous people who formed separate settlements, *vici*, outside the gates (Burnham and Wacher 1990: 7, 250). Such sub-urban settlements or fringe camps had a strong economic relationship with the town and contained craftsmen and traders, but also the unofficial wives and families of some of the town residents. An example of such a defended town is Chesterton-on-Fosse (fig 1.7). In the study of Romano-British towns, such fringe settlements are technically termed "suburbs".

Another way of siting small Roman towns was to build over pre-existing indigenous pathways and settlements (Burnham and Wacher 1990: 4, 9, 293). The Iron Age indigenous farming communities had lived in hamlets grouped at road intersections such as at the undefended village of Camerton (fig 1.7).

During the formation of high medieval towns in Britain, much of the same process of urbanisation was repeated. The townspeople formed a linked community. As in Roman times, the outsiders, who were economically or ethnically different formed settlements on the fringes of the town, often beside the roads leading into and out of the town. This may be understood as "ribbon development", clustering around roads and intersections. But it also had an economic aspect of land ownership. The cheapest land was taken up by the fringe dwellers. Later as the town grew, and as the outsiders improved their economic and social standing, such peripheral settlements were absorbed into the core of the township.

In modern third world shanty towns, whole communities, known as *villa miseria* in South America, are initially formed outside the cities. As the city grows, new shanty
settlements form further out into the peripheral area where the unused or residue land is available.

In the Australian colonial situation, the settlements of outsiders, and their movement into the town, have parallels with the above historical examples. A town like Narrandera had outsiders who formed settlements at the Narrandera Sandhills and Hill 60 of people of shared background, in this case ethnically Aboriginal. The key to locating the position of an outside group is to understand the extent of its incorporation, not just the aspects of its exclusion from the dominant group.

Aboriginal settlements have commonly been called ghettos. Dowling and Ward (1976) criticised the Aboriginal housing by government as a "ghetto-type" settlement which reinforced a negative self image. They related Aboriginal community and family problems in the context of overcrowded, underfunded, and institutionalised government settlements in which Aboriginal families were crowded together in identical substandard dwellings sited in areas isolated from the towns. These housing conditions were seen to combine with institutionalisation from government and racism from the white sector to produce a despondent state in the settlement communities. This living state was characterised by feelings of worthlessness, hopelessness and frustration. It was expressed through hostility, defiance and alcohol drinking (Dowling and Ward 1976: 1-2). Few could rise to the challenge of competing with the whites on their own turf: they had become accustomed over generations to the subordinate side of the ruling relationship.

This is an extreme interpretation. The paradox of the ethnic ghetto is also the paradox of the small community. It can be an island within a strange outside world, of which the ghetto inhabitant never is a full member. Yet it can also be a place that is free within the community circle, where one can receive appreciation, sympathy, understanding and status, which the larger world could not offer. Such descriptions of ghetto life are found in the literature of Jewish ghettos (Wirth 1928: 26), and have a parallel in the separatist and segregated nature of Aboriginal settlement communities. The use of the term ghetto is, however, wholly inappropriate because a ghetto is a settlement within a larger urban community. In this sense, Sydney's Aboriginal housing precinct, "The Block" in Redfern, is a ghetto. The camps and government settlements formed outside of townships were separate settlements, not ghettos.

Rowley (1972: 63, 169) suggested that Aborigines used the government settlement institutions as a base for establishment of communities with strong identities, replacing what has become loosely accepted as "tribal" loyalty with the sharing of a common history and
common experience as inmates of a government settlement. The people at Warangesda for example, became the Warangesda people. They were a community which kept themselves distinct from the town, but they also remained segregated by the institution.

While there is a large body of literature on ghettos in other countries which will not be examined here, in the Australian context the best known recent work is Peggy Brock's *Outback Ghettos* (1993). Brock emphasises institutionalisation in government settlements but also recognises their two sided aspect of protection as well as restriction. After the frontier period the Aborigines took the same broad path of survival independently invented by minorities in other times and places who were hopelessly outnumbered or outgunned, that is, to keep out of the way and not retaliate. One option confronting Aborigines along this path of survival was whether to align themselves with mission settlements. The mission settlements were, in hindsight, a restrictive part of government protectionism. Yet they provided consolidation for many Aboriginal communities which only broke up in recent times, during the post Second World War period of assimilation and self-determination policies.

Goffman's (1961) study of institutionalisation identified two properties of what were characterised as "total institutions". The first property is the breakdown of divisions between various activities such as sleep, play, and work (Goffman 1961: 4-6). This is the result of 24 hour a day institutions in which inmates never leave the buildings or grounds. The second property is the "split between a large managed group, conveniently called inmates, and a small supervisory staff" (Goffman 1961: 7). This second property leads to both managers and inmates adopting stereotyped, often antagonistic, attitudes to each other, and increases the social gap between them and the general community. Long (1970: 6) suggested that some of the government settlements in eastern Australia, while not strictly being total institutions, maintained an institutional character by being kept under supervision, and kept closed to the white community. This was broken down when people could find a livelihood off the "mission".

Like ghettos, government settlements such as Warangesda, Bulgandramine, Brungle, Erambie, Hollywood and Carowra Tank simultaneously oppressed and nurtured the communities they confined. At certain periods, they offered a basis for Aboriginal community solidarity and consolidation in contrast to the hostile world of the whites outside them.

How could such a situation such as that described by Dowling and Ward develop? Is this simply another example of uncaring whites and Aboriginal cultural "loss"? Observations
made on the ground by the Berndts at a government settlement in New South Wales during
the 1940s, and an examination of the transition over time from a mission to a government
settlement at one of the best known Wiradjuri settlements, sheds light on these questions.

A study of problems in a government settlement of southeastern Australia was
carried out by the Berndts who visited Menindee and reported on its problems in 1943.
They recorded what Dowling and Ward might have called the effects of
"institutionalisation," though they did not use that word and were careful not to pass
judgement on either the managers or the residents:

They recorded divisions inside the settlement community. They recounted the
increasing frequency of "unlawful" (according to both Aboriginal and white custom)
sexual liaisons, ranging from several "right" marriages according to Aboriginal law, to
increasing instances of "wrong" marriages, common casual sex with community outsiders
and one legally prosecutable case of incest. While men of the government settlement
community got on well with each other, the women from different tribal groups barely
spoke to each other (Berndt 1943: 14-5, 30-1).

They observed the outside divisions, between the settlement community and the
white township. A survey of the white children's school essays reflected that a deeply
entrenched ethnic intolerance of the Aborigines was being transmitted down the
generations in the town. Opinions about the managers, who had little direct involvement
with the people, were sought and compiled. Institutionalised religion failed to take root
among the Aborigines, who would easily switch from one church to another if it offered
them better food or clothing. A senior Catholic Church official was heard to facetiously
remark that the only way to Christianize the Menindee mission would be to "line them all
up on the river bank, baptise them, then shoot them", to preserve their state of conversion
to Christianity (Berndt 1943: 67-71).

While this complex of interrelated problems might have all be placed under a
convenient umbrella term, such as "institutionalisation", the Berndts observed that the
causes were deeply entrenched in the two (town and government settlement) communities.
The problems and symptoms were wide-ranging and inter-related: (1) Aboriginal culture
had stressed the importance of wisdom acquired by old people, but the interaction with the
non-Aboriginal value-system had shaken people's confidence; (2) the community were no
longer under the restraint of their old people and so there was a general breakdown of
Aboriginal law, most apparent in marriage law; (3) people of middle age and older had
begun to believe that white school education would be important to their children; (4) the
school curriculum was antagonistic to Aboriginal values and practices; (5) Aboriginal religion survived only in the minds of a few, and was not being passed down; (6) people's complaints and grievances were distorted because they had begun to believe that the whites should supply all their wants; (7) the lack of anything to do on the settlement was related to sexual and alcohol excesses; (8) the insecurity of land tenure related to disinterest in its maintenance; (9) managers greatly varied, but preserved social distance because of their role and lacked effort because they perceived the settlement as a temporary situation; (10) differing tribal backgrounds of the Aboriginal residents related to some of the social barriers; (11) social barriers between the settlement and the town were entrenched; (12) the instability and aimlessness of settlement life led to neglect of children, seen in their being allowed to roam through the night and in the state of malnutrition of some; (13) hygiene problems resulted from the children's unsupervised play and improper use of toilets (Berndt 1943: 16, 23-6, 45-6, 49-50, 55, 63-71).

To summarise institutionalisation, the authority of the old over the young had grown less. The people's ethos, their value-system, was vague and the goals of life were clouded. They had changed from widely separated and mobile groups into a static divided community. They had been self-sufficient and now were dependent on government welfare and the white township.

A realisation of the systematic character of Menindee's problems led the Berndts to suggest two far-reaching changes (Berndt 1943: 76, 82). Firstly they formulated a change to what would now be called a multi-cultural school curriculum for all children, which did not simply take the white English explorers' historical viewpoint. Secondly, land title for Aboriginal people so that family networks, who were at that time only employed as casual labour on white properties, so that the Aboriginal people would have incentives to manage their own properties. Such sweeping changes were not implemented at the time. However they did foreshadow developments which began to occur about 50 years later.

The change in possibly the best known Wiradjuri settlement from mission to government settlement places such "institutionalisation" in a perspective of change over generations. The early years of Warangesda suggest that the Aborigines travelled there without coercion and stayed voluntarily. The mission must therefore have had attractions for them. It provided meals and a security that contrasted to the unpredictable chances of survival in small household camps on the edges of towns. In the case of Warangesda, the first arrivals in 1880 knew a life away from the institution which may have included a substantially pre-European Aboriginal world view. They could leave if they were not happy.
The missionary John Gribble tried to establish the settlement and encourage the potential converts to stay there. The Aboriginal residents associated themselves with the mission in its early years because it fulfilled their urgent needs. Warangesda was unique in that it was the last mission in which Wiradjuri were presented with Christianity as part of a "civilising" package (Wellington Valley had been the first). Yet Warangesda shared many of the government settlement attributes noted by Brock (1993) with the result that the advantages to an Aboriginal community of large government settlements such as Warangesda initially outweighed the disadvantages. They offered a source of ready food through "rations" (weekly supplies), conditions for a permanent community camp, steady employment, refuge for the old and sick, some health care, and a place for children to gain some literacy and numeracy skills (Brock 1993: 157). While Aborigines did not create the government settlements which dominated their lives for many years, they also did not avoid them. The segregation of the government settlement also served as a filter between the Aboriginal community and the outside world.

This first generation could pick and choose from the missionaries' offerings. Their social need was so great that they opted for the life of the group by forming a mission community rather than splintering as vulnerable individuals. The "mission" was successful because the settlement community determined it was their best strategy for communal survival. The early years of Warangesda gave a strong sense of achievement to both white staff and residents. Aborigines were no longer marginalised as they had been in their small household camps, but were central to the establishment of a farming enterprise. They learned quickly and well, their level of skill equal to that of non-Aboriginal workers. Warangesda was a communal enterprise which first generated a communal pride, reinforced by the Aboriginal community's sporting prowess. In the 1880s it was an Aboriginal success story, but that achievement was later eroded by continued institutionalisation and was followed by the tragedy of closure and loss of land. As at Brungle, there is no documentation of how Aboriginal ceremonial rituals were practised or ended. It is likely that as the mission claimed control of the children, there were no new initiates to maintain ceremony and ritual, which then died with the last initiated generation.

The second generation who grew up at what was by then the Warangesda government "mission", had never experienced a separate existence and did not have the comfort of an alternative view of the world. It was difficult for them to leave as they had little means of employment or housing, or social support, outside. The managers were no longer converting heathens but controlling inmates. Their authority depended on inmates
never who remained dependent on the mission. Brock (1993: 165) comments that the later generations of Aboriginal people associated with government settlements "succumbed to the hopelessness of their position and took on the attitudes and behaviour of the institutionalised". Government settlements such as Warangesda became increasingly restrictive, emphasising discipline and policing rather than training for employment. By 1916 the manager of Warangesda was seeking permission from the Board to use a revolver and handcuffs (Board Minutes of Meetings, Archives Office of NSW). Like other later government settlements, Warangesda had become an end in itself instead of a means to an end.

Yet the 1920s break-up of Warangesda station was a tragedy. It forced the community to leave the communal and institutional life with which they grew up, and to struggle in a hostile world. The Aboriginal people had farmed the land but did not benefit. The land had gained in value but did not belong to the community. It was sold, repeating the pattern of the original usurpation of Wiradjuri lands.

A notable few early attempts by missionaries to segregate Aborigines at places like Wellington mission and Warangesda mission for education and Christianisation were followed by the generally secular period of government "mission" management which included a system of reserves with government built housing, managers, and school teachers. From the 1880s to the end of the 20th century the Warangesda community experienced the whole range of management strategies found in government settlements, which can be seen as 5 separate management projects: (1) a project of segregation for Christianisation; (2) containment on reserves so as to protect the Aborigines from the destructive influence of white civilisation; (3) policed segregation so that Aborigines would not contaminate the white community with their proximity; (4) removal of fair skinned children into special institutions to train Aborigines to become assimilated into white society; (5) keeping light-skinned Aboriginal people away from the reserves so they would become assimilated into white society; and then most recently, (6) integration into suburban housing by funding of Aboriginal corporation town housing and self-determination by funding of Aboriginal organisations.

Government settlements provided the main physical necessities. Residents of government settlements had access to treated drinking water and their tin huts provided better climatic protection against wind and rain than many of the camp humpies. Some people on government settlements retained a defiant attitude and a pride in their
Aboriginality. At times, the government settlements improved dealings with the white sector in comparison to stigmatised "fringe" camp communities.

Implicit in interpretations that see people as "institutionalised" is a theory which is victim-based. It examines the Aboriginal community as a victim buffeted about by external forces. The Berndts (1943) clearly thought that they were witnessing "cultural loss" of what would now be termed "classical" Aboriginal cultural forms such as traditional marriage matches, training through initiation and the authority of elders. Their theory saw the Aboriginal community as under the influence of people or forces external to it. These were the various white people who were managers, educators, medical staff, townspeople, employers, community hangers-on, and casual sexual partners. In a sense these white people had become the "main players" in the Berndts' analysis because they were occupying the central role in Aboriginal "institutionalisation". Indeed the Berndts' concerns were justified in the sense that the Menindee settlement had problems that remain not fully resolved even to the present day in its successor, the Murrin Bridge "mission" community.

However other recent observers, rather than focusing on cultural "loss" by Aboriginal change away from "classical" forms, have clearly gone into the field expecting to see contemporary expressions of changing Aboriginal culture ("post-classical" forms). Myers (1986) observed among the tin shacks of the Western Desert Aboriginal community that far from "internalising" the ways of the whites, the Aboriginal community "externalised" them. People such as medical and legal aid workers were seen as outside the kinship network. As non-community people, these whites were simply doing the job of all white governments which was to "look after" the Aboriginal people. In a sense this is a general view of whites as non-people, as a resource, rather than as kinfolk to whom one has obligations.

The only whites commonly regarded with a sort of affection by the Aborigines seemed to be employers. Far from being regarded in conflict terms as "economic exploiters of the oppressed Aborigines", white employers were given a quasi-Aboriginal status as "bosses". Just as Aboriginal "bosses" had obligations as guardians of dreaming places and of knowledge imparted to the younger men (e.g. Myers 1986: 61, 142-3), white "bosses" (whether hard task masters or not) were expected to "look after" their Aboriginal workers (Myers 1986: 282-4). Such part-incorporation into expected roles in Aboriginal society was typical of the cattle country of northern Australia (McGrath 1987).

Observers such as Myers and McGrath had turned the unsolvable problem of institutionalisation on its head. This was a return to seeing the Aboriginal community as the "main players". The managers and other whites were in a sense irrelevant, except in the
Aboriginal-designated role assumed for all white government, that of acting as a housing, medical and food resource for the Aboriginal community. Government settlements for Aboriginal people lasted for almost a century, until they came to be widely regarded as an anachronism in the 1970s.

Archaeology of Settlements, Outside Groups, and Ethnicity

Much of traditional, 19th century, archaeology had been concerned with finding relics of elite groups of past societies. This topic is part of the current archaeological debate on to what extent the details of lives of the economically poor social groups, can be extracted from the physical record.

One school of current archaeological discourse on settlements reflects concerns which emphasise cross-cultural generalisation and searches for behaviours which underlie the archaeological record. Kent (1990) postulates that as societies become more sociopolitically complex their use of space and partitioning of space becomes more segmented and partitioned. Following the model, societies, and their settlements, were ranked in categories. Category 1 grouped the least complex societies (windbreak dwelling societies with little sociopolitical stratification) and category 5 grouped the most complex societies (urban dwellers with greatest level of sociopolitical stratification). Such recent approaches have some of the aspect of an old theory with a new twist. This approach clearly is Darwinian.

This cross-cultural study omits a consideration of the Australian continent. There are aspects of traditional Aboriginal society which would not fit the theory. These "category 1" wind shelter dwellers would not be predicted by the theory to have marked differences in status between men and women, elders and the uninitiated, complex marriage laws, and varied forms of control over ritual.

An opposing school rejects the use of social complexity as a paradigm. Rowlands (1989: 31-9) contends that social relations in past societies were no more equal than in contemporary ones. Different societies over different times, in different parts of the world are seen to have adopted mechanisms to bolster and reinforce inequality. In the case of theory espoused by Rowlands, Marx is mentioned in order to draw patterns of social inequality out of the archaeological evidence. Such an attempt is probably easier in theory than in practise, and in essays such as that by May (1989: 215-24) on the social organisation in the central European Early Bronze Age, writers search the archaeological record for confirming signs of social stratification or asymmetrical social status (sometimes with limited success). The situation of many Aboriginal people living in camps or in government...
settlements which provided some cheap labour to surrounding stations and towns appears at first glance to fit the theory. The definition, provided by Tilley (1984: 112) of exploitation in the Marxist sense, is relevant: "a situation in which an individual or group of non-producers appropriates the surplus product created by the labour of direct producers, which is then harnessed to further the sectional interests of these non-producers".

Both of the above schools of archaeological thought place more emphasis on the modes of production than on ethnicity to determine social relationships. However the Aboriginal settlement and town viewed in this way ignores the range of social and cultural interaction and the autonomy of many Aboriginal settlements. Nevertheless, the Aboriginal settlements were ethnically separate and were regarded as an outside group by white people in the towns. More applicable than Tilley's definition of exploitation might be Weber's principle of "exclusionary closure" by which the dominant group secures privileges for itself through tactics which give rise to a subjugated group of outsiders or social ineligibles (Weber 1968: 43). This principle clearly applies to the colonial situation. The Aborigines, as a colonised group, were subjugated and treated as outsiders. This thesis, however, goes beyond Weber's principle by taking the further step of examining the wide range of government controls on Aboriginal people and the range of settlement response. Then rather than simply seeing Aboriginal people as a subjugated group, as oppressed by colonising forces, they are seen as active participants in the struggle for cultural and economic survival. The differing extent of participation of ethnically separated minorities is better addressed by theories of culture change covered in a later section.

One of the earliest developments in the archaeology of ethnicity was the late 19th century work done by Kossinna which directly linked material culture, "archaeological culture areas", with separate ethnic groups (Kossinna 1911: 3). First world nation states largely rejected the approach after the Second World War because of its political use by the Nazi administration. However the smaller embattled European peoples could not afford to ignore ethnicity. Groups, such as the "Balts", which had been forcibly incorporated into larger states of the eastern bloc, continued to draw on archaeological, linguistic, and historical evidence to map their separation from other peoples (e.g. Gimbutas 1968). One of the proofs of this deeply ingrained ethnic identity, so inexplicable to the people of First world nation states at that time, was when the tiny population of Lithuanians became the first people to make a stand against the Soviet Union in 1989 and re-declare their independence.
With the increasing interest in the culture of ethnic minorities in the USA, Britain and Australia during the 1960s, a new phase in the archaeology of ethnicity began. The first spatial characteristic to be recognised in distinguishing ethnic groups in urban situations was residential segregation (Boal 1976). Yet many of the other developments in recent archaeology of ethnicity over recent decades (see, for example, Chapman 1993; Graves-Brown et al. 1996; Jones 1997; Kelly and Kelly 1980; Renfrew 1993; Shennan 1989) concentrated on a discourse about the nature of ethnicity. These recent scholars concentrate on theoretical warnings against drawing simplistic conclusions about ethnicity, rather than setting out to actually distinguish particular ethnic groups archaeologically. This reflects continuing difficulties of dealing with the complexities of ethnic identity and its physical expression.

The importance of ethnicity has been seen in emergence of the so-called "ethnic revival" which is linked to an developments indicating an increased recognition of cultural diversity. Jones (1997: 8) identifies some of these developments as the emergence of Fourth-World (ie indigenous) movements, the breakup of the Soviet Union, and the growth of secessionist movements around the world.

The link, if any, between ethnicity and archaeology is a subject of recent discussion. Sian Jones (1997) convincingly argues that archaeology has been left behind in recent redefinition of ethnicity in the human sciences (and that it is time for archaeology to catch up by acknowledging the complexity of ethnicity).

Because of the emergence of European nation-states, 19th century culture history emphasised the continuity, boundedness and homogeneity of nations and "cultures" (Wolf 1982: 387). The identification of "cultures" from archaeological remains and their association with past ethnic groups was an accepted archaeological paradigm up to about the mid 20th century, best known in the work of Kossinna (1911) and Childe (1929). After this it came to be ignored in the Anglo-American world as an unfashionable paradigm (Jones 1997: 5). However since that time a debate on ethnicity in archaeology has proceeded. It has run along similar lines as the tribes and boundaries debate. Earlier formulations of "archaeological cultures" equated material culture directly with ethnic groups as bounded uniform cultural entities, fairly fixed over time. Just as "tribes" had "boundaries", so ethnic identity was fixed, constituting the basic underlying character of a people which persisted through time and could be traced back to a unique origin (Jones 1997: 13). Ethnic groups were conceptualised just as tribes were conceptualised: social and
cultural groups with distinct boundaries, characterised by relative isolation and lack of interaction.

In recent decades the open and fluid nature of cultural systems has gained acceptance and the fixed concept of ethnicity had come to be rejected as an illusion. Ethnic identity as argued by Jones (1997: 14) is a process rather than a fixed entity, its shifts resulting from ongoing situations in daily life. It is therefore subject to transformation and discontinuity.

Personal and social identities are complex in any society, however as Peterson and Carr (1998: 9) have observed, the range of indicators of Aboriginal identity are especially diverse as they may include: "Kinship connections, family groupings, descent, place of birth, places of residence, knowledge of ceremony, songs, sites, country and language". It is accepted practice in land claim hearings that many people, when pressed to confront ties to country and identity, demonstrate multiple and overlapping ties to country, and to several identities (e.g. Myers 1986: 127-45, esp.141).

At the extreme end of this range is the individualistic view, in which any person is free to assume any identity at any time. While rejecting such individualism, Jones (1997: 143) posits a flexible definition: "...ethnic identities are not free-floating constructions whereby individuals and groups choose to identify themselves and others in any way that suits them. Instead, particular ethnic identities, and the representations of the past associated with them, are produced in specific socio-historical contexts...". Hodder (1982) and Shanks and Tilley (1992: 172-240) explore such links between material culture and identity. Jones' thesis, in a nutshell, is that repeated association with a distinctive material culture does not necessarily define an ethnic group. This is a particularly significant statement for household archaeology in the Wiradjuri region, as examined in chapter 5. Material culture adopted in the Wiradjuri region was European, but it was adapted to service Aboriginal communities. This adaptive aspect is examined with detailed examples of a modern type of spear and of techniques adapted for hut building.

In a review of ethnicity, Eriksen has noted that there are, in effect, different types of ethnicity, different kinds of ethnic groups (Eriksen 1993: 13-5). This raises further questions of identity and ethnicity. Chapter 3 grapples with these questions in the Wiradjuri context.

**Theories of Culture Change: Colonialism, Assimilation, Acculturation, Creolisation**

Culture change, and its archaeological consequence, is the subject of this work. This section examines ways of viewing culture change among marginalised groups which have implications for the Wiradjuri region.
Carmel Schrire (1991) reviewed the effect of 17th century Dutch colonisation of the tip of southern Africa on the indigenous pastoral foragers. The striking similarities of this colonialism with that of the Wiradjuri region are pointed out later in the thesis.

The initial attitude of the Dutch settlers to the indigenous population was based on expediency. It began with a measured truce, broken by intermittent skirmishes. Once this delicate balance was broken, full conflict erupted (Schrire and Merwick 1991: 14). Early in the process of colonisation a smallpox epidemic killed large numbers of indigenous people. This broke the resistance and drew remnant groups into fringe camps near towns and into service as labourers on farms. At the Cape, the decimation of indigenous people by the smallpox epidemic was greeted by settlers "with dismay tinged with a certain relief" (Schrire and Merwick 1991: 15).

Early settlers were not concerned with recording the indigenous ways of life, their language or world view and sexual exchange between male settlers and indigenous women was commonplace. In South Africa it produced the ancestors of present-day "Coloured" people, identified as a group separate from the whites (Schrire and Merwick 1991: 17). The part-European ancestry of this new population did not lead to acceptance and inclusion in the white community. They still had to meet the challenge of building distinct communities.

Not only did the indigenous groups suffer after contact as a result of disease, but also settlers' changes to land use changes caused nutritional stresses of colonial settlement. Much of the collapse of traditional indigenous society at the Cape can be related back to the relentless Dutch demand for additional pastoral land. The growing numbers of Dutch settlers needed more land than the fortified centre of the colony. It was not long before the settlers moved deeper inland. Once the indigenous peoples beyond the Cape realised that the settlers were not going to leave they perceived their mistake and began mounting organised attacks (Schrire 1991: 77). Yet within a decade of the armed resistance, the indigenous peoples of the Cape were forced to beg settlers for access to their pasture land and for access to traditional foods (Schrire 1991: 77). As the settlers' hold on the land tightened, the indigenous people at the Cape were pushed beyond retrieval by the depletion of their resources. This, Schrire sees, forced indigenous groups off the land and into forms of bondage on white settlements and farms (Schrire 1991: 89).

The presence of indigenous people at the fortified Dutch outpost is known from the written record (Schrire 1991: 83). Most of them probably would have not stayed within the fort, but traded for goods from an adjacent "fringe" camp location. In the Dutch
colony a number of indigenous people attached themselves to the fort, later collaborating on the frontier of white settlement (Schrire 1991: 90).

Such a process of colonisation can show similarities over the boundaries of culture, space and time. A comparison of early Dutch Settlement in South Africa with the Wiradjuri region shows similar links between the colonisation of an indigenous people, their survival as a marginalised group of mixed ancestry, and their urban drift. Much of this colonisation process was repeated through Wiradjuri resistance to settlers in New South Wales. The massacre of Wiradjuri at Bathurst, their "pacification" at Wellington Valley Mission, and their approaches for rations at pastoral stations all echo this process of dispossession (Fry 1993).

In New South Wales, the growing numbers of European settlers needed more land than at the centre of the colony in Sydney Cove. As at the Cape, it was not long before the settlers' hunger for land moved them deeper inland and it was then that indigenous peoples such as the Wiradjuri, realising that the settlers were not going to leave, perceived their mistake and began mounting organised attacks. As at the Cape, within a few decades of the armed resistance, the indigenous people's resistance was broken and they were forced to beg settlers for access to their land and access to traditional foods.

Once resistance had been broken, it was followed by a drift into European foci of settlement. The attachment of indigenous people to white settlements at the Cape was paralleled in the Wiradjuri region by the role of "tamed" Aboriginal people on stations as protectors against "wild blacks" and their use by the colonial administration as mounted police. Early on in the process of colonisation (in both the Cape and in New South Wales), a smallpox epidemic killed large numbers of indigenous people (Butlin 1983), drawing remnant groups into fringe camps in towns and into service as labourers on farms. At the Cape as in the Wiradjuri region, early settlements were not concerned with recording the indigenous ways of life, their language or world view. Sexual liaison between male settlers and indigenous women was commonplace, and in the Wiradjuri region it produced the Koori ("mixed-blood" Aboriginal people of southeastern Australia) contemporary population.

Much of the current debate relating to the identity of Aboriginal people and the identity of other minorities is about who is a member of the minority group and why. Perceived distinctiveness of culture, and the extent of survival of certain aspects of a group's culture, are at the core of this debate. A number of terms, each of which embody different concepts of culture, have been adopted to explain the adaptations and changes of cultural
minorities. The question of culture change is therefore a prevalent subject underlying much of Aboriginal history and archaeology, although it is not often explicitly discussed.

There have been two dominant schools of social thought on the European invasion and Aboriginal response to it. The first was the pseudo-Darwinism of the late 19th and early 20th centuries which saw Europeans as technologically and culturally dominant over the primitive and helpless Aborigines. The second is the "culture struggle" school of the late 20th century land rights era which sees the Aborigines as living in a "shattered Eden" of culture loss, forever resisting the white invaders in a battle to survive in their own land. This is the "ideological resistance to the dominant ideology" model used in studies such as the work by Trigger (1988) on Doomadgee mission in Queensland. Each school of thought contains echoes of 19th century social theory and avoids dealing with culture change.

About 60 years ago, Ralph Linton (1940: 501, 504) described a concept coined as "acculturation" for examining culture change in a number of American Indian groups. Even though in practice the study concentrated on effects on the Indians rather than on the whites, in theory Linton emphasised the effects on the cultures of both groups, indigenous and non-indigenous, in a colonial situation. Culture change was seen as a two-way process, with the Indians seen as active in their own change, adopting some European traits and rejecting or adapting others. A society will tend to "pick out certain things from the range of those made available for borrowing and accept these while remaining indifferent or even actively opposed to others" (Linton 1940: 487). The pseudo-Darwinistic view saw the fate of Aborigines as pre-determined. It would have regarded indigenous people as having to proceed through a series of inevitable stages, from hunter-gatherer in a rigid traditional society, to a small scale farmer, to an assimilated member of industrialised society. The concept of acculturation was free of such determinism because it saw that changing circumstances require changing strategies by a colonised people if they are to survive. This view of culture change was characterised by Sahlin (1985: viii) as "externally induced, yet indigenously orchestrated, present everywhere in human experience".

Axtell (1982) provided comment on American Indian missions which was also partly a reply to the "shattered Eden and culture struggle" view. Applying his arguments, the missionaries and managers had their own criteria for success of a mission, which probably had to do with the number of Aborigines attending services, performing regular work or avoiding alcohol. Success or failure of a mission from the Aboriginal resident's perspective would have depended on whether the mission provided the means of survival (for the individual and therefore the household, community and ethnic group). Culture change, such
as religious conversion of the Aboriginal people, must be seen as a tragic loss, but only if
the pre-contact Aborigine is seen as the only true Aborigine. If community or ethnic survival
is the yardstick, then the missions were a success (Axtell 1982: 36-9).

"Assimilation" suggests a great transformation. It was a stated government policy
which accompanied the removal of children for rearing in a number of institutions, including
Cootamundra Girls' Home, situated in the Wiradjuri region, Kinchela Boys Home on the
NSW north coast and Bomaderry Infants Home on the NSW south coast. Of these only
Cootamundra Girls' Home has been examined from the standpoint of its archaeology,
history, and social dynamics (Kabaila 1994). Through these processes, "assimilation" has
changed meaning and tone from a term used to spell out what were then regarded as
positive levels of adjustment to the general community, to a negative term suggesting total
loss of identity and forced culture change. Linton's comment (1940: 464) on assimilation
was that it was only one of several processes operating during acculturation.

Wiradjuri accounts confirm that considerable changes in culture have been experienced
during the last forty years of settlement change from living in camps and government
settlements to living in white suburbs. This is part of a complex process of culture change,
which can be generally described, but for which there is no single accepted technical term.

Rather than rest the case on assertions, impressions from a recent case study of
culture change in America may be applied to the Wiradjuri region ethnography that I have
recorded as oral accounts to explain the limitations of concepts of "assimilation" and
"acculturation" for understanding culture change.

Not all culture change is imposed by force, and there is a continuing process of
interaction between cultural rules and actual behaviour. Expressed more formally "The
causal arrow between culture and choice goes in both directions" (Wilk 1990: 35).
Recognition of this aspect of culture change has given rise to several other terms which
attempt to embody processes of culture change in the colonising environment. Drawing on
the perspectives of Barth (1967), Cohen (1974), and Wilk (1990), it is possible to
understand culture change in Aboriginal communities by understanding the decision making
in housing. Wilk's (1990: 34-43) study of the extent of acculturation among modern Mayan
Indians presented an example of another society that constrained individual competition and
stressed collective institutions. Broadly viewed, the processes observed by Wilk can be
adapted for similar forms of cultural change in the Wiradjuri region.

The anthropological concept of acculturation was originally used to describe a mutual
cultural exchange between people in contact (Linton 1940; Redfield et al. 1936: 149). More
recently acculturation, like assimilation, has come to have a more specialised Eurocentric meaning. Used in its narrowest sense, it describes situations in which non-European people give up their traditional ways and become like Europeans (Haviland 1987: 373).

Terms, such as assimilation and acculturation, are descriptive rather than explanatory. They fail to specify the direction of diffusion, or the reasons why cultures change or why some aspects of a culture change while others do not. Both assimilation and acculturation are linked with a unilateral concept of culture change. They imply acceptance of coloniser dominance and reflect political ideologies which many social scientists reject (Walker 1984).

Culture change implies survival and the personal accounts of Wiradjuri people show ways in which Aboriginal people have forged a changed culture and distinctive identity. This contrasts with recent influential works such as Rowley (1970), Read (1988) and Reynolds (1992), which tend to portray Aboriginal people as victims rather than as a colonised people actively forging a culture. Even by the end of the 1970s, this developing paradigm was attracting published criticism (Reece 1979: 271) for exaggerating the scale of conflict and misreading Aboriginal resistance. Once a paradigm reaches wide acceptance, it can lead to uniformity, in which there is a danger that people will take easy answers "off the shelf" rather than work through the implications of new findings. For the archaeologist especially, the uncritical acceptance of a conventional paradigm presents an obstacle to research as it tends to drive both the collection and the interpretation of the data (Yoffee 1993: 60). For the wider community, uncritical acceptance of the paradigm stifles understanding. The resulting stereotypes of Aboriginal people are still held by the wider community, as various recent authors (e.g. Allen 1988; Attwood 1989, 1992; Macklin 1997; Mulvay 1997) have continued to point out. The stereotypes do not explain the "contact" experience.

An approach which recognises individual intentions and decision making is the picture of cultural interaction emerging out of American "creolisation theory" by a Jamaican historian (Braithwaite 1971) recognised that both slaves and their masters in colonial America were involved in a multicultural adjustment which entailed interaction, exchange and creativity.

The word "Creole" came to mean a cultural and racial mixture created in the New World. A theory was developed to examine the process which contains echoes of acculturation. The term acknowledged that there were different population patterns, historical situations, and cultural mixes which led to "creole cultures". The process of creolisation was seen as producing a series of interacting sub-cultures rather than a single uniform creolised blend. The American anthropologist Leland Ferguson (1992: xii-xiv, 150)
used creolisation as a basis for understanding the archaeological remains of slave settlements: "Creolisation recognises the free-will, imagination, and creativity of non-Europeans; creolisation does not simply model cultural contact and exchange but describes the building of a new culture from diverse elements."

Some of the direct results of European arrival in the Americas, Africa and Australia were encounters which took place both between, and within, previously separate groups such as Native Americans, African slaves, Aborigines and European settlers. Black African slaves immediately formed alliances with native Americans wherever they went. In Spanish colonial America, the mixture of Native American, Spanish, and African elements developed a distinctive Mestizo population and culture that flourishes to this day (Deagan 1991: 101; Redfield 1941: 339-40). The Metis of the Canadian frontier were a 19th century people descended from Indians and whites who borrowed adaptive techniques from both groups, by being both farmers and migrant buffalo hunters (Braroe 1975: 73). In South Africa the descendants of male settlers and indigenous women comprise the contemporary population of the so-called Coloured people, identified as a group separate from the white population (Schrire and Merwick 1991: 17). In northern Australia many Aboriginal people still speak Kriol (Sandefur 1979) as well as one of the Aboriginal languages. Kriol is a separate language which developed out of Aboriginal forms of grammar and of communication needs between pastoralists and their Aboriginal employees. In southeastern Australia the Aborigines of part-European descent are Kooris, a name they have given themselves. The term Koori recognises the separate identity that has developed amongst southeastern Australian Aboriginal people of part-European descent.

Conflict Theory Explanations of Culture Change

This approach modifies the picture of society promoted by critics of Marxian persuasion (e.g. Rowlands 1989). They have sought a simple interpretation of complex situations, and have reflected 20th century notions of a strictly racially segregated colonial experience - two separate groups each with its own role. They sought to divide black and white society strictly by race and concentrated on economic status, and came to a position from where they could not envisage the complex social exchanges that made pastoral stations and missions work: interactions between mission people and their Aboriginal overseers, field hands and house servants, black and white men who had been playmates as children, and between Aboriginal women and their white sexual partners.
The need for a theory, such as one to explain the growth of settlements, is to provide insight into seemingly unrelated data, but at a cost: "Any theory represents a simplification or a generalisation of reality and does not therefore completely describe particular situations. What it loses by way of details, it makes up by providing new insights into the relationship between various phenomena which at first sight may appear diverse and without connections" (Mabogunje 1968: 33). Redfield (1955: 95) similarly argued for the formulation of a community's world view, that framing into concept or theory will "always do some violence to particular reality" depending on how many facts a generalisation leaves out. That is to say, the essence of good theory is that it correlates with some given proportion of the available data. The greater the correlation with a range of data, the more successful the theory. A simple theory is very useful because it supplies an easy starting point for sorting of data. The conflict model, which sorts social phenomena into two opposing categories, is one such simple theory, which has been used to explain urbanisation.

Very little has been written which touches on the urbanisation of Aboriginal people in the Wiradjuri region. However, if we look at literature of urbanisation in another continent, a number of lessons become apparent. An example of non-correlation of a simple model with complex data can be seen in a sample of the extensive theoretical literature on urbanisation as applied to the African continent.

This is how Graham Connah (1987: 1-17) approached the problem of urbanisation theory in the archaeology of African settlements. The Marxist position is represented by the "conflict position" in which it is argued that urbanisation is a response to the conflict between two unequal social classes, and the actions of the privileged class in protecting its position. Morton Fried (1967) provided the most detailed recent statement of this position. Haas (1982: 151) strengthened the conflict position by redefining urbanisation and state formation in terms of power and social domination in which "a stratified society in which a governing body exercises control over the production or procurement of basic resources, and this necessarily exercises coercive power over the remainder of the population". However, the pre-colonial African states did not fit this conflict position and had been dismissed because they were not "pristine" and were therefore not relevant to the core theory. A new category had to be invented for them and Haas called them "secondary".

A second school of thought belonged to the "integration position", which on the other hand argued that urbanisation is the result of social groups coming together, largely out of self-interest. Elman Service (1975, 1978) provided a statement of the "integration position"
which was that those who held power perpetuated their hold over the governed stratum of society by offering benefits such as hydraulic, military, religious or defence developments.

Renfrew (1983: 17) then criticised the whole division into "pristine" and "secondary" as resulting in "facile taxonomy in place of serious analysis". He argued that a better understanding of African urbanisation would be gained by the systemic view, examining local conditions such as subsistence, technology, social system, population pressures and so forth. That is to say, the theories were so simplified and generalised that almost any detailed re-examination of local data would identify exceptions to the theory. At this stage, Connah (1987: 12) put theories aside and returned to examining the base of data.

This outcome has lessons for the Wiradjuri region and archaeology in general. In the African urbanisation case theory X (the "conflict" theory), sought to provide a simple structure in which to organise the available data. Its explanatory value lasted while the data under consideration remained narrow in range (Fried 1967, with the theory for a "pristine" state). However, later contributors to the theory then examined a broader range of data, and found that it would not neatly fit the theory. As time went on, the theory, once simple, became more elaborate, with an increasing accretion of corollaries and sub-theories (Haas 1982, finding that not all states are "pristine", there is also another type of state, called the "secondary"). Theory X had reached the stage where bodies of local data, if examined in enough detail, could probably be shown not to fit. In effect, theory X had to be continually reworked and elaborated by the addition of involved sub-theories to bolster the main one. Once theory X had reached this critical threshold of illogic, then a second theory Y (Service 1975 with "integration" theory) gained strength by stating that actually the situation was not as simple as theory X had maintained, and new data would not fit it.

In this parable the two general theories could have been continued indefinitely as an academic debate. The alternative, however unpalatable, would be to go back to the field, find and organise the data and examine what patterning it may contain. Thus Connah (1987:17-23) reached the same conclusion as other researchers (e.g. Fletcher 1995: xviii, 43-65) who enter an arena of theoretical debate that ignores alternative sources of data: the data-base should be examined to guide and arrive at a range of explanations, and possibly act as a guide to imaginative theory formation. This, in essence, is also what Hodder (1986: ix) argues is best for the discipline: that rather than setting some fixed theory, archaeology ought to be continually experimenting with a wide range of approaches. Folding out a wide and detailed base of data, such as in this study, permits a range of approaches.
The variability of people and of human culture and decision making is the difficulty with social theory. Rapoport (1969: 11) has argued that problems in social theory begin to occur when a broader range of data is introduced for explanation by fixed theory: "...Human endeavours obey varied and often contradictory and conflicting impulses which interfere with the simple and orderly diagrams, models, and classifications we love to construct. The complexities of humans and their lives cannot be encompassed in neat formulae, although the desire to do so characterises our age". Inevitably, the complexities of human situations do not fit neatly into such a simple theory and one of a number of strategies must then be adopted if the simple theory is not to be discarded. There are three such strategies: (1) exclude all data that does not conform with the theory, they can simply be stated to be "irrelevant" to the theory; (2) distort all non-conforming data to make it fit the theory better. This is possible in the social sciences because much of the data is open to many interpretations; (3) elaborate on the theory to make it fit the data better. What begins as a simple theory, then requires corollary propositions or numerous small subsidiary theories.

By adopting the three above strategies to knit the data base with the theory (ie by altering the data or theory, or excluding non-conforming data) the Marxian model becomes an irrefutable theory. Claims to knowledge in science are justified by devising confrontations between theories and fresh observational experiences; knowledge in science is therefore based on possibility of its empirical refutation (Popper 1969). It is precisely here that difficulties arise in the application of Marxian models to archaeology. The basis of scientific method is the "hypothetico-deductive" method (Gibbon 1984: 82), or the testing of implications of a hypothesis by experiment. The key property of an experiment is that it is repeatable by others. Archaeology is not a science, because it is generally not able to produce repeatable experiments. For example, excavations destroy context of the evidence, the site, and are therefore non-repeatable experiments. An oral account is a unique conversation between two people in the context of their relationship and can therefore be classed as a non-repeatable experiment. This alone would render a position that archaeology is a neutral and objective science (e.g. McKay 1993: 50-1) untenable. But while archaeology is clearly not a science, it tries to adopt scientific attitudes. One guide to good science, and also to good archaeology, is the refutability of successful theories. Theories, if accepted as irrefutable, then become articles of faith ("ideology" in the social sciences). Members of the faith, or ideology, think of the theory "as if" it were a law which fits every circumstance. This, the ideological approach, can lead only to belief, or non-belief and represents a dead end in the road system of scientific knowledge.
A more complex theory is going to have less immediate attraction. It will require earlier intellectual investment in return for longer term gains in understanding. But it can also provide closer correlation with the complexities of human situations. There would be, for example, extreme difficulty in justifying the use of a single criterion to summarise the process of urbanisation, of settlement growth. A multi-stranded theoretical approach, which describes a number of connected theories, might cope with the complexity of the variants of the process of settlement growth in different places at different times.

An example of the application of a Marxian model would be to examine the relationships between Aboriginal and white people in the Wiradjuri region and sort everyone into two opposing categories: the subordinate Aboriginal oppressed, and dominant white oppressors. There are many instances in which such relationships existed and therefore the theory could be deemed to work. It follows that ethnic identity in the Wiradjuri region is bipolar: everyone is either a white oppressor or one of the black oppressed. Therefore all data are considered only in a dichotomised context. What of the human relationships between Aboriginal and white people that do not fit into the bipolar theory? In order for the model to work, these relationships must be either ignored, or distorted, or made to fit by numerous circumlocutions invented for the model.

A more complex theory might see the formation of ethnic identity in the Wiradjuri region not in terms of fixed categories of who is white and who is black but as an interactive system, one that changes over time, for example in response to economic changes and pressures on minority groups to conform. Such a systemic approach can accommodate the fact that all Aboriginal descendants of the Wiradjuri region are of part-European descent. It can also accommodate changes over time to the proportion of the population that identify themselves as Aboriginal. It can accommodate people who have switched from one identity to another, or oscillate somewhere between two ethnic identities.

The older Marxian concept adopts a simplistic "us and them" view of society which emphasises conflict between European settlers as the dominant majority population and Aboriginal people as a subordinate minority population. A more prevalent view (easily seen in records such as the Warangesda manager's diary of daily events) shows how Aboriginal people worked on manipulating the system to advantage. They would not see their most important relationships as those between themselves and their mission managers or station employers. Securing food, shelter and clothing, by whatever means, including working or taking them as well as accepting them as rations - surely these would be classed as their chief activities. Similarly, the relations of husband and wife, parent and child, brother and
sister, friend and neighbour, healer and patient would be considered by most people as their primary relationships rather than their divisions along racial lines. Oral accounts of Wiradjuri people are a testimony to this rich detail and complexity of human relationships.

Parallel developments in the recognition of Koori culture have been taking place in south-east Australia since 1970, and there is no recognised term for such "Koori-making". The importance of acculturation and creolisation as concepts is that they allow a greater number of variables to be recognised than in imprecise culture change terms such as "assimilation". There are good and sufficient reasons to avoid such simplification and imprecision.

The maintenance of cultural stereotypes is an important feature of indigenous/coloniser relations and will be considered here in a present day context. Conflict theory has produced a negative effect in the hands of white social critics. Firstly, compassion diminishes when people are separated into black and white, friend and foe. Secondly, by the stereotyping of two self-contained and opposing groups, cultures remain stereotyped rather than understood.

Cultural stereotyping is not a deliberate conspiracy to lie about Aboriginal, or about white, people. It is linked to ethnic separation. There is a kind of blindness to information about each group that might alter perception of the other. In a study of an Indian and white community, Braroe (1975: 133,137-8,184-5,187) argued how this ethnic gap is maintained. His comments seem to apply equally to the Koori situation. Whites expect Kooris to be late for appointments and to "exploit" friendships. When a Koori fails to show up at a certain place at a certain time, does not pay a cash debt, or "exploits" a relationship with a white, he reinforces the white's perception of Kooris. Similarly, Kooris speak of the stinginess and uncaring nature of whites. Myers (1986: 41) similarly quoted a Pintupi man who "was especially afflicted by differences between white and black culture" as saying "Money is the main thing for whites; they don't worry about who will cry for them when they die." Kooris expect whites to be greedy, uncaring and unsharing. When a white fails to give away surplus wealth, or land, or places an elderly relative into an old people's home, he reinforces the Koori's perception of whites. Each, by doing what they think is proper, offers the other group clear proof of moral deficiency. Kooris have traditionally differed in certain key white values such as economic self-sufficiency, work being an end in itself, that success can be measured by the accumulation of material goods, or that punctuality is a virtue. Kooris recognise some of these differences, for example by jokingly distinguishing between "white time" and "Koori time".
However the fundamental contradiction seems to lie in white expectations. (For parallel white expectation of the "noble red man" see Braroe 1977: 138.) These seem to demand a colourful Koori who meets standards of the "noble savage", while also requiring Kooris to have all the qualities that are valued most in whites. White ignorance of Koori ways is extensive and Koori ways are a source of "shyness" to some Kooris. This confirms white perceptions of Koori cultural "degradation" or "loss". At the same time, whites expect Kooris to live up to their old traditions, or at least to the popular imaginings of these. Yet they also criticise Kooris for not being "white" enough. They expect Kooris to fully have accepted a commodity-based economy (Kooris do realise that money is of value, but many have little desire to enter into the Australian work economy). The contradictions are an underlying theme of much of the 19th European observations of Aborigines, and they continue to the present day. A recent local historical society talk was illustrated with slides showing the physical remains of recent Aboriginal community settlements. Finally the end of the hour-long presentation was reached and a long silence ensued. I couldn't understand what the problem was. Then a disappointed voice boomed from the back of the hall: "Yes very good. But did you find any real Aboriginal things there?".

Cultural stereotyping of Kooris is also part of a wider problem present in Western thinking of pigeon-holing, compartmentalisation, where according to Merlan (1998: 232) "the changing modern is set against the unchanging traditional, the artificial or constructed against the natural or customary, the built against the natural environment, the non-indigeneity (with its histories of immigration, mixing, heterogeneity, melting pots, multiculturalism, etc.) against indigeneity (with its firstness and enormous demand placed upon it for phenotypicality, fullbloodedness, and/or cultural essentialisms)". This had led to a "shattered Eden" view which sees complete dissolution of the indigenous world during the post-colonial era rather than conditions of inequality leading to new cultural forms.

Aboriginality may be represented so powerfully by whites that it comes to have effects on what Aborigines consider themselves to be. The damage is not confined to Australian shores. Vine Deloria (1969) observed the impact of anthropologists on the cultural identity of American Indians and their creation of the "real " Indian so that Indian people began to feel that they are merely shadows of a mythical super-Indian. Belonging to an identity group can give strength, but it can also be a prison which forces one to conform and to distort evidence and to live a lie. Many ideas that have passed for indigenous thinking in the media are in reality theories advanced and echoed by indigenous people in an attempt to communicate the real situation (Sommerlad 1976: 9). Two decades later, Beckett (1988:
194 cited in Jones 1997: 143-4) made the same observation in regard to the Aboriginal situation in Australia, where "Compared with, and at times comparing themselves with, the 'real Aborigines', Aboriginal people are caught between the attributes of unchanging essences (with the implication of an inability to change) and the reproach of inauthenticity". Both Beckett (1988, 1993) and Merlan (1998) agree that past anthropological and archaeological discourse has contributed to frozen perceptions of the "real Aborigines" by over- emphasising the "traditional" aspect. This recent complication for "Fourth World" peoples living in "First World" nation-states has been observed as an imitative (mimetic) process in which indigenous people are highly influenced by the expectations placed on them by white people (Merlan 1998: viii; Taussig 1993). Thomson (1997: 69) noted a similar process amongst war veterans who responded to changing public perceptions of them by changing their explanation of war experiences.

Recognition of Aborigines as a distinct segment of the population, accompanied by statements in the historical literature and public media of cultural "destruction" and cultural "genocide", have found a footing during the land rights era. Roosens (1989) extending the findings of work with the Huron Indians of Canada, found that "culture struggle" is a relatively recently developed mode of interaction between indigenous peoples and wealthy, liberal, democratic nation-states. In the Australian white community over the 1970s and 1980s especially, maintaining the self-esteem of a disadvantaged group began to be seen as more important than the facts. Oral accounts came to be recorded in ways that exaggerated the gap between Aboriginal people and mainstream society. This formation of black and white stereotypes and resulting imbalance was justified by a "boot's on the other foot" attitude. Some social critics (e.g. Rothwell 1996: 2-3; Williamson 1996: 25) see this as hypocrisy.

In the 1990s the journalist Nicolas Rothwell (1996: 2) challenged white Australians to go beyond a cultural stereotype which conceptualises the Aboriginal population as idealised tribal people, instead of facing up to the formation of an urban Koori culture, in both its positive and negative aspect:

_The first Australians. Our forebears from the Dreamtime. You know them, of course, those graceful figures. They have a special place in your imagination. And their modern successors - the musicians, painters, dancers, athletes - you know them. And the faceless, nameless ones, all 300,000 of them? The real Aboriginal nation? They live, for the most part, in the urban sprawl ... No more than one in seven of them speaks a native_
language. Do you know them? Know their lives? Have them in your thoughts? Not, perhaps, as much as you might, and this state of affairs -this contradiction- may tell us something about Australian society.

Merlan (1998: 3-4) sees the problem from the standpoint of anthropological misrepresentation. She argues that contemporary writings about Aborigines tend to remain traditionalist and reproduce idealised representations of present day Aboriginal people, expressed in terms of what is understood by white people as the Aboriginal past. Such writings, built on an idealised past, must fall short of facing the extent of change experienced by Aboriginal people, and the character of their present day society.

These criticisms of public perception, combined with a better understanding of the processes of culture change, explain why Wiradjuri, because of their settlement within or next to white townships in the closely settled landscape of south-eastern Australia, have only recently been recognised by white society as a distinct group of people, with rights to their own Koori identity which recognises both an Aboriginal and European inheritance.

The problem of maintenance of the Koori way is the same problem as any ethnic group will experience when living in the midst of a larger population: "this essential task confronts all humans to some degree, in that all must create for themselves the self-image of persons of competence, persons who deserve respect. The problem becomes even more complex if we require that esteem must come both from oneself and from others, since these two sources are not independent of one another" (Braroe 1975: 3).

Approaches to 19th Century- early 20th Century Aboriginal Archaeology in Australia

Very few research projects of post-colonial Aboriginal settlement archaeology have been carried out in Australia in recent decades. This section assesses archaeological work at the three best known sites and contrasts these with the direction taken by the Wiradjuri study. The sites are Wybalenna in Bass Strait near Tasmania (Birmingham 1992), Wellington Mission in New South Wales (Kerr 1984, Kerr 1988; Le Maistre 1993; Mulvay 1997; Pearson 1981), and Lake Condah Mission in Victoria (Rhodes & Stocks 1985).

Much of this work was carried out within earlier prevailing paradigms of descriptive history and archaeology. Comments on these works are made with the advantage of hindsight of the recent paradigm shift that began during the 1970s and continues to the
present day. This brought an emphasis on detecting culture change and adapting anthropological approaches which had not been used earlier.

As with all pioneering efforts, there are some problems both in the assumptions made and in their application to the respective sites. These problems only increase when one leaves these sites and turns to settlements in the Wiradjuri region. For several compelling reasons, these problems should be considered. This was surely not the intent of these earlier archaeological researchers. Their place in the literature is secure and the following critique can only strengthen it.

The Wybalenna project (Birmingham 1992) involved a large team of people, and included surface survey, excavation, analysis of excavated material, library research, reporting of results and archaeological theory writing. It took advantage of conditions on the site in which the house floors of the settlement were separated by walls as physical barriers, and could be defined as separate archaeological units. The house floors of a number of cottages at the settlement were excavated and analysed as separate and complete archaeological units. It is a well structured and recorded work, employing established excavation techniques, and forensic style description of excavated artefacts. Yet since it leans on the written record in preference to evidence on the ground, much of the work may fit into the "unfortunate" picture of historical archaeology, described by Deetz (1991:1) as "the most expensive way in the world to learn what we already know". With hindsight, and in the light of recent approaches in archaeology, the work had a number of problems.

Survey commenced in 1969 in the settlement site comprising a standing building and house mounds of brick rubble with surrounding scatters of glass and pottery (Birmingham 1992:15). Oral accounts from old residents of the island were obtained by interviews (Birmingham 1992:8). In addition to this rich archive was the official government map of the settlement, an intricate document drawn in 1838, depicting not only the building locations, but also the systems of tracks, fencing, fields and surrounding context of uncleared land (Birmingham 1992:19-20, fig 1.8-1). Without excavation, these three sources of evidence at Wybalenna (evidence on the ground, oral history, and a detailed 19th century map), might have formed the framework for a detailed interpretation. Yet the results of the surface survey (Birmingham 1992: 28, fig 1.8-2) demonstrate a crude approach which fails to bring together these sources. The use of the pictorial and oral archive to lift surface surveys into a higher level of interpretation is explained in chapter 2 - "Research methodology for Aboriginal settlements". At Wybalenna, with only the
rudimentary sketch map of the settlement gained from surface survey, the only effective fieldwork that could follow was excavation.

It is not just a problem for the Wybalenna project that the 19th century map was largely overlooked. It remains common practice to reproduce old maps and photographs to “illustrate” a research work rather than to examine them as artefacts in their own right, an item of method discussed later in this study.

The Wybalenna project design was about "finds," their description and excavation. The first phase of fieldwork consisted mainly of clearing, to "record the finds recovered to date, together with the minimal further excavation required for such a record" (Birmingham 1992:18). The bulk of the report deals with this traditional archaeological approach, with descriptions of familiar domestic refuse of the colonial period including transfer pattern ceramics, buttons, bottle fragments, clay pipes, architectural items and the like. These records were backed up with stratigraphic modelling. A very large body of archaeological data was produced. Subsequently, very little use was found for it, which raises the question of the utility of this data.

Five masonry cottage floors were excavated. The plan of cottages 7 and 8, (Birmingham 1992:41 reproduced as no. 3 in fig 1.8-3) typifies the problem of descriptive archaeology and its failure to interpret social patterns. The plan is intricate, but descriptive rather than explanatory. Yet a plan with this level of detail should have noted basic interpretative information, such as where the sleeping or cooking areas were; the sizes of rooms; that there were no windows in this dwelling; whether there was drainage treatment under the floor, whether or not there was damp coursing, what features such as pits or fireplaces were near to the building, placement of the building within the overall settlement plan, and notes on solar orientation. Instead the plan shows the exact placement of every brick in the floor. Basic information, let alone detailed analysis, of how people lived in these places is seemingly absent from the archaeological record.

The excavation methodology might also have included selected or random sample pits outside of the cottage floors, excavated to sterile sand or bedrock, to provide data on activities of households outside the immediate perimeter of the house walls.

A feature of Australian historical archaeology of the last few decades, and Wybalenna is no exception, is the treatment of archaeology as the "handmaiden of history". The primary placement given to the written record over the archaeological record may reflect a belief in the inherent truth of written documents. Possibly because of the reliance of Australian historical archaeologists on the written document, there seems to be a general bias in favour
of documents as more inherently truthful than the evidence on the ground or the memories of people. One main document for Wybalenna was George Robinson's journal, who was the Commandant of the settlement in the 1830s and 40s. While it was explained in the study that Robinson's journals need to be in understood in terms of the 19th century attitudes (Birmingham 1992:176), ironically the study did not take its own advice, and relied heavily on Robinson's account as truthful.

Yet a picture was already emerging by the late 1980s based on the study by Vivienne Rae-Ellis (1988) of Robinson as an habitual liar who combined fact and make-believe to create a glowing impression of his work and further his own career. According to Rae-Ellis (1988: 107), Aboriginal women were terrified by the presence of the armed guards, whilst their men were unsettled by the increasing sexual exchange between black women and whites. Rae-Ellis (1988: 108-13) explained how Robinson knew that Wybalenna was doomed, and that he kept up "the charade" for his three years there because he had to wait out the time for a promised government appointment. In the meantime he devised a way to add to his wealth by fictitious auditing of items claimed to have been purchased by Aborigines at a "market". Robinson "demonstrated clearly the sly manipulation of the system. His journal entries offered 'proof' should he be called upon later to provide it, of exemplary activity on the island. But that activity was a figment of his imagination" (Rae-Ellis 1988: 113).

This casts doubts on some of the conclusions which have taken at face value some of Robinson's more unlikely statements such as "the native men created a new strawberry garden of which Robinson was extremely proud" (Birmingham 1992:153). The Aboriginal mortality rate, which averaged one death every three weeks on the settlement (Rae-Ellis 1988: 128), should have spurred more questioning of the written record. While he generally preferred not to use physical force, Robinson kept the Aboriginal people in his charge in prison-like conditions, his derogatory attitude towards them increasing as he added their possessions, and their bones, to his collections. They were undernourished, homesick for the Tasmanian mainland, and were dying. As in other colonial settings (e.g. the Dutch in South Africa, see Schrire 1991: 73-4), apart from what people actually saw, there is always the question of what each group wrote about what they saw.

The analysis sets out a hypothesis to be tested against the archaeological record (Birmingham 1992:177): that acculturation ("the level of ideological acceptance") would be apparent in the depositional accumulation of European consumer goods and house cleaning patterns (specifically the archaeologically visible activity of sweeping). Conversely, the
survival of Aboriginal ideas and values ("level of resistance to the dominant ideology") would show up as traditional Aboriginal artefacts and activities. The hypothesis is presented as a theoretical framework. But it appears to be a retrospective formulation, made some 20 years after the site investigation, rather than part of the original research design. It also is an optimistically simple hypothesis. Excavation was carried out in the paradigm prevailing during the 1960s, producing in the pioneering efforts of historical archaeology in Australia a descriptive archaeology which concentrated on European aspects of sites. The post-exca
vation fitting of this data to new paradigms created a problem. It only further exposed differences between the early pioneering work at Wybalenna and the expectations of what current archaeology should be able to deliver.

Another work of contact archaeology in Tasmania was the hut excavation at Burghley (Murray 1993). Aboriginal stone, and what were thought to be glass and bone artefacts, were found close to the surface with European artefacts at the site of a burned out hut. The detailed plan (Murray 1993: 511) shows only one stone artefact within the excavated area. The appearance of pre-European stone tools on surfaces exposed by recently or current land use is not unusual, e.g. Perry Sand Hills (Kabaila 1989) and the Murie (Kabaila 1996). Stone artefact scatters are also often exposed on the ground surface at farm gates, clearings, recent camping areas and car parks. Murray (1993: 509, 513) interpreted the coincidental exposure of Aboriginal artefacts on a European hut site as evidence that Aborigines lived in the hut after it had been abandoned by whites. Such doubtful reasoning converted what would have been a routine hut excavation, into a celebrated work of contact archaeology. Links between evidence and its interpretation were further weakened by the suggestion (Murray 1993: 514-5) that William Lanne must have lived in the hut because he was an Aboriginal man known from the written record to have been alive in the region at that time.

Investigation into the Wellington Aboriginal mission site of New South Wales (Kerr 1984, 1988; Le Maistre 1993; Mulvay 1997; Pearson 1981) acknowledges the 19th century written sources, particularly the government sketch map and buildings plan of the settlement. Archaeological surface survey (Mulvay 1997; Pearson 1981) tended to a discussion of material culture. However the difficulties of dealing with inaccuracies in old maps, and with varying scales, prevented detailed interpretation of the 19th century maps. Similarly, Rhodes and Stocks’ (1985) research at Lake Condah mission in Victoria was based on an excavation of one of the buildings, described with finds but with no reference to a site survey. This study challenges the theoretical basis of the Wybalenna research, and contrasts the Wiradjuri study with the previous research of Wellington and Lake Condah.
Figure 1.5 Household cluster and community plan models: Above - Mesoamerican household cluster within its community setting (after Flannery 1976). Below - Iron Age Briton household cluster (after Clarke 1972)
Figure 1.6 Activity areas at Millie's camp 1) cooking area, 2) tent area, 3) tent or cache or menstrual retreat area, 4) refuse area, 5) dog-tie area, 6) cooking area, 7) hide-working frame, 8) refuse area, 9) corral area, 10) trails (from Bonnichsen 1973, fig 1)
Figure 1.7 Location of the outsider in the Romano-British town: Above - Defended town with separate settlement (suburb) by indigenous community (Chesterton on Fosse, from Burnham and Wacher 1990). Below - Undefended town with "fringe" settlements by indigenous community (Camerton, from Burnham and Wacher 1990)
Chapter 2
Research Methodology for Aboriginal Settlements

The methodological problem of an historical archaeology of recent Aboriginal people is that too much is known from other sources and it can therefore be thought to be redundant. Traditional archaeological tools are thus blunted considerably. This chapter is about "sharpening" the tools of historical archaeology by working with Aboriginal community members and by finding ways of recording Aboriginal sites through both oral accounts and surface survey.

Methods for researching Aboriginal settlements are presented in a didactic, how-to-do-it manner. Here a general theory for interpreting evidence on settlement sites is proposed. However this chapter is also about "method", if that means not merely the techniques of observation but also the techniques which allow us to confirm, characterise and compare. It also examines the question of the difference between the material evidence on the ground from what is in the oral record and official records.

Methodological Problems of Previous Archaeological Studies

The Introduction reviewed previous approaches to 19th century and early 20th century Aboriginal archaeology in Australia by research at three places: Wybalenna (Birmingham 1992), Wellington (Kerr 1984, 1988; Le Maistre 1993; Mulvay 1997; Pearson 1981), and Lake Condah (Rhodes & Stocks 1985). This section now challenges the theoretical basis of these projects by contrasting the direction taken by this study.

As described earlier the theoretical approach of the Wybalenna project ranked excavation above surface survey, and ranked the truthfulness of the written record above that of material in the ground. Some basic differences of theoretical approach with this study were pointed out.

The core theory of the Wybalenna analysis proposed that the levels of Europeanisation of the Aboriginal residents would be apparent in the archaeological record in two ways: (1) as European material culture items, counted by proportional accumulation in the excavated areas, and (2) as sweeping, because that is a European activity, detected by depositional concentrations in the excavated areas.
Evidence from the Wiradjuri region casts doubt on this theory. There is ample evidence in the Wiradjuri region fieldwork that European consumer goods do not identify whether settlements are ethnically Aboriginal. Also, the sweeping activity, far from showing that Aborigines were becoming European, is identified in the Wiradjuri study from the anthropological and ethnographic record as a traditional Aboriginal activity, and at a more general level as the manifestation of a cross-cultural human trait (territoriality). Likewise, there is no reason to expect "traditional Aboriginal artefacts" or physical residue of specifically Aboriginal activity patterns to show up within the confines of a house floor archaeological investigation. Robinson had even admitted in his journal that the Aborigines on the settlement camped opposite the new houses, not in them, and he had visited their windbreak shelter camps on occasion (Rae-Ellis 1988: 130).

Studies in household archaeology, as well as the ethnography in the Wiradjuri study fieldwork, emphasise that household activity extends well beyond the four walls of the house. The written record for other 19th century government missions, such as Warangesda, Brungle and Wellington, alludes to camps set up outside the housing area, which provided a focus for traditional life. At these missions, as well as at Wybalenna, hunter gathering, ceremonial activities, and many living activities took place outside the buildings. This raises the question of whether small scale house floor excavations should have been chosen as the means of locating and describing Aboriginal activity at Wybalenna.

By contrast, the Wiradjuri study treats the settlement as an artefact in its own right, and uses the extensive opportunities offered when detailed surface survey is correlated together with oral accounts and the written record.

Whether a theory had been formulated for the Wybalenna study as an explicit statement or not, the rigorous application of surface survey techniques would have greatly advanced the potential for analysis. Rigorous application in surface survey would have required thoughtful observation and field recording, rather than the preoccupation with metric accuracy which seems to have applied in the Wybalenna case, where the team used theodolites for producing what was essentially a rudimentary sketch map. After a surface survey and correlation with maps and journals at Wybalenna, a research design should have been drawn up which would have pinpointed places to excavate in order to answer specific research questions, an opportunity that was not taken.

The Wybalenna study comments (Birmingham 1992: 178) briefly on ways in which the physical layout of the settlement reflected European and church authority. The opportunity presented for a detailed analysis, of the ways in which the Wybalenna settlement followed
the general symbolic patterns of other 19th century institutional and village-style settlement layouts, was not taken up. The Wiradjuri study addresses these issues by interpreting the physical layout of settlements.

The Wybalenna study produced a copious quantity of data. One impressive aspect of recording of excavated material was the faunal analysis, which at Wybalenna, as well as at Lake Condah Mission in Victoria (Rhodes & Stocks 1985: 11), confirmed that Aboriginal residents continued to hunt and gather traditional foods. However this was already known from the written record. It also is documented by this author as common behaviour through a range of Aboriginal settlements spanning in time from Warangesda Mission during the 1880s (Kabaila 1993), to camps and government missions in the Wiradjuri region up to about the 1970s. The point is that a vast amount of data was recovered, but that very little was done with it. The faunal work shows that it was possible to process descriptive data for interpretation.

Difficulties for the Wybalenna study resulted from an accumulation of recovered data of a narrow range (ie large counts of excavated finds), the interpretation of which is largely discarded in favour of the written record. The bravest excursion in the Wybalenna study is a hypothetical list matching resident's names to particular cottages. It is more guesswork than reconstruction and lacks conviction.

The Wybalenna report dwindles into detailed commentary on written journals and draws away from the archaeological record, concluding with the ironic observation that "the interactive use of archaeological data is essential if a deeper level of meaning is to be achieved" (Birmingham 1992:196).

The approach taken in the Wiradjuri study is that for the historical archaeologist, material remains should constitute only part of a data set, which includes written records, maps, plans, paintings, sketches of the site, photographs, and people's memories. The recognition of these as primary data, as opposed to aids for research, is significant in formulating the reconstruction of a site. As observed by Schuyler (1978), in theory the treatment of the written and pictorial document as an artefact presents the opportunity for re-analysis and reconsideration of such documents. The limited extent to which historical archaeologists apply such a theory is one of the issues addressed in this study, which develops the ways of correlating seemingly disparate sets of data to form a coherent picture of the site. These are summarised as settlement "reconstructions", each one a working hypothesis of what the site had been like at a nominated time. The holistic approach that a reconstruction entails allows further refinement or re-interpretation as more research
information becomes available. In a sense, the reconstruction is never finished, because there is always the possibility of finding new information. For cultural or historical reasons, it seems that in Australia inter-disciplinary approaches have been largely ignored. The social sciences seem to favour conventional research designs which tend to remain "pigeon-holed" within the confines of familiar disciplines.

Similar problems are present in recent investigations into the Wellington Aboriginal mission site of New South Wales (e.g. Kerr 1984, 1988; Le Maistre 1993; Mulvay 1997; Pearson 1981) which reproduce the 19th century government sketch map and buildings plan of the settlement. None of them worked through the 19th century documents to fit them to a present day survey map. The practical result of these investigations is that the local Shire Council is unable to protect the site. Nobody, least of all the researchers to date, seems to know where the site is (Sid Craythorn, Wellington Shire Council, pers. comm.).

The Wiradjuri study confronts theoretical problems of producing reconstructions of settlements in relation to present day features. This theory is also put into practice as the reconstruction of Wellington Valley Mission presented in this study is a practical working model (figures 2.17, 2.18). It will be able to be used as a working model, to be revised and refined by future archaeological discoveries.

Rhodes and Stocks' excavations of the mission dormitory at Lake Condah in Victoria were designed to recover information about the building. The researchers appeared to have rejected this aim together with what they saw as "architecturally oriented studies of sites" (Rhodes and Stocks 1985:12). Accordingly, the site plan of the mission (its general layout of buildings) appeared in the form of descriptive prose, followed by description of the excavation, including minutiae of the building footing and finds. Despite this description of footings, no translation into a floor plan was proposed and no reconstruction of the building attempted.

Far from reaching its potential as a fruitful inter-disciplinary field of research, during the 1970s and 1980s the emerging field of historical archaeology was based on analysis from the written record. While people stated in theory that different types of document needed to be considered together (e.g. Rhodes and Stocks 1985:11), those that had started from a training in history began to intuitively rank the archives available to them into a "hierarchy of truthfulness". The hierarchy probably ran something like this: (1) written record; (2) excavated evidence; (3) surface evidence; (4) oral accounts; (5) pictorial record and (6) correlation across these archives (the types of document and their truthfulness is discussed elsewhere in this work).
By contrast this work oscillates between these sources, for example, reconciling details of old maps and photographs with site measurements and people's memories. It emphasises fieldwork, correlation and spatial interpretation across traditional boundaries of disciplines. While easy to describe, it does not lend itself to any standard formula. Yet the approach has potential in at least a few areas of the discipline, to extend the archaeologist beyond description.

Dialogue

Many white researchers have been troubled by the difficulties of writing about Aboriginal topics as outsiders. Examples are Morris (1989), Myers (1986), and Rose (1991) in the area of anthropology, Donaldson (1980: 21) in linguistics and Goodall (1993) and Attwood (1994) in history. In particular, Heather Goodall (1997: 94) voices a concern that "non-Aborigines will always be in doubt as to the validity of their own interpretations", and asks "how far are we imposing yet another white construction which distorts more than it clarifies?".

The above question contains a healthy caution to those involved in translating the experiences of others into another medium. Audio recordings will not reflect the gestures and mood. Video will tend to compress experience by the limits of available film setting, time and camera viewing angle. Any recording medium, whether it be field notebooks, CD-Rom, written report, artefact record sheet, interview tape or film will necessarily be a filter, involving a degree of change during translation.

The researcher and Aboriginal community member may well approach fieldwork and research from different angles. During a visit to a site the community member may try to recall special or everyday experiences from an earlier period of their lives. On the other hand, the researcher may try to see the reflection of experiences in the landscape and record details of the physical residue of activities associated with these human experiences. Both are viewing the same landscape through a different prism. We could simply state this as one of the properties of any intercultural encounter and move on to another topic. After all, the difficulties of understanding another culture and social experience will always remain a factor in such research. However, in terms of methodology, there are ways in which both the researcher and community member can improve their understanding of this dynamic situation. Each can benefit and appreciate some of the other's perspective through dialogue.

In practical terms the dialogue between the researcher and the Aboriginal community member can commence at the empirical level. For example, a visit to a former settlement
site will begin with some joint observation of the landscape, interpretation of its features, and possibly some involvement in recording.

Later, there is more dialogue with Aboriginal community members at the analytic level. This may extend into archaeological tools of analysis. For example, there may be joint interpretation of aerial photographs or of other artefacts. Difficulties or discrepancies with the written or archaeological record may be discussed or resolved through recollections of details. Genealogies and maps of the household locations, household clusters and community plans may be produced out of such work by the researcher. While all of these analytic tasks still involve the researcher as organiser of information, drafter and scribe, the Aboriginal community member holds a key position in the research process as ethnographer and interpreter.

The most difficult part of the process is follow-up dialogue after "completion" of the fieldwork. Many community members have some researcher or other who contacts them and involves them in a project. For a researcher who has formed such a relationship with hundreds of community members, to ensure on-going contact can be a very real practical difficulty. The three common Aboriginal complaints about researchers are: (1) researchers do not present the information they are given; (2) researchers do not acknowledge Aboriginal contributors and, (3) researchers "run away" with the information avoiding contact with contributors ever again.

There is practical methodology which will reduce or even resolve these three difficulties. The first complaint is the direct result of misunderstandings between researchers and Aboriginal people and is reduced through dialogue as noted above. The second complaint is addressed by fully acknowledging contributions. Where the researcher has relied heavily on an oral account, a substantial part of the account, not just a two line excerpt as is the habit with many historians, should be included in the work. Our western tradition stresses the researcher as an individual with an individual contribution and individual insights. The reality is that what the individual researcher experiences and incorporates in the work is fundamentally eclectic. The "individual" research is made up of recombined materials and ideas of a surrounding world which is populated by a matrix of those same materials and ideas. Aboriginal (and non-Aboriginal) contributors ought to be listed in a research report, not in some vague capacity as the "third wheel", but by name and in relation to their active project contribution.

The third complaint is reduced through recognising people's generosity by continuing the friendship. Also in practical terms, each research project budget must allow for the
expense of a professionally presented and bound copy of the report to be posted, or preferably delivered by hand, to each contributor. Such an obligation can present a difficulty for researchers who have signed contracts in which the funding source has reserved the right to appropriate and/or conceal the research material, as is the case, for example, with a Victorian government contract as applied by the Australian Alps Committee (Department of Natural Resources contract GNPS/969/69,70,71).

Having adopted a collaborative methodology during fieldwork and a continuing dialogue during analytic phases of the research, one may well be "methodologically prepared" to examine the types of documents available and ask the question: which source tells the truth: written documents, oral history, or physical evidence from the ground; or is there a single truth?

Country and Boundaries

The most striking aspect of the Wiradjuri region (fig 1.1), as depicted in Tindale's (1974) map of tribal boundaries, is its huge size in comparison with surrounding Aboriginal language areas. This, together with the division of the fieldwork for this study into three sub-regions (Murrumbidgee, Lachlan and Macquarie river systems or "basins"), requires clarification.

Among Tindale's justifications for his delineation of Wiradjuri area were two claims, firstly that the area had particular ecological features relating to the use of grass seeds (1974: 105; 1977: 347), and secondly that it had "a cycle of ceremonies that moved in a ring around the whole tribal area" (Tindale 1974: 201). In his study of Wiradjuri region boundary White (1986: 5) questioned these two claims, although he did agree that the 19th century written record had established the region was occupied by speakers of the Wiradjuri language at the time of early European settlement. Peterson and Carr (1998: 15) noted in the case of Ngunawal identity that the linguistic label had outlived the spoken language. There is thus a direct and long lasting relation between language and a tract of country. Well after the land-owning groups of the pre-European period have disappeared and individuals relocated there persists a link between land and language. Indeed in an area such as the Wiradjuri region the language name has outlived the actual spoken language and has become a term for group identity and the country it is associated with. People thus claim Wiradjuri language identity when they no longer speak the language. Donaldson (1985a: 78) also had agreed in general terms with the Tindale estimate of the language region, in
that the place names of Wiradjuri origin on current general maps indicate the large extent of the area.

More convincing than certain of Tindale's throw-away lines about "ecology" and a "ceremonial ring", was the report of someone's conversation with an aged Wiradjuri man at Brungle Mission in 1948:

_This man said that the Wiradjuri spoke of their country as a "line" rather than as an enclosed area... the line as passing through Brungle, Gobarlong [sic], Jugiong, Harden, Cowra, Orange, Dubbo, Condobolin, Hillston, Hay, Darling Point [sic] (south of Griffith), Wagga Wagga, Tarcutta, Adelong, and returning to Brungle. Tumut was on the "line" of an adjoining tribe for which he gave the name Gurmal (Tindale 1974: 129)._

The account is interesting because the Aboriginal man, who was un-named, must have been one of the only four male elders at Brungle, and was either Buboo Fred Freeman, Buboo Harry Collett, Big Bill Williams or Tom Hickey (Vince Bulger pers. comm.). The account traces a circuit of 14 places which delineated the area that many Wiradjuri men would have covered over the course of 20 or 30 years of shifting camp to do droving, shed work, and other seasonal work. Only 4 of these places (Jugiong, Harden, Tarcutta Adelong), contained no well-known Aboriginal or camp communities, and were probably included in the description as geographic markers. The rest of these places are easily identified from the Wiradjuri study ethnography as camping places on the travel circuit. There were Aboriginal government settlements at 5 of these 14 places (Brungle, Cowra, Dubbo, Condobolin, Darlington Point). Another two were station employers (Hillston, Gobarralong) and at least 8 had camps (Brungle, Cowra, Orange, Dubbo, Condobolin, Hillston, Darlington Point, Wagga Wagga).

Dr. Tindale's project was one of boundary definition, and these places were seen in terms of marking an edge to territory. Such a definition of the Wiradjuri region was necessary for practical mapping purposes. However the Aboriginal informant clearly was describing a travel circuit of places included, rather than boundaries. In some respects this is the definition of my study area, because it includes a number of places outside the Tindale estimate of traditional Wiradjuri country which were nevertheless part of the Wiradjuri travel circuit.

An Aboriginal perspective on country emerges out of Vince Bulger's memory of his grandfather's, Buboo Fred Freeman's, description of Aboriginal territories while more
generalised than the report quoted by Tindale, agrees with it on two counts. Firstly Brungle Mission (near Tumut) is located on a traditional inter-group boundary. Secondly, the cardinal points, taken with Brungle Mission as the centre, placed Ngunawal to the east, Walgalu to the south, and Wiradjuri to the north and west:

My grandfather always told me that from here, from Tumut, to where the Great Dividing Range is, south towards the Murray, nearly as far as Albury, that was Walgalu [pronounced Wangalu by Vince] territory. From there to where the waters run east from the Great Dividing Range towards the ocean, is Ngunawal, then west and north of Tumut is Wiradjuri. Tumut is on the place where these three tribal territories meet: west and north of Tumut - Wiradjuri country; south of Tumut to the Murray, and then down the Murray some distance - Walgalu (Vince Bulger, Tumut, July 1997).

The conceptualisation of Tumut/Brungle as the focus or centre may be the result of the importance of Mudjam, its initiation mountain, combined with its later importance as a place of housing and employment. The account also suggests that with the passing of each generation in Wiradjuri country there has been an increasing vagueness about the specific relationships to country through the dreaming associations of particular places.

Any description of a bounded "tribal" area throws open the time-worn debate as to the extent of identifiable cultural groups and their boundedness. The emergence of the anthropological concepts of clan, totem and country are relevant.

An early perspective emphasised the political and religious life in Aboriginal societies. Radcliffe-Brown (1913) presented the clan as the basic social unit. Each clan was separate, occupied a separate territory on the ground, was distinguished by a totem, and had its own line of patrilineal descent. A cluster of clans made up a tribe, ideally distinguished by "possession of a name, a language, and a defined territory" (Radcliffe-Brown 1913: 144). Sutton (1998) argues that of the three types of clan descent, patrilineal (traced through males), matrilineal (traced through females) or cognatic (traced through any combination of males and females), it is only the latter that has survived in southeastern Australia. What factors such as increased status of women in western society and the inter-marriage with whites mean for Kooris is that their Aboriginal descent is traced through a line that includes both men and women of their "Aboriginal side" (see Sutton 1998: 67). Peterson and Carr observe the implications of this for multiple identity: "By their nature, cognatic links allow people to trace connections or links to a number of different groups/identities. Whether
these are recognised or not is a matter that is fought out in Aboriginal social arenas" (Peterson and Carr 1998: 40). The cognitive system gives people a doubled number of ancestors each generation, each one of which might be traced as a link to a language group or tract land. A person might say, on my father's side I am Wiradjuri and on my mother's side I am Ngunawal, but my grandfather's country was around Bulgandramine and my grandmother was from Brewarrina.

Early formulations for tribe remained in use for 60 years or more. The popular conceptualisation of tribe was that it existed in a concrete sense, a specific membership of people of fixed identity, occupying a fixed geographic territory. This began to be questioned in the 1970s and since that time the term tribe has more properly been used in the ethnographic literature as a conceptual tool for formulating social identity.

A later perspective emphasised hunting and gathering subsistence in Aboriginal societies. It presented the band as the basic on-the-ground social unit. Each band was a self-contained group in terms of regular survival, and it only tended to form the larger groupings of clan or tribe during ritual or warfare.

Much of the discourse over the course of the 20th century has involved discussion of definitions for terms. Terms for small groups have included band, horde, mob, community, sub-tribe, sub-section and local division. Terms for large, regional, groups have included nation and aggregation (Davidson 1938: 678; Tindale 1974: 156), alliance (McBryde 1984), and tribe (Peterson 1976b: 50-71). Merlan (1998: 145) qualifies the latter, by arguing that tribal terms (such as Wiradjuri) are best understood as "complex products of representation of several different levels or dimensions of social experience (language, large-scale territoriality, and personal belonging at this level). At given historical moments, these dimensions are held to intersect in certain ways, and (within ranges of variation) to have certain kinds of empirical reference".

It is now generally accepted, and argued in for example Sutton (1995) and Peterson and Carr (1998), that pre-European boundaries were rarely sharply defined in Aboriginal land tenure systems. Where they were it was mainly for very short distances, near important places, or along river banks, or other geographical features. Any "boundaries" were highly permeable, with people and things moving across them constantly. Spouses came from different language groups. People "travelled widely into areas where quite different languages were spoken, some staying there for the rest of their lives, as a result of marriage, conflict left behind and other reasons" (Peterson and Carr 1998: 15).
The tribal view of people began to run into difficulties in the late 20th century. There began to be reflections in the Aboriginalist literature of a world-wide trend to emphasise the individual. Myers (1986) found that the individual Pintupi in the Western Desert did not match the excessively concrete and structural character of writings on Aboriginal social organisation. The grouping of individuals into boundaries, such as "tribal" areas, also has also lost a little credibility. Peterson's (1976a: 6) comments on boundaries suggests the balance that needs to be struck in such a debate: "Boundedness has an aesthetic and analytic appeal...[but] transposes what are often really gradients...into bounded units". A first hand description of their concept of territory by Aboriginal language speakers near the Wiradjuri region suggests that the concept now called country (the land in which people used to "camp-about", their "camp world") existed, though not in the geographic sense of an area of fixed boundary: "Beyond their camp-world, and sometimes camping within it, were people seen as other people, and classified according to two different kinds of difference, they either had different territorial associations or they spoke differently" (Donaldson 1985b: 22).

In the post-colonial period, the destruction of much traditional Aboriginal social organisation replaced clan identity with camp community identity. Groups at major Aboriginal settlements such as Warangesda, Brungle, Hollywood, and the Murie forged distinct identities that were grafted onto earlier language group or tribal identity. The "Yass blacks" and the "Brungle blacks" were related communities. A friendly rivalry in drinking, fighting and sport developed between groups such as the Griffith, Leeton, and Darlington Point "mobs" (Macquarie: 94). The Griffith group originally moved into the town as fruit pickers and lived in various town camps, Frogs Hollow and later the Three-Ways reserve. The Leeton group lived in the cannery workers' camp on Wattle Hill. The Darlington Point group lived at the community camp on the reserve and were largely descendants of the Warangesda Mission community.

Pre-European Aboriginal ties to small local areas changed when hunting and gathering gave way to an urbanised life in reserves and towns. In recent decades, the combination of sedentism and government incentives have emphasised tribal identity. Peterson and Carr (1998: 15) comment that "Tribes have been gradually taking on the very characteristics they lacked at contact. That is to say they are seen as well bounded and as the land-owning unit". Despite being roundly criticised and made virtually obsolete as a technical term in the 1970s, the tribe has been emerging as the unit associated with land claims. In the contemporary situation under which people are affiliating themselves with old tribal
identities. Yet whatever tribes are shown on the maps, it is clear that the links to certain communities and settlements are more real, and in this sense the tribal affiliation is irrelevant to a place study.

A few of the government settlements in southeastern Australia, such as Brungle and Wallaga Lake, are also strongly invested with mythic significance, along with the other dimensions of meaningfulness that arose through practical association with that country, such as Kylie's run pastoral station near Brungle. This means, as Myers (1986: 56-7) explains, that Aboriginal conceptions of the place-world existed at two levels. It contained both "camp", associated with people who made it and lived there, as well as "country", associated with dreaming presences which made it and are felt to be in it. In archaeology, as in Aboriginal belief (e.g. Myers 1986: 53), there is in such places always the possibility of discovery of existing but newly revealed and interpreted significances. However most Wiradjuri region Aboriginal settlements have no clear mythic significance, but may be meaningful as "home" places in which people have lived.

Estimated limits of Wiradjuri territory have been produced by Brown (1918), Cameron (1899), Horton (1994), Macdonald (1983), Mathews (1900), Richards (1902, 1903) and Tindale (1940, 1974). Although they vary in opinion the work of Mathews and Richards, the two researchers who came in closest contact with Wiradjuri and their language, largely agrees on Wiradjuri boundaries at the time of "contact". However, the diseases and massacres which signalled early European settlement wiped out whole hunter-gatherer bands, leading to the redefinition of group boundaries. Macdonald (1983: 27, map 8) in a study of Wiradjuri boundaries stressed the fluid, dynamic aspect of the Wiradjuri region. Here the "line" is not the reflection of language region reality at European arrival. It is the minimum extent of Wiradjuri speakers at European arrival, with the language spreading into areas to the north and south west in the recent past. Clark (1977) had already postulated that the boundary in the Yass/Boorowa district was moving east, and Tindale (1974: 201) had also suggested that the boundary had moved across the Albury district (Murray River) just prior to European arrival.

White's review (1986: 83) of the Wiradjuri region and its boundaries concluded that within this common language area there was differing ecology, differing cultural practices and differing resource availability, both within the region and crossing Wiradjuri language boundaries. Yet whereas the environmental differences ran from east to west, the cultural differences ran from north to south. River valleys cutting through the wide dry plains of the Wiradjuri region served as "corridors of connection" between the east and west of the
region. Culturally, then, Wiradjuri speakers might be grouped into three river communities corresponding to the three river systems of the Wiradjuri region: the Murrumbidgee, the Lachlan, and the Macquarie Rivers (fig 2.1). An area near the Murray River was noted by White (1986: 96, 98) as a fourth possible community which was however more closely affiliated with Murray River Aboriginal groups (fig 2.2).

In short, the map of the Wiradjuri region is an approximation, dynamic over time, and variable in both its landscape and pre-European culture. The data gathered so far does not generally support its division into strongly identifiable cultural sub-regions. However, for the sake of car travel practicality, and influenced by White's suggestion of three river basin communities, the field surveys of Aboriginal settlements in the Wiradjuri region have been based on Tindale's estimate of the area and have been divided into three groups of surveys, each disseminated as a published fieldwork report: Murrumbidgee (1995, 1998), Lachlan (1996) and Macquarie (1998). Even so, the revisiting of places towards the end of the study necessitated an additional set of surveys documented in the third fieldwork report as "places revisited". Regional boundaries considered in this study are therefore not essentially either linguistic or traditional, but the area in which Wiradjuri people have lived in the last century, approximating an area bounded by towns in each compass direction: Dubbo and Condobolin to the north; Brungle, Boorowa and Bathurst to the east; Darlington Point and Tumbarumba to the south; Hillston and Hay to the west.

Gibbon (1984: 220) argues that a distorted view of communities would occur if they are studied as if hermetically sealed within a region. While a perfectly defined region may not exist, regional contexts do exist. With language identity areas as with regions in geography, to ignore the relationships and linkage between one region and another is to freeze the study area into something far removed from actuality. This is why some surveyed settlements were outside the traditional Wiradjuri region. Movement across traditional countries in historic times, and marriage links between them, links other southeastern Australian places such as Yass and Cummeragunja to communities of the Wiradjuri region. In this sense, all Aboriginal communities in southeastern Australia have links between them, developed both before and since white arrival. It may therefore be expected that what was found in the Wiradjuri region will apply in varying degrees to other parts of Aboriginal Australia. An inter-regional comparison is not possible because no other region in Australia has yet been studied in comparable detail. Yet many of the patterns of life which emerged in the Wiradjuri region will be recognisable to researchers of other Aboriginal settlements, over different time-frames, in other parts of the Australian continent.
Types of documents

Recording the settlement of living people, one is confronted by three types of information: what people say, what has been written, and what physically remains on the ground. Although the written archive is popularly regarded as the most reliable, any attempt to rank these three archives in terms of reliability would be frustrated because each could be criticised as inherently lacking in reliability. Oral testimony has been described as no more than a mirage of the reality it describes, and hearsay as the fountainhead of most written documents (Vansina 1965: 76; 1985: 6). Some of the early written record is based on hearsay. The problems experienced in using ethno-history as an archive, commented on by archaeologists such as Mulvaney (1958) and McBryde (1979: 147; 1985: 5), are not unlike the problems of using oral accounts.

But rather than attempting to rank these sources, it would be more constructive to explore possibilities of combining their respective strengths into a whole.

Confronting each and finding degrees of correlation between them can provide a broad base of data and a strong foundation for interpretation. Indeed, as Goodall (1997: 79) has commented, some of the documentary traces (whether written or archaeological in form) could not be interpreted without oral accounts. On the other hand, physical evidence on the ground is a distinct archive and may relate very little to either individual recollections or to what shows up in the written records.

As noted earlier, the recollections of people are highly selective. Equally, the writings of people are highly selective. History has traditionally been constructed around "great man theory", recording cultural change through the activities of exceptional or famous individuals. Archaeology is, by contrast, the silent record of people who lived and died without their stories being recorded, becoming in a sense "non-historical" people. During the 19th century ordinary people had no impact on the historical record except when involved in an activity recorded by the government, such as birth, marriage or death, payment of a tax, employment as a worker or count in a census. Yet it is these ordinary people with whom archaeology is most concerned because they have left residues on sites. Examples were the inhabitants in slave communities and hobo camp sites in the USA; and the camps of Afghan camel drivers, prospectors, fettlers, drovers and Aboriginal people on the Australian continent. For example, Morris (1994) identified 19th century navvies in England as a distinct lower working class sub-cultural group, with little or no historical record, but with a distinctive archaeology of separate settlements. History does not dictate the activities of archaeology. The written record, oral accounts and archaeology are not
generally sources that tell each other's stories. They represent different sets of information. More usefully, they complement each other. There is no more reason for the written record to drive the archaeological interpretation than for oral accounts (i.e. the things people say), to drive the historical interpretation. A pitfall of archaeology is to make a simple association between what invariably is an accumulated record of changes in the landscape (i.e. the archaeological record) to ephemeral writings and recollections belonging to different time frames.

This is why the reconstructions of settlement layouts and community plans should be seen as a task of correlation and thoughtful interpretation rather than the mere compilation of data. The Warangesda mission buildings plan (fig 2.3) illustrates this approach. Pictorial evidence from 19th century sources, evidence on the ground, notes in the mission manager's diary and oral sources were all correlated to produce a record of the mission buildings. This approach may explain why the previously discussed historical archaeologists who have studied Aboriginal settlements in south-eastern Australia confined their compilation to detailed descriptive systems for particular sites, but did not attempt to formulate reconstructions of the settlement layouts. Excavations have covered small sample areas and do not seem to have led to an overall understanding of the site.

Some knowledge of a large number of sites in a region is necessary in order to assess the value of a single site. Due to the general lack of understanding of whole sites and lack of regional knowledge, excavation archaeology faces a problem exemplified in "telephone box" archaeology. These are the very small excavations which produce knowledge of very small sample areas. The excavation alternative is "area" excavation, which exposes a broader area of a site. Both face difficulties if a narrow archaeological perspective is adopted. One way of overcoming the stagnation of knowledge created during the era of heritage management (1970s to the present) in Australia is to foster the understanding of whole sites in relation to their surrounding landscape and region.

These difficulties were exemplified in work done on the Warangesda Mission site by the National Parks and Wildlife Service. A State Historical Archaeologist contracted a small archaeological excavation next to the mission school teacher's house to determine whether there were traces of an adjacent slab hut which had burned down. The excavation report (Holmes 1993) listed the hundreds of "finds", such as "piece of bent wire", but no sign of charcoal from the burned hut. The experts left and an earthmoving contractor arrived to remove the rotted building verandah flooring. The contractor's photograph of the site after the first topsoil scrape by a Bobcat tractor was photographed clearly revealed a charcoal
outline where the wall of the slab hut had been (Pip Giovenelli, pers. comm.). This was in effect a form of area excavation by bulldozer bucket. "Telephone box" test pits had failed to locate it. In a separate project of the same period the whole mission settlement layout was reconstructed on paper using non-extraction archaeological techniques (Kabaila 1993).

The use of personal accounts and the study of places as individual case studies is not an explanation of Aboriginal history; but it does show the complex influences always to be kept in mind in the study of history. It is the archaeologist's job to supplement by direct observation of evidence on the ground, or by circumstantial evidence, the missing connections of the unrecorded past. Although some theories are based on analogies drawn from physics, much of the data is missing and can be deduced and/or supplemented by circumstantial evidence.

Archaeology is concerned with particular and concrete events, framed in a time scale. Although the collection and analysis of material might be considered "scientific", its presentation and description is an art. In his retrospective of the last 20 years of historical archaeology, Brian Egloff reiterated a concern shared by a number of scholars (Birmingham and Jeans 1983; Megan 1984; Pearson and Temple 1984; Wesson 1983, 1984) that as a discipline, historical archaeology was "weak on theory and strong on techniques, in particular the mechanisms of cultural heritage management, site based excavations and thematic descriptive systems" and that archaeologists were "excavating a lot of rubbish without any clear-cut idea of what it means" (Egloff 1994: 2-3). As if to compound the problems of research in the area of archaeology, at the time of writing the Australian archaeologists had largely divided themselves into two camps. The historic archaeologists were studying the past from a colonial standpoint; pre-historic archaeologists were still seeking out far-flung Aboriginal communities in the distant past.

This study will help to fill some of the gaps referred to by Brian Egloff by acknowledging the events of the recent past; by drawing conclusions from archaeological survey; and by seeing this data in terms of interaction between the indigenous and non-indigenous populations.

Types of Fieldwork

There are many difficulties in locating some Aboriginal settlement sites, one of the most crucial being an absence of written records giving the location of buildings and other structures. Another feature of this type of survey is obtaining sufficiently detailed maps
upon which to record surface evidence. The final problem is that of recognising the site and interpreting its elements as belonging to the period in question.

The memories of people provide an important starting point for site survey. They provide a way of understanding the past by starting at the present and working back through time. In the late 1990s the cut-off point for this type of record was around the 1930s to 1940s. One popular belief is that all that is necessary to produce a factual survey of a place would be to record somebody's memories. But memories are not interchangeable with surface survey because a person's memory is highly selective: memory vividly records only that person's version of events. However, once a person's memories of a place have been brought to the surface through conversations, then a confirmation of events and their locations in the landscape may become achievable through surface survey. My own metaphor is the composite material construction of products such as structural sandwich panels, where components of contrasting properties, such as plastic foam and steel sheet, are joined together. As with composite construction, it is the marrying of oral accounts and surface evidence, two components with very different properties, that imparts strength to the reconstruction that neither an oral account nor a survey could produce on their own. Where written records are available, a third component, and extra detail, is added.

In many towns the exact locations of former Aboriginal settlements may be forgotten, or have been altered almost beyond recognition. This means that a certain amount of detection work is necessary, involving comparison with pictorial records, such as old aerial photographs, and ground level mapping of residues left on sites.

The types of fieldwork are probably best illustrated by one example. At Yass, local Aboriginal people aged in their forties could generally point to hill slopes where an old camp was believed to have been during the 1920s and 1930s. But it took many individual accounts, from people living over a large area of New South Wales, from Tumut to Sydney, to identify individual households and relate them to material evidence on the ground visible as refuse scatters and hut terraces cut into the hillside (Murrumbidgee: 42-6). Census records of 1891 listed the number of people in each household and its head at the "blacks camp", thereby extending the knowledge of resident families by another generation. Family history research methods showed that all households at the camp were linked by kinship, i.e. by marriage or descent, as well as with other communities over a wide geographical area stretching from Darlington Point, Brungle and Cowra. Family trees also documented sexual union in the 1850s between local Aborigines and early settlers. By contrast, a nearby site of institutional housing for Aborigines had been bulldozed and converted to suburban housing.
A Defence Department aerial photograph of Yass taken in 1952 showed a row housing layout for this government settlement called "Hollywood" (fig 2.4). Interviews with the bulldozer driver, with former residents and the mapping of the site developed further details of the locations of pathways, schoolhouse, church and various households (fig 2.5) to produce a community plan of the settlement (Murrumbidgee: 54-5).

Landscape changes, such as tree clearing and vegetation regrowth, bulldozing, new vehicular tracks and fencing are common on settlement sites. The strategy for finding the location of an old fringe camp is firstly to talk to local people. People who have worked in jobs that were passed from father to son, such as undertakers and mail contractors, have been good sources of local background information. In some Aboriginal communities, older residents have been able to relate childhood memories of a particular camp. In other cases, people far removed in time and place have had the most vivid recollections of the places. The only former residents of the Bushranger's Creek camp at Wellington who could be traced had moved to Queanbeyan and Bateman's Bay as teenagers. Young Aboriginal people often had a good general idea of where households had lived.

In other chapters I discuss evidence on the ground in the form of hut remains and household refuse. These two artefact classes form the basis of much of the recording of settlement sites, and are both recorded by surface survey rather than excavation. This raises the question of choice of surface survey as an investigative tool over archaeological excavation.

There are several difficulties with excavation as an investigative tool. An area the size of the Wiradjuri region contains considerable surface evidence which should be compared and assessed before excavations are undertaken. Though the 'tried record has potentially more data to offer, it provides a lot of information about very small sample areas. In excavation there is therefore the very real possibility that data recovery may exceed thoughtful analysis.

Any area the size of the Wiradjuri region is large enough to occupy several whole lifetimes spent in non-excavation methods of investigation.

Use of Oral Accounts

The debate about using oral accounts as documents includes reservations about a wide range of problems: the cultural baggage of white researchers; pressures for interviewees of proving respectability; the influence of nostalgia; Aboriginal views of the present as part of an unchanging past. However as McGrath explains, despite its side-
effects, oral history is a powerful research tool: "In ways the debate about oral history resembles that about the oral contraceptive. While the surfeit of information on harmful side effects is worrying, other methods have equally disturbing risks. If our aim is to get away from the victims model and integrate the reactions of powerless groups, we have no better alternative" (McGrath 1987: 176).

Oral accounts form the basis of history for many peoples: "No one in oral societies doubts that memories can be faithful repositories which contain the sum total of past experience and explain the how and why of present day conditions" (Vansina 1985: xi). Oral accounts have played a major role in this study and may be regarded as important documents in their own right. The recording of oral accounts may well be regarded as the most preferable form of historical documentation by large numbers of Aboriginal people.

Furthermore the correlation of oral accounts with detailed surface survey indicates a range of imprints: structures which have survived, those which have not survived above ground, and those for which the material evidence has been lost.

Surface surveys and oral accounts address demands for more attentiveness to history, and reduce the broadly based public ignorance of recent experience. One may ask why this ignorance has occurred despite aggressive and vocal assertions of the significance of history: stereotyped historical and cultural images account for many gaps of understanding. Oral accounts remain the greatest single source of detailed data about recent Aboriginal experience. However, some oral accounts in recent publications are based on repetition of spoken language, containing all the slang and swear words of conversations. These can be used by transcribers to widen the apparent gap between black and white, reinforcing the racial stereotypes. Conscious of this kind of reverse discrimination, I have edited conversations into contemporary style, while being careful to include key statements, so as not to distort the meaning.

As a research tool, the oral account is severely limited by the many conditions which shape and influence the conversations between people: What is the relationship between people taking part in the dialogue? How well do the people know each other? How much trust is there between them? Does one of them perceive an aim or agenda to this conversation? In what physical and emotional context is the conversation taking place? This is the core of the theoretical dilemma regarding oral accounts. How can the personal account (which will reflect individual reality, motivation, and behaviour) become a generalised explanation of social events? An approach from the "methodological individualism" angle turns the problem on its head, by instead asking whether the
generalised explanation of social events is of use in understanding the individuals. As reviewed by Gibbon (1984: 405-406), the approach regards collective concepts (such as culture, social structure, class, tribe, and region) only as analytical tools; handy fictions invented by researchers. As analytical tools, collective concepts have no reality independent of the individuals who make them up. According to this view, it is the generalised social explanations that must be reducible to the basic needs, thought processes, and activities of individuals in order to be valid. Through oral accounts, ethnography can aim to provide a thorough and objective documentation of a culture in all its unique features without involving a search for general principles or laws. The approach is a cautionary tale about ignoring the people while building a social theory.

As with all sources, there is also room for caution in verifying oral accounts. A recent case is the construction of mythology for Curiosity Rocks, a rock outcrop and stone artefact scatter brought to prominence by construction of Lake Jindabyne at the inland tourist town of Jindabyne in New South Wales, as well as by the actions of a government agency. It is relevant how this site came to be found. It was not in the course of an everyday, ordinary expedition by Aboriginal people into the area. It arose out of the context of tourist town management and recent Aboriginal affairs: land rights, heritage management, tourism interests, and the employment of Aboriginal people as "consultants". A white ranger found several stone artefacts on the ground surface and was convinced that the stones represented some particular ritual use and invited representatives of the Bega Aboriginal Land Council who no longer lived in the area, to comment.

The ranger in effect "planted" the idea of ritual significance of Curiosity Rocks, then demanded the answer from Aboriginal people. To their credit, they, the Aboriginal people, treated the problem with caution. Under pressure to provide knowledgeable comment, they said that they believed the stones had belonged to "their" ancestors and should not be removed by souvenir hunters, otherwise such people, because of sacrilege of disturbing relics, might become ill or even die. It is around this point that continued pressure for "traditional meanings" of the site combined with the projection of beliefs, by both the white ranger and by the visitors into versions of Curiosity Rocks that made it alternatively fit into various vague categories: "women's site", "men's site", "children's site". A meaning was thus constructed for Curiosity Rocks which involved Aboriginal people outside of their familiar country in conjunction with agencies of the nation-state. A similar, though more celebrated recent example of "planted" mythology was Hindmarsh Island (Brunton 1996). Yet this was not a straightforward process of opportunistic constructionism. Both the Aborigines and the
whites' imaginations are enthralled by the "forever" quality of mythically storied Aboriginal places. The fact that meanings of places do change, are produced and shaped, is not popularly imagined. It is likely that the Aboriginal representatives would have made the same cautionary statement about not disturbing relics, had they been confronted with a similar demand to interpret a stone artefact scatter anywhere on the continent.

Aboriginal association with the area had been attenuated for generations. The area had been depopulated of the local Ngarigo people by about the mid-19th century when they were resettled into government settlements far from Jindabyne. When the dam was being built during the 1950s, there were a few people camped near the town but no notice was taken of them. Where they were from and where they went was unknown, and was of no apparent interest to either previous or present day heritage managers. A long period of discontinuity is evident. There are periods of colonisation in which loss of knowledge occurs, even if the fact of such loss is unpalatable to later generations. Places closer to where people live (such as Pidgeon-House and Mount Dromedary in the case of the coastal Aboriginal communities) may become the focus of belief. Historical facts of Aboriginal de-population and resettlement make it extremely unlikely that at the end of the 20th century any oral accounts could surface which detail pre-European meanings to specific landscape features. Yet this seems to be the naive expectation of government agencies charged with finding the evidence of long-term meaningfulness that the "heritage" perspective demands. The significance of Curiosity Rocks had been built up through previous association with the National Office of Parks and Wildlife and through uncritical use of an oral account as an archive. It remains unclear whose oral account it actually was, the white ranger's or the Aboriginal community's.

In any oral account there are at least two performers, the person giving the oral account and the person recording it. Often a friendship develops between the two. One of the fruits of that friendship can be an increased mutual exchange and understanding. Oral accounts may start with the experiences of individuals, however they also suggest aspirations and experiences that may be common to a household, community, ethnic group, and sometimes, to the whole human family.

Use of Maps

In maps depicting archaeological and historical situations, the chief problem is that of graphic communication. The question is what is the best way to concentrate and combine
layers of information such as memories, evidence on the ground, and written references onto a two-dimensional medium?

In a few cases, former residents have been able to draw a map of a place from memory. Such "mental maps" are important documents in their own right and have been collected together in this chapter. For example, Coral Kennedy drew the "Blacks' Camp" at Yass in the 1930s from her memories as a young girl when her life was centred on Mary Kennedy's hut, its immediate surroundings and the closest kinfolk (fig 2.6). Rose Chown's sister compiled a diagram of the Wellington Town Common households locations in the 1950s (fig 2.7). Agnes Coe produced a layout of Erambia from the 1940s (fig 2.8). Elma Pearsall sketched the floor plan of the old Russell slab hut as she remembered it from the 1930s (fig 2.9). Part of the archaeological project is to interpret these as artefacts in their own right. By correlating their details with surface evidence, by using site measurement and by plotting details onto a base map, it is possible to fix these mental images onto an existing (and in some cases greatly altered), landscape.

Site surveys were commenced with a suitable base map, such as a 1: 25,000 topographic map or 1: 4,000 photomap. A photographic enlargement of a present day aerial photograph (fig 2.10) provided a suitable base on which to show forty hut structures located on the 620 acre Wellington Town Common (fig 2.11). Figures 2.12 and 2.13 are examples of aerial photographs used in this survey and clearly show the type of detail as well as the problems of definition in greatly enlarged old images. The earliest available cover for some areas were 1944 aerial defence survey photographs which provided corroboration of oral accounts onto surface survey details at Brungle, Hollywood and Erambia. Details gleaned from aerial photographs have usually been added to surface survey maps. The author flew over Warangesda to record the mission site at a low altitude under different light and vegetation conditions, taking 35mm format photographs from the floor of a Cessna light aircraft (fig 2.14). Often the vegetation cover or shadows obscure details of settlements and so most of the maps in this study are composites of compass and tape readings and field notes, typically drawn to a scale sufficient to show required detail such as 1:500 or 1:1,000. The use of written records, old photographs, early aerial photographs, and oral accounts, each have provided additional layers to add to surface survey plans, producing a composite that no single one of these sources could provide.

At this level, maps serve a number of functions. A reconstruction of a small settlement will typically be traced over an enlarged aerial photograph to an approximate scale, and will contain features, plotted from a variety of oral and written sources, correlated as closely as
practicable with surface survey features. As interpretation, maps can be used to bring together correlations between different sources such as ground survey, oral, pictorial, and written sources. Written descriptions of settlement layout (such as "the Aboriginal housing was to the east of the girls' dormitory") invariably gloss over unknown or unresolved aspects of the spatial relationships. As text, maps can provide a far more efficient description than attempts to convert spatial relationships into words. Written descriptions are restricted by literary convention and tend to show a fragmented view of a topic by splitting it up into "bites" of information, each with separate citation of sources. As representation, maps provide a holistic and realistic view of settlement layout, because gaps in knowledge have to be resolved during their preparation.

Recognition from Surface Survey

This section looks at the physical signature in the landscape left by former Aboriginal settlements. Features of such settlements which leave a distinctive mark, or physical signature, in the landscape commonly include huts, channels, water sources, child care items, pathways, dumps, vegetation and forms of enclosure. Their archaeological aspects will now be examined.

Much of the archaeological evidence is seen as patterns that do not naturally occur in the landscape: lineal patterns in the growth of crops and natural vegetation, patterns caused by foot tracks, by shadows in the ground and scatters of household residue. Typically, such evidence is a matter of direct observation. It is also equivalent to a non-repeatable experiment because the evidence is visible only for short windows of time: under suitable but rare light conditions; after livestock over-grazing; during periods of severe drought or even after rain.

Huts and other features survive in relict landscapes, those settlements which are no longer in use, both abandoned and not resettled. Characterising the relict landscape of an Aboriginal settlement after European arrival is not easy because preservation conditions vary greatly from place to place and interpretations will vary on who is observing. There may be disused standing buildings, such as at Blakney Creek and Warangesda mission, or artefact scatters in bulldozed, levelled or ploughed areas, such as at the Darlington Point Police Paddock.

In various ways, the living landscape also reveals the activities of people on Aboriginal settlements. There are a number of distinctive, living elements in the botanical landscape. Ornamental plants, such as flower bulbs and rose bushes, can be found at many settlements.
Enclosure plantings to fence livestock or gardens may be found, such as "silver bush" (*Artemisia absinthum*) and briar hedges. Edible plants can be found, such as watercress planted at a spring, passionfruit vines planted near huts, or fruit trees growing in yards. Some species that were introduced took advantage of cleared area and have spread outwards from their original location as suckers or self-sown seeds, for example at Grong Grong mission, Oak Hill and Gooloogong.

While relics of settlements dating from the last hundred years are unlikely to show much stratigraphic build up of soil, some of the sequence of events can be deduced from archaeological superimposition. Much of the present day appearance of abandoned settlements is the result of activity which followed abandonment, and cut through previous, older, features. Conversion of the 1890s Warangesda school house and teacher's cottage complex, together with associated flood levee banks, into a shearing shed and shearers' quarters after the 1920s, involved a series of modifications which superimposed the mission period and can be stripped away in layers to reveal details of its operation during the earlier mission period.

One feature of sites, which must be accounted for during field observation, is looting. Looter's holes dug in household dumps for old bottles expose the strata and location of dumps but also may produce confusing mounds of spoil on the surface. At Bushranger's Creek, neat lines of slightly damaged bottles on the ground were a sign that bottle dumps had been mined and sorted. At the Wellington Valley Mission site, the moment that an archaeologist was ready to start the record of surface finds, a local historian was collecting artefacts and later returned with gardening tools to dig (John Mulvay: pers. comm.). At Narrandera Sandhills, small arrangements of nails and bolts into little heaps next to small scoop holes in the ground showed that metal detector looters had been through the site. The mossy rock phenomenon, the looting of lichen covered rocks for suburban gardens, has stripped the remains of stone fences and fireplaces from sites close to townships, e.g. at Yass "Blacks' Camp". Some sites may be rapidly stripped by casual collecting. Others, such as Oak Hill, also in Yass, show recent destruction of hut remains with earthmoving machinery.

Archaeological indicators or features integral to preparing a community plan of a settlement may be: huts, water sources, vegetation, dumps, pathways, forms of enclosure and child care items. While these are discussed in various social contexts elsewhere in this work, they tend to leave characteristic "signatures" in the landscape. Hut sites may appear as mounds of collapsed fireplace walls, often with an ash mound intact, rising to about
300mm above surrounding ground level. Bulldozed and cleared huts may be left as half-buried tin sheet cladding fragments. Water sources vary as natural features but provide a general confirmation of the likelihood of nearby camps. Settlement and cemetery vegetation often survives, as already noted, as self-propagated clusters of fruiting or ornamental plants. Household dumps tend to be visible as circular depressions filled with burnt or rusted containers and soil or ash. Pathways may survive as scars in vegetation. More commonly they clearly show up as linear patterns on old aerial photographs. Forms of enclosure may appear on sites as rows of stones to mark gardens, chicken wire still attached to sulky or machine axles stubbornly hammered into the ground, or simply as a barely visible break of slope, seen under certain light conditions. Child care items may be found at or near hut sites, and generally are from the more durable components of toys, such as glass marbles, steel tricycle wheels or seats.

This makes recognition from surface observation appear easy. One could examine the battery of archaeological methods or point to an exemplar case in which all the pieces of the jigsaw seem to fit neatly together. Perhaps a better way to qualify the recognition from survey and point to its challenges and pitfalls, is to look at a survey in which some pieces of the jigsaw fit neatly, while others do not fit or are yet to be found.

Aboriginal households on Darlington Point Police Reserve lived in red huts and had a small church on the raised field which was a former police paddock. A local white inhabitant (Les Kubank of Griffith) was able to point out which end of the field he thought the church and huts had been. He also explained that camps had also been scattered on nearby river flats. The camps could not be found because the banks had been eroded during floods and were heavily re-vegetated. The field, which contained the church and huts, had been occupied from the 1920s to 1950s and had been recently ripped. No surface features survived. This was a shallow deposit, with small fragments lightly scattered over a large area.

The survey aims on this particular site were to find where the church and huts had been located on the field, to shed light on material aspects of life on the reserve from the small artefacts, and to find out what had happened to the remains of the settlement.

One of the obvious first steps was to sample the remains lying on the surface of the field. I directed the work with two local history enthusiasts, Robyn and Christian Oliver assisting, over two days. A one hectare field was mapped. What was thought to be the church floor was located outside the field in a less disturbed area and was separately mapped. Returning to the site after the map had been prepared, two survey techniques were
combined: "point provenance" (Jermann 1981: 15) in which individual artefact locations were plotted on a map, and "block provenance" (Warran and Miskell 1981: 127) in which artefacts were recorded in area grids to determine any broad differences in artefact type across the site and the general nature of the assemblage. The surface was gridded with 10 x 10 metre squares oriented along the indicated settlement area as well as adjacent to it. The location of every artefact found within these squares (and in some areas surrounding them) was marked in the map (fig 2.15). The church floor was measured. The artefacts were tabulated and described.

After this site work, a likely size and spacing for the huts was assumed, and these were superimposed over the mapped areas of greatest artefact density, in order to estimate the number and locations of the huts. The reconstruction that resulted showed positions for the church and row of huts. The artefacts were then shown to someone who lived as a young child on the reserve and their oral account was then recorded. Iris Clayton's story shows ways in which artefacts both affirm the oral history and differ from it:

*We lived in a kerosene tin house at Bunyip Bend, perched on the edge of the steep river bank. Our water came from the river by bucket tied to a rope. I was taken to the Police Paddock when I was five, about 1950. The houses were corrugated iron, earth floors... The church there was pretty crowded too. We always had a church service, sometimes two. Beautiful songs you could hear, my mother was in the choir. Even of a night-time there was always singing and then somebody would make a fire outside. When they got together we always had musical instruments: guitars, ukuleles, mouth organs, gum leaves. They were great gum leaf players. You ever heard one? Squeeze-boxes, jew harps. Some of them could pick up any instrument, fiddle about with it for a while and then play it...We had one of those wind-up record players on big spindly legs. I remember climbing up on a chair, changing the record over and winding it up.*

*The men went out to work on stations you know, like Tubbo and all that, land clearing, and fencing, shearing and horse-breaking. My mother's father was a horse-breaker. And the men would stay out particularly at shearing time and come back on weekends. Well when they came in we'd all go down to the river bank and have a dozen fires and everybody cooking different tucker. So then us kids used to run along from one fire to another. Stew here, someone else big dampers. Like you'd have your bakes, cooking in the camp ovens, dumplings. Beautiful meals! Because the men were working, we ate pretty well. Like they'd bring in a sheep or share a bullock between the mob. And plenty of*
vegetables. Porridge, lots of porridge. And Weetbix. Weetbix were maltier too! We had cold rice with milk and sugar. A lot of corned beef. Lambs tongue too. Lots of mussels. Mussels were a delicacy. We'd eat lots of turtles, cook them straight on the fire. We'd set rabbit traps all around because the kids knew where they all were. So we'd go and get the rabbit out of the trap, take it home and cook it up. So we was always out in the bush, you know, us kids! I caught my first fish when I was 3 years old. The fishing lines were twine in those days and we knew how to find witchetty grubs (for bait). We'd check everybody else's lines and reset them. That Hughie Foote was a good swimmer, and he used to swim underwater when people were fishing and tug on their lines so they thought it was a fish. Then he'd come up to the surface and laugh at them and they'd abuse him. And of course there was the school in town. I liked it there.

My grandfather Joe later died of tuberculosis. Measles was the thing too; terrible. We had our own medicine, used to grow on the river bank. People were sick a lot. We also used a lot of Aboriginal words those days. I remember the first time I saw nuns. I'd never seen a nun before. It was a really hot day and there was this group of nuns who'd stopped to rest under a big old gum tree and had sat down on the ground with their black and white habits all spread out. I was with a friend and was so terrified I screamed ———, which means "ghost!".

And the old women in our community were very very strict. It was the old women who laid down the laws to the kids; not the mothers. We used to get sticks when we knew the old people were resting and run along the house with these sticks against the corrugated iron. Made a racket (laughter). We'd have all the old people out. If we got caught, we got the biggest flogging. They used baddawais, boomerangs, you know, on the flat part on your legs; or leather straps, not like these days—Iris Clayton, Hall, July 1993.

Artefacts in the assemblage which prompted some of this oral account include part of a plastic mouth organ, slivers from gramophone records, river mussel shells, bones from fish, tortoise, and butcher's chops, and a medicine bottle. These represent something of the way of life of the people who used them. The mouth organ is a small relic of the importance of music in people's lives, as are the slivers from gramophone records. River mussel shells occur alongside butcher-sawn chop bones, as well as turtle bones and fish scales, the archaeologically visible signs of a diet centred on shop-bought foods but supplemented by bush tucker. The medicine bottle is a reminder of illnesses administered by patent medicines.
As a document for research, the artefacts encapsulate, in some small tangible way, the details of daily life at the reserve. In these ways the artefacts reaffirm the oral history.

What the surface artefact assemblage doesn't contain is all the perishable items and social interactions. Iris mentions "Old Man Weed" an Aboriginal herbal medicine gathered on the Murrumbidgee River, Weetbix breakfast cereal, vegetables, porridge, lambs' tongue and baked damper, materials which quickly perish from the archaeological record on the ground surface.

What was found in the assemblage but not in the oral account were some of the personal objects, including trouser and shirt buttons and a spoon. Initially the forms of shelter at Darlington Point received no comment from Iris, although houses and huts are represented in the "fibro" (asbestos cement sheet) cladding fragments, door striker plate and window glass fragments, as well as numerous kerosene tin and corrugated iron scraps. Iris was a young girl at the time and couldn't comment on issues such as whether alcohol was drunk at the settlement, the types of ceramic ware used there, or the age of the settlement. However the artefacts do include wine bottle fragments. The ceramic fragments that were found were of types common after the Second World War rather than the earlier transfer ceramics present on the nearby, but older, Warangesda Mission site. These suggest that the reserve occupation is recent, i.e. post-1920s, although a definite starting date for the settlement is not available.

During further investigation, details of one of the row of government constructed huts and of the church were obtained from Iris, from an old photograph of the church, and from a silent movie done during the 1950s which showed huts on what appeared to be the edge of the field. This was incorporated into the reconstruction (fig 2.16). From the half buried hut remains observed in the steep outer banks of the field, it was concluded that the settler had been cleared by bulldozing huts over the sides of the field. Historically, Darlington Point Police Reserve was significant in the 1920s because its Aboriginal inhabitants contained the displaced remnants of an earlier mission closure (Warangesda Mission, 1880-1925). This was significant archaeological work because it located, in the landscape, an Aboriginal settlement that had previously only been written about rather than mapped.

Surface survey methods, similar to Darlington Point, have been used in North America and in England. A similar archaeological method was tried at the Hatchery West settlement site (Binford et al. 1970), in which a site was sampled by a systematic total surface pickup. In a re-evaluation of the work, it was observed that some of the patterning
on this undulating surface was the result of artefacts moving downhill, with lighter artefacts moving further than heavier artefacts (Flannery 1976: 51-4). For the deep, stratified site at Hatchery West, surface remains closely corresponded with the upper levels of the site, but did not closely correspond with the deeply buried ones. By contrast to Hatchery West, the Darlington Point Police Reserve was a flat site with a shallow deposit.

Other similar archaeological work was done on a larger scale for locating Roman settlements in Britain, by locating artefact densities in a set of parallel line transects walked by fieldworkers over sites that covered many square kilometres (Dintliif and Snodgrass 1988: 506-7; Snodgrass 1991: 64-5). The artefacts in the fields were the results of centuries of manuring, which broadcasted household rubbish together with animal manure over areas around the settlements. This artefact scatter "shadow" was used to approximate the location of the settlement. By contrast to this work, the Darlington Point settlement was considerably less of a risk in invested survey time.

This survey also raised problems. Some time after the survey, more former residents were found. One (Jean Cliteur at Darlington Point) was able to locate the general vicinity of a particular household camp on the river bank, now washed away, but imprinted in at least her memory. Two others (Josie Ingram at Cowra and Clancy Charles at Three Ways) remembered 5 huts in the row, not 6 as had been inferred from the size of the artefact scatter. The church floor also appeared to contain an additional area of paving. It may have been a small porch addition, but the problem is not resolved. Excavation of the edge of the mound may very well uncover a more complete artefact assemblage. Further searches for photographs might uncover details of camps which cannot be seen in the surface archaeology. Most importantly, a new "hunt" for former residents, further collection of their oral accounts, and preparation of a genealogy of the households, might provide samples sufficient for the preparation of household or community plans, rather than just the physical placement of buildings.

Darlington Point Reserve was only the second Aboriginal settlement in the Wiradjuri region to be archaeologically surveyed. From the lessons learned, site observation and survey improved as the study progressed. Surface observation can yield information, as Kent Flannery (1976: 62) had concluded a long time ago: "only if one approaches the whole study with healthy scepticism, aware that a great deal of the pattern on the surface has resulted from erosion, gravity, monumental construction and disturbance, plowing, looting, and modern occupation."
Use of Reconstructions

A reconstruction of a community (whether or not qualified by prefixes such as "conjectural", "hypothetical", "conceptual tool", or "a working hypothesis") is a spatial model of the material content, activities and lives of the members of that community in the form of a scale drawing, providing the "best fit" for all the known facts about the place at that time of reconstruction. It allows travel back to a particular time and provides a structure on which to support other research questions. It also embodies the three important dimensions of archaeology: space, time, and form.

A consistent theme of reconstructing a plan at the household, community or settlement level is the access to and integration of many independent lines of evidence about the past. In this lies the unique strength of the reconstruction, and the (largely unrealised) potential strength of historical archaeology. When the various lines of evidence are integrated into the one reconstruction, they often add up to more than the sum of their parts.

The issue of sampling arises in the reconstruction of a community plan. How to get a representative sample of the surface remains of that community (in surface surveys)? How to excavate a representative sample of the community? In the present work, the sampling dilemma is reduced by correlating archaeological lines of evidence with oral accounts. In this situation, a former resident is generally taken to be a "representative sample" of the settlement community. For the Gooloogong Reserve, only one former Aboriginal resident, Wiradjuri elder Agnes Coe, was able to be located. Coming across one person who was part of a reserve community at a given time is a simple probability sampling of oral history. She assisted in interpreting the surface residue on the settlement site for the period in which she lived there. Correlated with surface survey, written school records and a partial genealogy, the single resident's oral account formed a representative sample of community life on the reserve. A reconstruction of the community plan was drawn from this sample, representing life on the reserve during the 1950s.

Subsequent oral accounts from a short stay Aboriginal camper on the reserve (Rose Whittaker) and from a former white resident of the adjacent property (Margaret Moore) provided samples of information from earlier and later decades than those remembered by Agnes. These other samples were less complete. They were isolated memory flashbacks, or "windows" into the lives of particular households. On their own, these smaller samples are not representative of a whole community phase of occupation, but they provide fine grained
detail, analogous to the "windows" into stratigraphic horizons in small scale excavation archaeology.

Camps represent a category of land occupation sometimes historically invisible. One obvious example is the historically unrecorded use of vacant public land. If the study had been confined to a survey of standing buildings, or masonry structures, then most of the places in the study and their communities would not have been recognised. The need for researchers of settlements to overcome sample bias of historical documentation on masonry structures has already been noted by others (eg, Higginbotham 1992:4). The direct approach employed in this study was to travel through a broad geographic region visiting and interviewing people, then carrying out surface survey. Where possible, a reconstruction of the layout of the settlement at some known time period has been carried out.

Each reconstruction is limited by the depth of research into the evidence on the ground, pictorial records and memories of inhabitants. It might be naively assumed that the reconstruction of a settlement can be completely achieved as a fixed layout. But most settlements encountered changes over time. Their living space changed as households moved on or were replaced. A proportion of households would stay for a few months or years and then move on. Others were long-term residents. In this context, the reconstruction of layout is not an absolute copy of the settlement through all its period of existence but a "best fit" representation, usually at some given point in time. The reconstruction, as with any archaeological interpretation, would never be claimed to be perfect.

The reconstruction of the layout of the Wellington convict settlement, later Wellington Valley Mission, illustrates some of the difficulties to be faced. Two published government maps of the settlement were used. The first, a chart of the settlement layout of 1826, is a sketch of the landscape as seen at that time, and cannot be clearly reconciled with a present day survey map. The second, a buildings plan of 1844, was prepared from measurements taken by people not used to survey work. Room measurements, building measurements, and distances between buildings are inconsistent and generally do not provide a fix in the landscape. The examination of the settlement layout could stop here. In fact previous researchers have stopped at this point.

However, by an examination of the dimensions of the 1844 buildings plan and by imaginatively filling in gaps of knowledge using inferred and where necessary assumed dimensions and building components, it is possible to arrive at one likely version, or reconstruction of the floor plans of the buildings (fig 2.17). When the measurements
between these buildings in the 1844 plan are sandwiched with the layout shown on the 1826 chart and the remains on the ground on site, it is possible to plot a reconstruction of the Wellington settlement layout onto a present day survey map (fig 2.18). Future archaeological surface survey and excavation will undoubtedly reveal more accurate locations of the structures and may also explain something of their sequence of change, a suitable subject for separate study. Yet without this first important step of finding a best fit between the written record and the record on the ground, it is not even possible for others, historians or local planning authorities, to be able to say where the site is.

Refinements to interpretation would be expected following every additional revisit to a site. What is important is that the reconstruction comes to grips with a problem rarely confronted in other disciplines, the spatial organisation of a community.

This thesis is not a complete survey as known reserves at Booligal, Hillston and Rylstone were not visited. There also could have been other Aboriginal settlements which were not mentioned in the written records and had disappeared from oral tradition. Aboriginal camps on pastoral properties in the 1850s to 1880s, or camps on river flats that have been swept away by floods, might be examples. The fifty places located for this study might therefore be regarded as a sizeable sample, though not the complete universe, of a greater total number of 19th century Aboriginal settlements within the Wiradjuri Region.

The interpretations drawn exclusively from either of the three types of documentary archive, oral accounts, the written record, or surface survey, generally tell different stories of the former Aboriginal settlements. Today they are largely invisible to the public. Archaeological reconstruction of their physical layout and examples of the kinship network that bound them socially contribute to an appreciation that there are both differences and similarities between Aboriginal and non-Aboriginal people of similar economic capacity. While surface survey, oral accounts, and reconstructions of places drawn as maps are useful research tools, some understanding of their limitations is required before conclusions can be drawn. Details of settlements recovered by this method enlarge on the details given in written sources. In some cases the written record is complemented by surface survey, and in a few cases the surface survey might call for a re-assessment of the written record.
Figure 2.2 Distribution of European and Aboriginal places of settlement (Wiradjuri region)
Figure 2.3 Warangesda Aboriginal station buildings plan (from Kabaila 1993)
Figure 2.4 Aerial photograph recording ground features of Hollywood government settlement (1952 Defence Dept. photograph 30X enlargement, Australian National Library map collection)
Figure 2.5 Hollywood government settlement community plan (Murrumbidgee: 55)
Figure 2.6 Yass "Blacks Camp" in the 1930s, drawn by Coral Kennedy in 1995 (Murrumbidgee: 41)
Figure 2.7 The Wellington Town Common households in the 1950s, drawn by Tilly Hill in 1989
(Macquarie: 25)
Figure 2.8 Erambie government settlement in 1945, drawn by Agnes Coe in 1995
Figure 2.9 Russell family slab hut floorplan in the 1930s, drawn by Elma Pearsall in 1995
Figure 2.10 Aerial photograph used as a surface survey base of the Wellington Town Common community camp (1990 aerial survey photograph, CALM, Bathurst NSW)
RECONSTRUCTION:
WELLINGTON COMMON
ABORIGINAL SETTLEMENT c 1955
Household locations from the 1930s to 1970 as remembered by Rose Chowne, Tilly Hill and Vivian Griffith, reconstructed from surface survey and aerial photographs, including sketch map by Eliza Heap (unseen).

0 50 100 200 400 metres

Figure 2.11 Households of the Wellington Town Common, a composite of surface survey, the sketch by Tilly Hill sketch, and details from recollections of Rose Chowne traced over the aerial photograph from fig 2.10 (Macquarie: 29)
Figure 2.12 Aerial photograph used to correlate surface survey detail of the Murie community camp at Condobolin (1965 Defence Dept photograph, enlarged)
Figure 2.13 Aerial photograph used to assist in interpreting the field system, paths, fencing and building structures of Brungle station (1944 Defence Dept. photograph, enlarged, Australian National Library map collection)
Figure 2.14 Photographs taken for Warangesda Mission aerial survey
Figure 2.15 Surface survey, Darlington Point police reserve (Murrumbidgee: 128)
Figure 2.16 Reconstruction, Darlington Point police reserve (Murrumbidgee: 129)
Figure 2.17 Wellington Valley Mission Buildings 1844. A reconstruction of the floorplans drawn to metric scale incorporating some inferred dimensions and assumed building components (Macquarie: 15).
Figure 2.18 Wellington Valley Mission 1844. A reconstruction of the layout of structures shown superimposed over present day landscape features (Macquarie: 14)