CHAPTER FIVE - Discussion and Wider Implications

In the relation between myth and history, myth proves to be the primary, history the secondary and derived factor. It is not by its history that the mythology of a nation is determined but, conversely, its history is determined by its mythology – or rather, the mythology of a people does not determine but is its fate (Cassirer, 1955: 5).

Gazin-Schwartz and Holtorf wrote that "when [mythology] is analysed (as archaeological materials have to be analysed), it sometimes does provide plausible interpretation for those materials, whether or not they can prove unbroken continuity of transmission" (1999: 5). This research not only demonstrated the truth of this statement through analysis of several examples of myths relating to fortified homesteads, but went further, analysing the material of the myths in close conjunction with archaeological analysis of the physical materials upon which the myths were founded. In all of the case studies presented here, in-depth analysis of the veracity of the myths using a combination of archaeological and historical data showed that the myths did more than provide a *plausible* interpretation of the material culture, but also provided an accurate interpretation of it.

Historical archaeology can be used very effectively to test the veracity of defensive architecture myths. Through a combination of archival research and a structured archaeological investigation of the material remains, this research has shown that the methods adopted here can be used to address the confusion that exists regarding what constitutes examples of civilian use of defensive architecture in the Australian frontier context.

Rural Architecture in Colonial Australia

One aspect of style, as Burke pointed out, is identification through 'differentness' (Burke, 1999: 25). By comparing the design of the sites investigated here with the 'typical' (and non-defensive) design of Australian rural architecture of the period, it is possible to more clearly identify the way that defensive sites were modified, and thus different from, the typical design and thus formed a style of their own. This is useful because it helps both to deduce the intended tactical role of the structures investigated here, and to provide a basis for comparison, independent of historical evidence, against which other civilian sites can be compared to help identify whether or not they are examples of defensive architecture.

However, to chronicle and discuss the entire range of architectural styles within the period is neither practical nor relevant. The types of buildings investigated within this research were not the stately mansions built by those who had the funds and leisure to build in compliance with the 'high architecture' of the times. Rather, the buildings investigated here were of a more common type; those that were built for practicality, functionality and economy, by settlers whose financial stability was often tenuous and who were faced with a hostile environment and, as has been demonstrated, often hostile people. Therefore, what is of interest here is the typical design of the most basic and functional rural buildings of the period.

Not surprisingly, colonial builders in Australia were influenced in their building styles by those which had been long-established back home in Britain. The basic type of country cottage which influenced the colonial builders, both those in town and in the country,

dated back to the late 18th century (Pikusa, 1986: 19). Those cottages found in the Scottish highlands and the west coast of Wales were particularly influential to Australian designs (Pikusa, 1986: 19) (Figure 5.0).

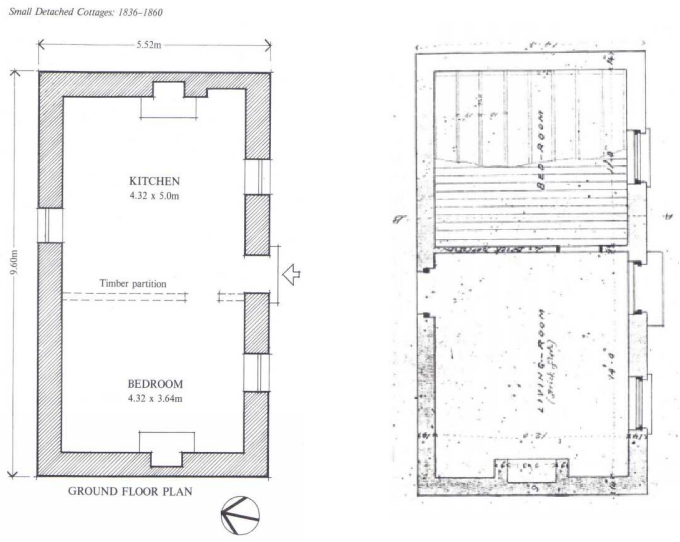

Figure 5.0. Left: Plan of Spital Cottage, in the Grampian region of Scotland, c.1850. A crofter's basic two room cottage. Right: An Adelaide cottage, ca 1869, though typical of mid 19th century colonial cottages. The similarity between the two plans is obvious. After Pikusa, 1986: 20, 28.

Turning first to dwellings, and according to Boyd (1961: 8-10), during the period under investigation here (c1847-c1879) all dwellings were based on three basic plans. These were (1) The primitive cottage, (2) The bungalow and (3) The asymmetrical front (Figure 5.1).

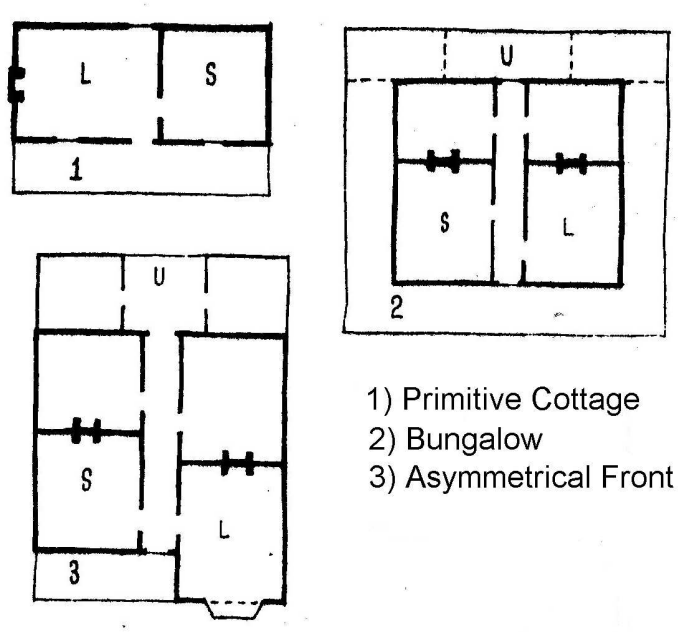

Figure 5.1. Principal plan types. After Boyd, 1961: 9.

All three of the dwellings investigated within this research (i.e. Mount Benson, Central Outstation and Springvale) appear to have been based on the primitive cottage plan, though in the more elaborate form of a complex of cells. Therefore the details of the bungalow and asymmetrical front plans do not require further description. The primitive cottage, in its most basic form, was characterised by one room, the living room/kitchen, being slightly longer than the other. One small window was placed either side of the door and a fireplace and chimney stood at the far end of the living room/kitchen. The side walls were blind (i.e. they had no openings) (Boyd, 1961: 8). Although superseded by larger houses during the second half of the 19th century, in rural areas the simple cellular cottage of two rooms continued to be popular well into the 20th century (Pikusa, 1986: 22). This type of plan is also characterised by its additive quality. That is, its open-endedness allowed additional cells to be added to the sides or rear to suit the particular

circumstances (Cox & Lucas, 1978: 14). This can clearly be seen in the examples of Central Outstation and Springvale. The Central Outstation men's hut uses the text-book primitive cottage plan, but with the addition of an extra room on one of its short sides, with an extra fireplace. Springvale's dwelling represents a more elaborate version of the cellular plan, with a main section of three rooms, once again all in a row, and still with the fireplace on one of the short ends. The other dwelling investigated here, Mount Benson, looks as though its plan could have been taken directly from Atkinson's 1826 book of practical advice to new settlers in the Australian colonies (Atkinson, 1975[1826]) (Figure 5.2). The significant characteristic of this plan, and one which is mirrored in the Mount Benson dwelling, is the positioning of a fireplace in the rear wall, as well as on one of the short sides, as with the primitive cottage.

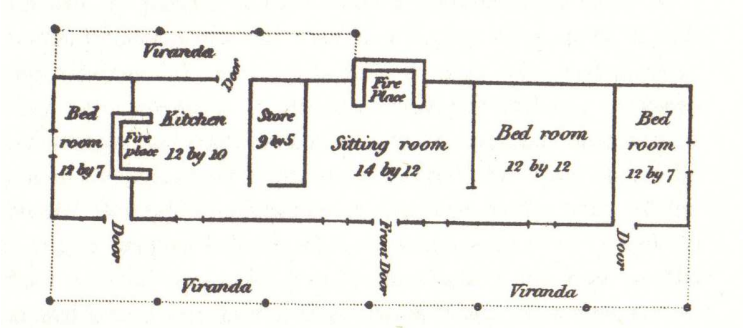

Figure 5.2. Atkinson's suggested ideal plan for settler's houses. From Atkinson, 1975[1826]: 99.

What is most noticeable about the 'typical' linear cell plans is the general absence of windows and doors in the rear wall. Even when present, there are fewer windows and/or doors in the rear wall than in the opposite (or front) wall. This is a feature of Australian vernacular cottages which comes from their British antecedents and is therefore not in itself part of a defensive design. The original reason for the lack of windows in the rear

wall has its origins in the cottages of the northern hemisphere, which were generally sited so that the openings were on the southern side, protected from the prevailing northerly winds (Pikusa, 1986: 19-20). The same procedure for siting was followed in Australia, although the building's orientation was often altered depending on the particular direction of the prevailing wind. It appears that, both in the British and Australian cottages, the only time a rear door *was* included in the plan was if there were buildings at the rear of the dwelling such as a wash-house, storage shed, privy or chicken house (Pikusa, 1986: 23). Otherwise they were not considered necessary.

Thus it can be seen from the above examples that all of the dwellings investigated here more or less conformed to the typical primitive cottage plan. They also conform to the typical plan in their lack of windows or doors in the rear walls. The Springvale dwelling has a single door in the rear wall of the complex, but as mentioned above, this can be explained by the fact that it was required to provide access to the outbuildings and yard. There is also a small window in the rear wall of the Mount Benson dwelling, however this is located in a section which was constructed later. The dwelling in its original configuration evidently did not have any windows or doors on this side.

The significant difference between the typical design, and those investigated here, is, of course, the existence of one or more small apertures, in all of the cases studied here, located in the rear wall of the dwelling. None but one of the architectural literature sources consulted dealing with the design of British and Australian rural dwellings provided a precedent for the adoption, or function of, such features. This one exception

was *The Australian Homestead* by Cox and Stacey (1972). Cox and Stacey mention that when defence against bushrangers or Aborigines was needed, wooden shutters were used instead of window panes and "gun holes" (embrasures) were incorporated into the walls (1972: 14). Owing to their absence from nearly all of the architectural literature, however, such apertures were evidently not a part of the usual cottage plan, either in Europe or Australia. Rather, they appear to have been incorporated if, and when, deemed necessary, in response to local situations. Therefore, these apertures constitute an important and significant modification to the Australian vernacular, and one which has hitherto been overlooked in the architectural literature.

We now turn to the 'typical' design of the other two types of rural buildings investigated here: the coach-house and the store (at Lizard Lodge and Springvale respectively). It is rather difficult to describe the typical coach-house, since the actual function (or functions) of the one at Lizard Lodge, is unclear. In terms of its general design, the coach-house at Lizard Lodge appears to have been heavily influenced by the English 'bank barn' (refer Bell, 1997). The Lizard Lodge coach-house is similar to the typical bank barn in that it is built into a slope, with upper and lower levels (Figure 4.3.18). It is also common for traditional bank barns in England to have narrow apertures located in the upper level which splay outwards on the interior (Figure 5.3). These features as they are found in English barns, though identical in form to the typical embrasure of military fortifications, are actually designed to provide ventilation for perishables such as bulk grain or fodder (Brunskill, 1974: 141). As a result, when it comes to outbuildings (as

opposed to dwellings) it is more challenging to distinguish between those apertures which were built for defence and those that were built for ventilation.

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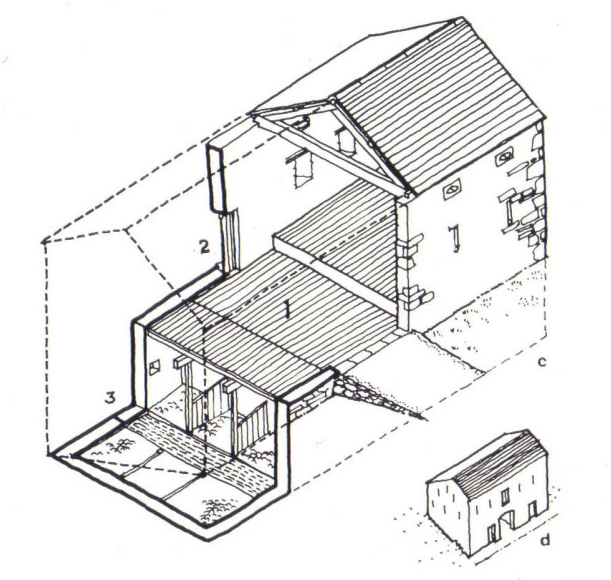

Figure 5.3. Typical Lake District (English) Bank Barn. Note the narrow, elongated apertures which splay outwards on the interior in the upper level. From Brunskill, 1974: 139.

Since the presence of apertures in an outbuilding is not in itself diagnostic of defensive nature, the only way to determine such a structure's defensive construction is through supporting evidence. Aside from documentary sources, the best way to test the defensive construction myth of an outbuilding based on the physical evidence is to determine whether there is a feature (or features) which would render the construction of ventilation apertures superfluous or non-functional. This was the method adopted with the Lizard Lodge coach-house. If this can be demonstrated to be the case, then providing there is supporting documentary evidence for a motive, the apertures can be fairly confidently interpreted as embrasures.

Then, of course, there is always the possibility that the apertures of some outbuildings were designed to have a dual function for ventilation and defence should the need arise. When this is the case it is almost impossible to state for certain whether such a structure was built to serve a defensive role, even as a secondary function. In such a case, all one can do is refer to the primary documentary evidence which may, or may not, be considered strong enough to interpret such a structure as defensive.

Overall, however, these findings bring to light a significant sub-culture of Australian rural vernacular architecture. The documentary evidence relating to frontier conflict at the time of the sites' construction, and the personal frontier conflict experiences of the builders, provide us with Carter's "local factors", which, combined with the 'standard' designs imported from Europe – Carter's "distant impulses" – led to the "dynamic process" by which this distinctive vernacular architecture of the frontier was created (Carter, 2006).

Defensive Strategy and Tactics

The dwellings investigated all had in common the fact that their front facades were not designed any differently to non-defensive buildings, yet all had defensive embrasures built into their rear walls. This is very significant to Australian frontier construction techniques because it provides clues as to the intended tactical roles of these buildings as defensive structures.

It has already been shown above that the lack of doors or windows in the rear wall of these dwellings was not in itself unusual, or an indicator of defensive construction. Rather, this was a design feature taken directly from the rural cottages of England. The standard rural dwelling of England, with its doors and windows in the front, and possibly a window on one of the ends and a blank rear wall, was perfectly suitable for direct translation into Australia (with the addition of verandas), but proved unsuitable when the occupants feared attack. The dwellings investigated here show that, although these settlers did not feel the need drastically to modify the vernacular design to deal with the threat of attack, they evidently felt anxious about having no way to see if a threat was approaching from the rear of their dwellings. The evidence provided by the sites investigated here shows that one of the ways they addressed this was by building one or more embrasures in the rear wall.

Being places in which people had to live, it is easily appreciated why the settlers still preferred to keep conventional windows in the front and sometimes side walls, rather than have small embrasures as the only source of light and air. Their intention does not appear to have been to turn their dwellings into dark forts (which would have been unpleasant to live in) but rather to have the added ability for the occupants to keep an eye on the rear of their dwellings and, in the event of an attack, have a firing position from which the defender would be practically invulnerable to Aboriginal weapons. The existence of conventional windows elsewhere in the building may at first glance appear to defeat the purpose of embrasures in the rear wall, after all, it would have been just as likely that attackers would approach from the front of a building, or go around it.

However, this design does not appear so flawed when one considers that it was usual for dwellings during this period to have sturdy wooden shutters (Cox & Stacey, 1972: 14; Cannon, 1973: 30). These could be locked in the event of a threat, or at night time, and could also have embrasures built into them, thereby rendering a dwelling very secure and well-designed as a defensive structure. Unfortunately no evidence for shutters was available for the sites investigated here owing to no original joinery being retained.

The tactical role of these 'fortified' dwellings is therefore quite straightforward to deduce. They were, of course primarily homes, where men, women and children lived. However, the dwellings investigated here were also designed to be 'battened down' in the event of a threat. By doing so they changed function from home to fort, and owing to the existence of embrasures in what would usually be blank walls allowed the occupants to remain relatively safe, as well as be able to defend themselves.

The siting of the dwellings may also have borne a relation to their tactical role. To the rear (i.e. embrasured) side of all three dwellings were features that could be regarded as potential targets for Aboriginal attackers. In the case of the Mount Benson dwelling, this was a large paddock which was probably used to keep sheep in; in the case of Central Outstation there were sheep yards to the rear of the fortified dwelling; and in the case of Springvale dwelling, the store was located to its rear. Therefore, it is possible that the embrasures were built into the rear walls facing these potential targets in order to be able to keep an eye on them and drive off any attackers with gunfire from the safety of the embrasures. Another example of defensive siting which appears to have been practiced in

the cases of Springvale and Mount Benson is the siting of the structures atop a steep river bank (as in the case of both of the Sprinvale structures investigated) or a hill (as in the case of the Mount Benson dwelling). This helped to provide better observation of any potential threats (Cox & Stacey 1972: 9; Taylor 1988: 24). With the case of the store and dwelling at Springvale we also have evidence for the positioning of fortified structures in a manner that allowed the two structures to mutually support each other.

As for the two outbuildings investigated, Lizard Lodge coach-house and Springvale store, these appear to have been intended to be used slightly differently in the event of a threat. Although the primary function of the embrasured room in the coach-house is uncertain, it appears to have been designed to function as a refuge for those around the homestead in the event of an attack. It was positioned in the centre of the homestead complex, though retaining clear fields of fire and vision on the embrasured sides. This central positioning was possibly designed to allow it to be the same distance from either end of the homestead complex, so that wherever one was at the time of the threat, the coach-house was not too far away.

The store at Springvale homestead was designed primarily for use as a store. This is evident from the fact that the embrasures probably doubled as ventilation apertures, since two of them are inaccessible as embrasures. However, that it was designed to be functional as a defensive structure is evident from its overall secure design, with no windows or apertures in the ground floor, yet with accessible apertures which could function as embrasures around all four sides of the loft, and no windows. It seems most

likely that the tactical role of the store was for it to be 'garrisoned' in order to defend its contents, in the event of an attack upon the homestead.

Implications of the 'Weapons of the Frontier' Experiment

The practical testing undertaken into the typical firearm types of the Australian frontier period proved important because it provided new and reliable data pertaining to their capabilities. Not only was this data valuable when it came to assessing the functionality of the structural sites investigated, but it may also constitute a valuable set of results which could be applied to the investigations of other frontier conflict situations, such as massacres and battles.

By showing the actual capabilities of a range of firearm technologies of the period, the data gathered is useful for both historians and archaeologists because it can be used to compare what it was possible to do with particular types of firearms with what historical accounts of massacres and battles claim was done. For example, it allows one to judge whether such factors as the number of casualties, the numbers of participants, and duration (if known) of the incident seem plausible in relation to the types of firearms used. This data could be highly useful for archaeologists investigating massacre and battle sites, as it may provide a clue to the likely proximity of opposing sides, which could aid in the selection of excavation areas.

Changing Technology, Changing Tactics?

No association was determined between the defensive design of the structures investigated and improvements in firearm technology over the time scale of this investigation (ca 1847 – 1885). This is moderately significant, given the great advantage to firearm capability provided by the introduction of breechloading firearms during the 1870s and 80s. Evidently, later settlers were not sufficiently confident in their faster-firing and more accurate firearms to forego using defensive architecture. This may have less to do with the rate of fire and accuracy of these firearms and more to do with the nature of Aboriginal homestead attacks. The primary accounts that describe such attacks give the impression that the Aboriginal attackers were usually able to approach close to a building before the occupants were either aware of their presence or intention, thereby negating the increased accuracy of the later firearms at longer ranges.

Were Their Precautions Justified?

> [Fear] is a complex feeling of which two strains, alarm and anxiety, are clearly distinguishable. Alarm is triggered by an obtrusive element in the environment, and an animal's instinctive response is to combat it or run. Anxiety, on the other hand, is a diffuse sense of dread and presupposes an ability to anticipate. It commonly occurs when an animal is in a strange and disorientating milieu, separated from the supportive objects and figures of its home ground. Anxiety is a presentiment of danger when nothing in the immediate surroundings can be pinpointed as dangerous. The need for decisive action is checked by the lack of any specific, circumventable threat (Tuan, 1979: 5).

If one reads the above definition with the actions of the builders of the sites investigated in mind, it perfectly encapsulates and explains the whole mental process the builders may have undergone. It also encapsulates what must have been the atmosphere in which the settlers lived. It makes one appreciate the feelings of alarm and anxiety that evidently pervaded the minds of these frontier settlers.

On the other hand, one could argue that, since no evidence was found of direct attack upon the sites investigated here, the defensively-built structures were never 'put to the test' through being attacked, and therefore the builders' precautions were unjustified. However, one could make just as strong a counter-argument that it was *because* the structures were built defensively that they were not attacked. This was certainly the case with regards to American Indians and U.S. Army forts (Hoagland, 1999: 218) and the Aborigines and Fort Dundas in the Northern Territory (Connor, 2001: 68, 73). Both American Indians and Australian Aborigines, when confronted with defensive structures, chose to avoid direct attacks on what were prepared positions, and instead waited for opportunities to pick off isolated individuals or groups who were away from the forts (Hoagland, 1999: 218; Connor, 2001: 68, 73). There is also the very reasonable possibility that, although one would expect a concerted attack upon one of these buildings to have been recorded somewhere (such as in police or newspaper reports), small 'scares' may have gone unrecorded. Similarly, the firing of a shot or two from the embrasures at Aborigines who approached too close to the dwelling may have been commonplace and so not recorded, even though such an action would technically constitute the use of the

structures in their defensive role. Furthermore, there is the unfortunate fact that, with the exception of Springvale, none of the station journals which recorded the day to day happenings are known to have survived. Such documents may have been invaluable in shedding light on the construction of the buildings and the frontier conflict events which occurred around them.

Although it is true that there is no evidence that the particular buildings investigated here were ever attacked, there *is* ample evidence for Aborigines attacking buildings within South Australia and the Northern Territory, and elsewhere in Australia. For example, between 1842 and 1851, the South Australian Police Commissioner's reports and the Adelaide press contained at least 27 reports of rural settlers being attacked, or threatened with attack, in their dwellings (Appendix 3).

A pattern seems to be apparent that buildings were often only built defensively *after* the initial settlers had been the target of Aboriginal resistance, and after they had already built non-defensive dwellings. When the runs were initially taken up, the settlers evidently did not seem to have anticipated much or any Aboriginal resistance to their presence, and hence did not think it necessary to build defensively. Often, the defensively designed structures were built in later developmental stages (e.g. Lizard Lodge), after a change in ownership of properties (e.g. Mount Benson), or during the later expansion of runs (e.g. Central Outstation). The irony is that by the time such structures *were* built, the most intense period of conflict had already passed, although this fact was, of course, unknown to the settler. This does not, however, mean that such structures were any less

functional, or built without real justification. It was simply a case of the settlers learning from experience. Therefore, such defensively designed structures can be seen as part of a colonising learning-curve, a physical expression of the settler's 'coming of age' in the Australian frontier environment as he/she came to terms with the true nature of the frontier and his/her position within it. A close parallel with this kind of process is observable in the case of the settlers of the East Cape of South Africa in the 1830s, as identified by Winer (2001). There, as in the sites investigated here, fortification was not used by civilians until *after* the peak of frontier conflict (Winer, 2001: 264-6).

What Does This Tell Us About the Nature of Australia's Frontier?

At the beginning of this thesis the question was posed, "was defensive architecture used by civilians on the South Australian and Northern Territory frontiers?" The results of the site investigations undertaken here are evidence that it was. The existence of this type of architecture in Australia provides information about what life on the frontier could have been like for both settlers and Aborigines. These sites tell us that, for both sides, the frontier was a place of open conflict and fear. Fear of Aboriginal attack may have caused the settlers to fortify their buildings, but this very specific fear of attack was only one aspect of the general atmosphere of fear that pervaded the lives of both sides. The historical evidence for actual violent conflict, even if not directed against the specific structures investigated here, but against the individuals who had the structures built, their employees, their neighbours and others in the region, tells us that conflict was present and the fear that naturally goes with conflict was particularly strong. The particularly strong nature of the fear is reflected in the fact that it caused the builders to modify the normal

construction techniques and designs in order to build them in such a way that helped to address their fear. These structures also highlight the existence of an active and effective Aboriginal resistance in the regions studied. This may not have been effective enough in the long run to prevent the loss of their land and people, but it was effective enough to cause the settlers to take extra measures to deal with it.

The existence of these civilian-built structures also tells us something about the extent of protection (or lack thereof) that was afforded to the settlers by the government, as represented by the police, the military, and the so-called 'Protectors of Aborigines'. The government was evidently either unwilling, unable, or particularly poor at preventing frontier conflict in the study regions and the settlers evidently did not consider that they could rely for protection on the government. This shows that often the civilian settler really was the 'front line' agent of colonial invasion and, through being the one who settled on the land and then proceeded to fortify and defend it against its traditional owners, was the one who actually 'conquered' it. This should, however, by no means be taken as evidence to exonerate the government from any blame in the 'dirty work' of colonisation. There is ample evidence of government military actions carried out against Aboriginal resistance (see for example, Connor, 2002).

The findings also tell us a great deal about how the nature of the frontier affected the mindset of the settlers who built these structures. Each of the builders (Gifford, Maurice, O'Halloran and Giles) had a documented history of experiencing suffering and/or violence at the hands of Aboriginal people prior to the construction of their fortified

buildings. The fact that these fortified structures were built in the wake of frontier conflict experience tells us that the settlers were evidently significantly affected by their previous experiences. This trauma, brought about by the nature of Australia's frontier (with its inter-racial violence), thus manifested itself in the construction of fortified buildings. This is demonstrated in all of the sites investigated here.

The structures, and the histories of the people who built them, also demonstrate the harsh reality of colonialism and the way it was carried out in Australia. The structures represent physical examples of the process of colonisation, a process which involved a society of strangers appropriating vast tracts of land for no other reason than capitalistic gain and displacing the previous occupants with little or no regard for their welfare and no compensation. With perhaps the exception of South Australia's Prussian settlers (see Jenkin, 1989: 99-118), these settlers did not emigrate order to escape persecution, but to become wealthy. As often as not, the speculators who took up pastoral runs did not even live in the colony, residing instead in England and administering their pastoral interests through managers and agents in the colony. If they did live in the colony, it was usually in a capital city.

These structures, or more particularly the situations that gave rise to their fortification, also tell us about the serious inter-cultural misunderstandings that often existed between Europeans and Aborigines on the Australian frontier. Initial contact between the newly-established settlers and the local Aborigines was usually friendly if the Aborigines had not had much previous experience with Europeans (Elkin, 1974: 363). This was because

the settler often unwittingly complied with the traditional Aboriginal custom of reciprocity (Elkin, 1974: 363). The settler, upon meeting the local Aborigines who came to his/her dwelling, would initially, out of hospitality and optimistic goodwill, provide them with some meat, damper and tobacco (Franklin, 1976: 28). The Aborigines, on the other hand, would have regarded the settler's provision of these things as his/her obligation. In return, the Aborigines allowed the settler to live in their country and often even provided male settlers with women. When, however, the Aborigines continued to carry out the reciprocity custom by taking what they needed of the settler's livestock, the communication breakdown became apparent, as the settler's concept of property and capital clashed with the Aboriginal concept of shared use of the land's resources. Eventually, after becoming frustrated and angered at the continual slaughtering of livestock and Aboriginal demands for flour, and tobacco, the settler invariably adopted a policy of keeping the Aborigines from approaching the property and took up arms against them (Franklin, 1976: 28). Naturally, the Aborigines also took up arms, both to defend themselves and to punish the settler for breaking their laws. The attacks upon settler buildings in this context were launched in response to the settler's refusal to comply with Aboriginal laws. Aboriginal objectives were either to procure the food which they saw due to them, punish the settler through violence, or a combination of the two. All this is represented in the fortification of these buildings.

As a final point, it must be understood that although these structures are described as 'defensive'- and so they certainly were to those who lived in them – in the broader context of colonisation, these buildings were just as much *offensive* constructions. They

were built on land belonging to Aboriginal people who were openly and demonstrably hostile to European society; land which the settlers occupied without the Aboriginal owners' permission or any consultation (the offensive nature of U.S. Army forts in the American West has also been noted, see Hoagland, 1999: 218). The very fact that the settlers felt the need to construct these buildings in such a way demonstrates this.

What Does This Tell Us About the Myths Associated With These Sites?

Stanner's concept of 'the great Australian silence' (Stanner, 1974: 18-29) appears to apply to the history of some of the sites investigated in this research, in that in some cases the story about a structure's defensive nature is completely omitted (e.g. Forrest, 1985). Although Foster, Hosking and Nettelbeck claimed that this 'silence' is less true of local histories because they are "the product of informed local history knowledge and completely at odds with the received wisdom of a twentieth-century white historical silence" (Foster et al. 2001: 9), Haggis has pointed out that "local history is not to be trusted because rural communities put a great deal of effort into covering up a past of violence and expropriation that was often uncomfortably recent in terms of family and community memory" (Haggis, 2001: 92). Although at first glance these two views appear diametrically opposed, the results of this research have shown how both can actually be true within the context of one site, and shows how this ties in with settler identity construction and social memory.

There are evidently two ways that local history information about fortified homesteads is dealt with in the construction process of Australia's settler identity. One is to ignore it

entirely, the other is to mythologize it. The purpose the first option achieves is to omit evidence of conflict and thus create the illusion that the land was either unoccupied by Aboriginal people or settled without any interference from the Aborigines. Essentially, this option seeks to remove the Aboriginal factor. In both of these cases, these myths create a stark separation between those who are the "insiders" (the European settlers) and those who are the "outsiders" (the Aborigines) in settler culture, a phenomenon identified by Linenthal with regards to commemorative activities at United States battlefield sites (Linenthal, 1991: 216).

The second option, that of mythologizing the conflict, while in a way acknowledging a prior Aboriginal presence on the land, also portrays the settler as a victim of violent 'savages', intent on murdering the settler in his own home. In this light, the Aboriginal threat is portrayed as one which the settler has to contend with as a hindrance to his/her heroic effort to farm the land and 'civilise' it.

Local histories are, in fact, the source of many of the myths about civilian use of defensive architecture. However, there are also exceptions to this within local histories, where defensive architecture has been played down or omitted altogether, such as Peter Forrest's book, *Springvale's Story* (1985). Furthermore, local histories associated with the sites investigated here have been found to include mentions of civilian use of defensive architecture while completely overlooking the frontier conflict and the causes that led to its construction (e.g. Baillie, 1978: 134; Dolling, 1981: 272, 313).

Springvale's Story provides a prime example of the way local histories can create the exclusionary past discussed in Chapter Two, through omitting information about defensive architecture and/or frontier conflict. This is the only published local history that deals specifically with the Springvale site and, as such, has become the definitive history of Springvale and the early history of the nearby town of Katherine. This makes the fact that the book makes no mention of frontier conflict - or the myth of Springvale's fortified store building – all the more significant.

This must be a deliberate omission, considering that 21 of the book's 73 pages deal with Alfred Giles' overland expedition to establish the station. Giles' own account of the expedition shows that he or his party were involved in no less than four separate violent clashes with Aborigines, as well as two other incidents which did not get to the physically violent stage (Giles, nd.: 35, 36, 39, 106). These clashes resulted in at least two Aborigines being shot dead and an undisclosed number being wounded, as well as two 'blackboys' procured by Giles as trackers being killed by hostile Aborigines (Giles, nd.: 35,39,106). Forrest must have known about these incidents, since the manuscript in which they are found appears in his bibliography.

Turning to the homestead of Springvale itself, Forrest made no mention whatsoever of the myth that the angled apertures around the upper storey walls of the store building were built as embrasures (e.g. as in Norris, 1976: 78). Nor did he attempt to explain two round apertures built into the stonework on either side of the homestead's rear door.

There is documentary evidence that these were also built as embrasures as a defence against Aboriginal attacks (Giles, H., nd.: 10).

Springvale's Story also contains no mention of the incidents of frontier conflict that were recorded in the Station Diary, also known to Forrest and included in his bibliography. The diary records the fact that Aborigines were spearing Giles' cattle and attacking settlers right up until at least 1889. For example:

> Wednesday 1st June, 1887: J. Heap reported niggers killing cattle on Haywards Creek (Giles, 1879-1894: Entry for 1/6/1887).

> Tuesday 1st October, 1889: Man named Chapman arrived from Mr Macartney's Auvergne Station reporting that Mr Thomas Hardy the manager was speared in the right heart by blacks & that he was not expected to live (Giles, 1879-1894: Entry for 1/10/1889).

As was seen in the section on Springvale above (Chapter Four), frontier conflict actually comprises a significant element of the history of Springvale's manager, Alfred Giles, and to a lesser extent, the station itself. Forrest's deliberate exclusion of all mention of frontier conflict creates a sanitized version of the history of this site in a similar way that the historians of Australia in general have done.

Settler societies are notorious for developing such "narratives of reversal" when it comes to the subject of settler/indigenous conflict and fear (Curthoys, 2003: 193). Indigenous people are portrayed as the invaders and the settlers as the defenders (Curthoys, 2003: 193). Whereas the myths associated with civilian use of defensive architecture make specific mention of the need for settlers to defend themselves against Aboriginal attack, no mention is made of the Aborigines' motives for attack, "[t]heir [i.e. the indigenous people's] history of the event has been overlooked, because it serves Euro-American [or Euro-Australian] needs to dehumanise [them] and justify conquest" (Shackel, 2001: 4). This lack of the explanation of a motive can only lead the average receiver to regard the 'aggressive' actions of the Aborigines as those of 'savages'. To omit Aboriginal grievances and denigrate them thus has served an important role in settler identity construction, that of removing settler guilt and facilitating the process of colonisation. Furthermore, this reversal of roles, casting the indigenous defender as aggressor and the invading colonist as defender, also serves the very important purpose of constructing a past that "allocates the land as won through suffering, and therefore as theirs" (i.e. belonging to the settlers and their descendants) (Curthoys, 2003: 199). The "self-chosen white victim finds it extremely difficult to recognise what he or she has done to others" (Curthoys, 2003: 199), and this is exactly what settler identity construction has traditionally been designed to do, since it serves to turn people's minds away from the dark truths of the foundations of their society and keep people proud of their whiteness and the nation that it forged.

The structures investigated here have, through their associated myths, evolved in their meaning to become just as much monuments as purpose-built statues. Amy Gazin-Schwartz and Cornelius Holtorf (1999: 16) pointed out, "[i]f we are interested in what monuments mean, it is our task as archaeologists to study the complete history of monuments rather than restrict our interests to the motivations that led to their first construction". Monuments are meant to create consensus and stability (Savage, 1997: 4). The durability of landscape and the monuments placed in it, makes them effective symbols for the sustaining of values over long periods (Foote, 1997: 33). This is precisely how the structures investigated here have been used by settler society mythology. Like monuments in general, the mythic interpretation of structures by settler society is designed to "make it worthwhile to be a descendant" (Greenbie, 1981: 247).

Implications for the Preservation of Australia's Cultural Heritage

The findings of this research highlight a significant gap in the recognised cultural heritage of Australia. The defensively-built structures identified within this research are significant from a cultural heritage perspective in several ways. First, they represent stark and indisputable memorials to the frontier conflict that occurred in their respective regions as a result of colonial settlement. They speak of the settlers' feelings of vulnerability, paranoia, fear and a 'siege mentality' in occupying someone else's land. They stand testament to the fact that Australia's colonial settlement often progressed in the face of determined Aboriginal resistance. However, they also stand testament to the settlers' determination to 'conquer' the land, and its traditional owners. When the settler

fortified his/her building, he/she was effectively declaring a determination to remain there despite fears of attack.

Second, not only do these structures speak of the settler's reactions to Aboriginal resistance, but they also serve as indisputable primary evidence of the existence of the active, courageous and determined Aboriginal resistance to invasion mounted by those people against whom the sites were designed to defend. Today, the recognition of these sites for what they are will send a strong message to the non-Aboriginal public that they were built on another people's land; land which the traditional owners were not willing to simply surrender to the invaders without opposition, but instead defended and contested to the extent that the settlers had to fortify their buildings against them. This latter value is particularly significant as it constitutes physical evidence of the existence of frontier conflict in the respective regions, evidence that could be incorporated into the current historiographical arguments regarding the nature and scale of Australian frontier conflict.

The cultural heritage of the Aboriginal communities in which these sites are located could also benefit from the sites' recognition and preservation as examples of defensive architecture. Similar to the way in which these sites are testaments to the settler's experience of the frontier, they can also be regarded as memorials or monuments to the Aboriginal resistance to invasion and their suffering.

Unfortunately, however, this perspective has not as yet managed to make its way into the popular mythology or public memory. Currently, the social memory constructing use of

these sites is clearly dominated by non-Aboriginal, settler society. In these modern, multicultural and apparently enlightened post-modern times, no group should be allowed to win the struggle for such culturally and historically significant places (Linenthal, 1991: 217). Only when all groups and sections of society can come to terms with both (or all) sides of their land's past, and accommodate the telling of more than one story, can that society be said to have reached maturity in terms of its identity.

However, with all of the above points, it is important that the actual interpretation and presentation of these sites be very carefully done. Poor interpretation and presentation could result in these sites reinforcing the old ideas of Aboriginal savagery and the settler as victim. Ideally, their interpretation would present these sites as representing the combined fears and circumstances of both Aborigines and settlers in a balanced and sensitive way.

From an architectural heritage standpoint, the structures identified here are highly significant because they represent a hitherto almost totally omitted aspect of our built heritage – that is, a specifically frontier-influenced modification to Australia's vernacular architecture. Furthermore, compared to non-defensively built civilian structures, surviving examples of defensively-built ones are far scarcer and hence the need for their recognition and preservation is greater.

Further Research

One of the aims of this research was to develop and test an historical-archaeological method by which examples of civilian use of defensive architecture could be confidently identified. It is hoped that by following the analytical process developed here others will be able to use this process as a 'tool' with which to identify other examples of this kind of architecture, even when no such myths are known to be associated with the sites. The identification of more of these types of sites will lead to a more complete picture of the nature and extent of frontier conflict and associated settler fears in Australia.

There is a great deal of potential for further research into this field. To begin with, there are many more potential dwelling and outbuilding sites whose defensive construction myths can be tested using the procedures adopted here (see Table 1). The defensive architectural techniques identified in the sites investigated here were all basically the same, that is, they consisted of embrasures built into the walls of primarily non-defensively used buildings. However, there is great potential for different applications of defensive architecture to be identified, such as embrasured curtain walls (as at 'Montacute' in Tasmania [Ryan, 1996: 104]), towers (as at 'Murray Downs' in New South Wales [Croft, 1965: 29,31]) and structures whose primary, or only, role was defensive. This latter application of civilian use of defensive architecture is particularly significant and is in need of further research. The evidence for such structures comes in the form of two photographs, both of the same structures, one of which is held by the John Oxley Library in Queensland and dated to ca 1905 (Figure 1.0), and the other appearing in Waterson and French's *From the Frontier: A Pictorial History of*

Queensland to 1920 (1987: 313) (Figure 5.4). These appear to be purpose-built block houses (small detached forts), constructed of mud brick and with embrasures in the walls for firearms. Apart from these two photographs and their accompanying captions, no other evidence of their existence or details of their use was found. The original caption to Figure 5.4 calls these structures "shielans" and claims that they were erected by Scottish settlers, hence the Scottish-sounding name (Waterson and French, 1987: 313). The text with the photograph from the John Oxley Library (Figure 1.0) also mentions that they were built in the early days for protection against the Aborigines.

Figure 5.4. Two shielans at Tin Tin Chilla station near Adavale in Queensland, probably erected ca 1866. These appear to be the same ones as depicted in Figure 1.0, though photographed at a later date. From Waterson and French, 1987: 313.

As well as further archival research, an archaeological investigation of a shielan site could prove highly significant to the study of Australia's frontier conflict. Archaeology could be employed here to show an indisputable example of civilian use of defensive

architecture in purely defensive structures. Not only could archaeological investigation show that such sites were built, but it has the potential to demonstrate they were actually used for their intended role. The evidence for this would come in the form of artefact finds of detonated percussion caps or cartridge cases within the interior space of the structures. Had these structures been used for their intended role, such objects would certainly have been discarded on the interior floor during the process of firing and loading of firearms, and owing to their soil floor and enclosed nature, there is a very good chance that these objects would have remained in place.

In conclusion, there is clearly a great deal of potential for archaeology to further investigate this hitherto untapped source of evidence for Australia's frontier, that is, the architecture of fear. The relative paucity of specifically 'frontier' material evidence, compared with, for example, more general evidence of the colonial period, makes this a particularly valuable resource, and one which can be used to construct a picture of the frontier past which is not exclusively reliant upon the written evidence, but also incorporates the material evidence.

APPENDIX 1 – Weapons of the Frontier

A good Winchester or Martini carbine, in conjunction with a colt's revolver…are your best friends, and you must use them too (Mounted Constable William Willshire [Willshire, 1896: 50]).

The purpose of this section is to describe the most common weapon types used on the frontiers of South Australia and the Northern Territory. It is important to have a firm understanding of the types of weapons used, their capabilities and limitations. This is because there is, and always has been, an inseparable association between the design of a defensive structure and the weapons intended to be used to defend it as well as assault it. Therefore, in order to be able to effectively assess the defensive functionality of a particular site, one must also possess an appreciation of the 'arsenal' available to the would-be defenders, as well as the perceived attackers. For example, the relative effective ranges of the weapons available at any given time may have an impact on the length of fields of fire created. Another way in which the type of weapons available can affect the design of a defensive structure is the rate of fire. This can also affect fields of fire since it follows that the higher the rate of fire the closer one can afford to allow an enemy to approach before opening fire.

In the following section the main technological innovations in popular frontier firearms are described in chronological order, along with their advantages and disadvantages. The purpose of this is to provide an understanding of the way these firearms functioned, and thereby gain an appreciation of their use on the frontier. Although limited to post 1836

(i.e. since South Australia's colonisation), the history of firearm use in the study area mirrors that of the rest of Australia. This chronology terminates ca 1885, since this is the construction date of the youngest structure investigated in this study. The time spans given for each period of most common use are only general. The method of extrapolating each span has been to take the year the firearms were first produced and then add approximately five years, making an allowance for the delay of new technologies to become available in Australia. The termination dates given reflect the period in which the next newest technological type came into common use, generally, though not necessarily, resulting in the previous type falling from common use.

European Weapons

Firearms, like cars, house styles or cuts of clothing, can take hundreds of different forms and be subjected to hundreds of variations. It would be impractical, and well nigh impossible, to document each and every type and style of firearm used in the study area. Therefore study of the use European weapons in South Australia and the Northern Territory's frontier is best undertaken as a study of general evolving weapons technology over the period. However, like most technological advances, there is an overlap amongst the users of that technology in terms of those who have access to it and those who do not. This is especially the case with firearms technology, where outdated firearms often continue in use long after they have been superseded.

There are several reasons for this. The first reason is cost. The newest technology is naturally the most expensive. This, in turn, causes the price of older types of firearms to drop. The most technically advanced types of firearms were only available to those who

could afford it. The poorer settlers had the money only to buy the cheapest, and therefore the least efficient, firearms (Denholm, 1979: 37). The type of firearms on issue to the colonial and British governments also had a large influence on the kinds of weapons available to civilians. Whenever the home government re-equipped its army with an updated firearm, large quantities of their old arms became available for sale or loan to the colonial governments for the use of their volunteer military forces, police, etc (see, for example, Slee, 1988: 29-31). Likewise, whenever the colonial governments upgraded their arsenals, some of the old arms were often sold off to the public. This led to the common situation of civilians having weapons considered obsolete to their colonial governments. In addition to this, the isolation of colonial Australia often meant that civilians could not obtain the latest type of firearm, even if they could afford it.

There were also practical considerations that may have influenced the types of firearms used by civilians on the frontier. One of these was the availability of ammunition. A frontier settler would not want a firearm which was so modern or obscure that it would be difficult or expensive to obtain a regular supply of ammunition for it. This resulted in most civilians opting for ex-military, or at least British firearms; these being the easiest to obtain ammunition for. The ready availability of ammunition was also one of the reasons for the continued use of muzzle-loading firearms in frontier South Australia and the Northern Territory long after breech-loading firearms had superseded them. It was much easier and quicker to cast one's own balls or bullets from a hand-held mould (an operation known as 'running ball'), than to reload spent cartridge cases. Although casting balls or bullets for a muzzle-loader was by far the most common way of reloading on the

frontier (see, for example, Halls, 1974: 14), there is archaeological evidence that some settlers did reload breech-loader cartridges (see, for example, Connah, Rowland and Oppenheimer, 1978: 33).

Conservatism may also have played a part in the types of firearms used by the frontier settlers. People are just as sceptical of new firearms technology as they are about other types of technology. The British government itself was remarkably conservative in this respect (see, for example, Pegler, 1998: 81). For the civilian settler whose personal firearm has served him/her faithfully through many a tough time and situation, it may have been seen as an unnecessary risk to change to a 'new-fangled' type of gun.

These factors made it almost impossible to say for certain what type of firearms a particular settler owned/used at a particular time. It is, however, possible to make an educated guess, based upon what is already known about civilian use of firearms in colonial South Australia and the Northern Territory. For the purposes of this investigation the many and varied types of firearms commonly used in the period (1836-ca 1885) have been grouped into six categories based upon technological developments. These have been placed in a rough chronology of their use: the flintlock smoothbore; the percussion smoothbore; the rifled musket; the capping breechloader; the single-shot breechloader; the revolver; and the repeating rifle.

A Note On Blackpowder

In the period under investigation here, all firearms used blackpowder as a propellant. Blackpowder is very different from modern firearm powders in terms of its characteristics. These characteristics themselves impacted on the design and characteristics of the firearms and therefore warrants some comment. Blackpowder is composed of three basic ingredients: potassium nitrate (saltpetre), sulphur and charcoal. When it burns, not all of it is consumed. What is not remains as a black, sooty residue in the barrel of the firearm (known as 'fouling') which hardens through contact with air. The more shots fired without cleaning the bore, the more clogged it becomes until, in the case of muzzleloaders, the pressure required to ram the projectile down the bore becomes such that the soft lead projectile is deformed, making firing less accurate. If this is continued it eventually becomes impossible to load the piece. This effect is not usually a problem for breechloding firearms since they do not require the projectile to be driven down the barrel when loading. However, the build-up of fouling in the bore of a breechloader will still adversely affect its accuracy.

Flintlock Smoothbore (1836-ca 1860)

Figure 1 Flintlock musket, .75 calibre. Author's Collection.

This type of firearm usually takes the form of a musket or a fowling piece. A musket is a muzzleloading, smoothbore military long arm. A fowling piece is a muzzleloading, smoothbore civilian long arm, known today as a shotgun. A muzzleloader is a firearm that is loaded by pouring a measured amount of blackpowder down the barrel at the muzzle. This is followed by the projectile (or projectiles in the case of shot), and usually a wad on top to hold it all in. This combination is driven home to the breech of the barrel with a ramrod.

The flintlock smoothbore consists of an iron tube affixed to a wooden stock, with a small touch-hole in the right side of the breech, through which the ignition flame communicates from the pan outside to the main charge in the barrel. The ignition flame is provided by a piece of flint, held in the screw-tightened jaws of the spring-loaded hammer or cock, striking a hinged piece of steel called a frizzen and throwing a shower of sparks onto a small amount of powder held in the pan (Haythornthwaite, 1990: 71).

Advantages:

The main advantage of the flintlock smoothbore was not the ignition system but the smooth-bored barrel. Because firearms of this type were invariably ex-military muskets or civilian-made fowling pieces, they were usually of a large calibre. This combination of smooth bore and large calibre made these firearms very versatile. They could be loaded with small pellets to use as a shotgun to take birds; they could be loaded with larger balls called buckshot to take larger animals such as rabbits or the like; or they could be loaded with a single large ball which was capable of killing people (Figure 43). This versatility

made the flintlock smoothbore the early settler's weapon of choice for the first twenty years or so of the colony (Denholm, 1979: 33).

Figure 2. The three types of 'load' which can be used in a smoothbore muzzleloader. To the left is a single large ball, at centre is a charge of 'buckshot' and at right is a charge of 'birdshot'. All projectiles are made of lead.

Disadvantages:

One of the disadvantages of the flintlock was the unreliability of its ignition system. In order for the firearm to discharge, every part of the system had to work correctly. This allowed for several things to go wrong. First, the flint itself had to have a sharp edge which, if not maintained by means of careful and skilled knapping, would not throw sufficient sparks to ignite the pan powder. The flint also had to be tightly held in the jaws of the hammer or cock and its striking edge correctly aligned with the face of the frizzen. Then, even if enough sparks were thrown to ignite the pan powder, it might fail to ignite the main charge due to the touch-hole being blocked with oil, grit or powder residue (the latter known as 'fouling') (Haythornthwaite, 1990: 72).

Another great disadvantage of the flintlock mechanism was the effect inclement weather could have on it. Although the frizzen incorporated a pan cover into its design, this really only served to prevent the priming powder from falling out of the pan as the firearm was moved about. The pan cover was not watertight, which meant that rain could get in. Blackpowder is hydroscopic, which means that it attracts and absorbs moisture. When it does get damp it will not ignite. This rendered the flintlock extremely unreliable in damp weather and completely useless in heavy rain (Haythornthwaite, 1990: 72).

Figure 3 Close-up of the lock, shown here in the 'half cock' position. In this position the pan is closed, protecting the priming powder to some extent but the trigger cannot be pulled. To fire the piece the hammer must first be pulled further back to 'full cock'. Author's Collection.

The flintlock smoothbore also had a relatively slow rate of fire; three shots a minute in experienced hands and under favourable conditions. The rate of fire was further reduced by the fact that, for any one of the several reasons described above, the flintlock would

misfire about once every six and a half shots under favourable conditions, rising to one in four shots in wet weather (Haythornthwaite, 1990: 72).

Another one of the smoothbore's disadvantages was its relatively short effective range and, hence, inaccuracy. The term 'effective range' means the range at which a firearm can be reliably expected to hit what it is aimed at. For the smoothbore military musket it must be understood that the target it was designed to hit was a rank of European-trained soldiers standing shoulder to shoulder, measuring around 1.82 metres high by 30.48 metres wide (Pegler, 1998: 56). However, on the Australian frontier the targets were usually individuals or small, loose groups. Figures for effective range against individuals vary, but the general consensus is that at about 50 metres one would *probably* hit one's target, whereas at around 100 metres one *may* hit one's mark, if lucky (Pegler, 1998: 55).

Percussion Smoothbore (ca 1840-ca1870)

Figure 4. Civilian percussion smoothbore. This was commonly known as a 'fowling piece' as its traditional use was for shooting wild fowl. This example is single barrelled. Courtesy of the South Australian Museum.

This type of firearm differs from the flintlock smoothbore only in its ignition mechanism. The main charge is set-off by means of a 'percussion cap' which is a small, cup-shaped piece of copper, filled with a small amount of fulminate – an explosive that can be detonated by a blow. The cap is placed on a 'nipple' which has a small vent that leads into the chamber and the main charge. The firearm has a spring-loaded hammer which can be cocked so that by pulling the trigger it falls on the cap, detonating the fulminate and sending a jet of flame through the vent and into the chamber, where it in turn detonates the main charge, thus firing the piece. The percussion smoothbore is a muzzleloader and can be loaded with the same types of projectiles as a flintlock smoothbore, namely a single, large lead ball, or many smaller balls. It may be either single barrelled or double barrelled.

Advantages

The percussion smoothbore shared one of the advantages of the flintlock smoothbore, namely its ability to function as a shotgun as well as being able to be loaded with a single

large ball. However, the great advantage the percussion mechanism had over the flintlock was the former's reliability (Pegler, 1998: 81). As long as the percussion caps were kept dry, and allowing for the odd 'dud', they could be expected to go off every time. Furthermore, owing to the fact that the caps were sized so that they had to be firmly pressed onto the nipple, they therefore provided a reasonably effective water seal, rendering the percussion firearm far more reliable in inclement weather.

Disadvantages

Although the percussion caps themselves were quite reliable, and the system more resistant to wet weather, there was still the ever-present issue of fouling. In order to minimise loss of gas from the main charge, the nipple vent needed to be very narrow. The fulminate itself left a residue in the vent, as well as the burnt blackpowder from the main charge. This could result in the vent becoming blocked which, even if the cap went off, would prevent the flame from reaching the main charge, resulting in a miss-fire. However, compared with the flintlock, the percussion system's miss-fire rate was drastically lower. For example, in tests carried out by the British Government in 1834, it was found that, whereas the flintlocks miss-fired once every seven shots, the percussion firearms failed only once in every 166 shots (Pegler, 1998: 81).

Rifled Musket (ca 1858 - ca 1870)

Figure 5. The Pattern 1853 Enfield rifled musket, .577 Calibre. This is the short 'musketoon' model, a term which effectively means the same as 'carbine.' There was also a longer '2-band' model and an even longer '3-band' model, so designated on account of the number of barrel bands present securing the barrel to the stock. Courtesy of the South Australian Museum.

The rifled musket represented a great leap forwards in terms of firearms development. A 'Rifled musket' can be defined as a large-calibre, muzzleloading military longarm whose bore is rifled. 'Rifling' is the engraving of the bore of a firearm's barrel with (usually) several spiralling grooves. These impart a spin on the projectile, which causes it to fly further and with more accuracy than a smoothbore. The concept of rifling had been known for a very long time prior to the introduction of the rifled musket, however muzzleloading rifles were never popular in colonial Australia. This was probably due to the relatively slow loading time required to load a rifle. In order to make the projectile engage with the rifling it was necessary that it fitted the bore tightly. This was achieved by wrapping the projectile (a lead ball) in a cloth 'patch' before driving it down the barrel. This was a slow and sometimes difficult process after fouling had accumulated.

What really made the rifled musket so revolutionary was not so much the rifling as the projectile it used. This was known as the 'minie' bullet, named after the Frenchman who developed it. This was a conical projectile, superficially similar in appearance to the popular modern concept of a bullet. The minie obviated the need for a tight fitting projectile by having a thin, hollow based 'skirt', which would expand into the rifling grooves by the force of the exploding powder charge behind it. Thus, the bullet could be relatively loose-fitting to speed up loading and avoid getting jammed by fouling (see Figure 35) (Pegler, 1998:82).

Figure 6. Two original .577 calibre minie bullets excavated from the site of a South Australian colonial militia's practice range in Old Noarlunga, South Australia (Grguric, 2005: 12-13). The impression of the firearm's rifling can clearly be seen on the example at left, in the form of lines running lengthways down the side of the bullet. These examples date from between ca 1859-1866. Author's Collection.

Advantages

The advantage of the rifled musket was its ability to have a similar rate of fire to a smoothbore longarm, though with far greater accuracy, and at longer ranges. Owing to the period when rifled muskets were introduced, all of them use the percussion system of

ignition, with the same advantages as described under the section on 'The Percussion Smoothbore' (i.e. reliability and resistance to inclement weather).

Disadvantages

Rifled muskets were not as effective at firing shot (birdshot and buckshot) as smoothbores. This was because the rifling would cause the shot to fly out at erratic and wide angles. This rendered them good for shooting large game and fellow humans, but not so good for procuring small game. This would have represented a significant disadvantage in the eyes of a settler on the frontier, who would have used his firearms for hunting far more frequently than for fighting.

Capping Breechloader (ca 1862 – ca1875)

Figure 7. Westley-Richards capping breechloading carbine. Courtesy of the South Australian Museum

Figure 8. Callisher & Terry capping breechloading carbine. Courtesy of the South Australian Museum

The next major development in firearms technology was the capping breechloader. This type of firearm represented an intermediate step between the old percussion system and the true breechloader. The cartridge comprising a bullet attached to a tube of combustible paper containing the powder charge. This was loaded into the chamber via the breech, or rear, of the barrel. Where this type of firearm differed from the true breechloader was that it still required a separate percussion cap to be placed on the nipple, as in a percussion firearm. When fired, the flame from the cap would burn through the paper cartridge and ignite the main charge which in turn burnt up the cartridge paper at the same time as it fired the bullet.

Advantages

As it was no longer necessary to turn the firearm around, draw the ramrod, ram down the load and replace the ramrod after each shot, as with a muzzleloader, the capping breechloader increased the rate of fire. The Westley-Richards, for example, had a rate of fire of six shots a minute (Halls, 1974: 80) which was almost double that of a muzzleloader. It was also more accurate, since one could now load a larger diameter bullet, something that was practically impossible with a muzzleloader. A further

advantage was that one could now reload relatively easily on horseback, prone, or (most relevant to this study) without having to withdraw the barrel through an embrasure each time.

Disadvantages

After the introduction of true breechloaders, the capping breechloader's rate of fire was disadvantaged by the need to separately prime the weapon with a percussion cap. Also, if the paper cartridges became wet they could easily be rendered useless. For the same reason, they were fragile and could be broken or bent.

The Single-shot Breechloader (ca 1870 – ca 1885+)

Figure 9. Snider carbine, .577 calibre. Short rifles such as these were favoured by the settlers for their handiness. This is the model known as the 'Artillery Carbine', as it was originally designed by the British for their artillerymen. Note that it is of the same basic design as the rifled musket above (figure 34) though this one is a breechloader. Author's collection.

Figure 10. Martini-Henry carbine, .450/.577 calibre. This is the short 'Cavalry Carbine' model, designed for use on horseback and therefore very popular with frontier settlers. Courtesy of the South Australian Museum.

The introduction of the true breechloader was made possible by the invention of the metallic cartridge with a self-contained prime. Such cartridges were essentially the same in terms of their appearance and characteristics as modern cartridges. They have a metallic case or 'shell', into the underside of which a small explosive device called a 'primer' is set. The case holds the charge of powder (in this period still blackpowder), sometimes some form of wadding or lubrication and a bullet.

Figure 11. Cartridges for single-shot breechloading rifles. At left is a Snider cartridge, at right a Martini-Henry cartridge. The 'primer' which replaced the percussion cap can be seen in the centre of the bases of the cartridges. Author's collection.

To load this type of firearm one simply opened the breech, inserted a single cartridge, and closed the breech. Some firearms of the time (such as the Snider) required a further step, that of cocking the hammer, whereas others (such as the Martini-Henry) automatically cocked themselves upon closing the breech.

Figure 12. The loading of a single-shot breechloader. This shows a cartridge being inserted into the breech of the Snider carbine pictured above (Figure 38). Once inserted, the hinged breech-block, which can be seen to the right of the breech in the open position, is snapped shut. Author's collection.

Once the shot had been fired, one reloaded by opening the breech and removing the spent case. Different designs of firearm achieved this in slightly different ways. For example, the Snider the breech-block to be pulled back manually to allow the case to be pulled out of the breech, after which the firearm had to be canted to the side to eject it. The Martini-Henry, on the other hand, automatically pulled out the case and ejected it upon the opening of the breech mechanism.

Advantages

The single-shot breechloader had advantages over the previous systems in every way. First, the potential rate of fire was greatly increased. One no longer had to place a separate cap on the nipple. One had only to load in a cartridge, fire, eject the spent case and reload. The second advantage, shared by the capping breechloader, was that the bullet could be bore diameter, thereby ensuring it engaged the rifling uniformly, resulting in accuracy. The increased ballistic efficiency afforded by the cartridge also meant greater accuracy at longer ranges. For example, the long models of Snider and Martini-Henry had sights which could be adjusted for shooting up to 1200 yards (just over a kilometre). However, it must be said that one would still have had to be an extremely accomplished marksman to be able to strike a target the size of a human at this range.

Disadvantages

The single-shot breechloader's main disadvantage – its rate of fire - is really only evident when compared with later, more advanced firearms. The next generation of longarms after the single-shot breechloaders were known as 'repeating' firearms. These had the advantage over the single-shot firearm of being able to hold a number of cartridges in a magazine, allowing one to fire all of them without having to reload in-between shots.

One disadvantage of this type of firearm compared to some earlier types concerns its ammunition. Owing to the use of self-contained metallic cartridges, it was much more technically difficult to reload one's own ammunition for a breechloader than a

muzzleloader. However, compared to the great advantages offered by this type of firearm over muzzleloaders, this disadvantage would have been negligible.

The Revolver (ca 1860 – ca 1885+)

Figure 13. Colt 'Navy' pattern revolver, introduced in 1851. The American-designed Colt revolver was very popular in Australia, although English revolvers were also popular. Courtesy of the South Australian Museum.

The availability of the fully-developed revolver in the colonies revolutionised the use and popularity of pistols on the frontier. This was because it was the first reliable and serviceable pistol which could fire several shots in quick succession. Its advantage over the old single-shot percussion smoothbore pistols is therefore obvious. The single shot pistols, though certainly possessed by the settlers, were not much use against Aborigines, as they were highly inaccurate at well within spear-range and could only be fired once before having to reload. Until the introduction of the revolver, settlers relied upon their longarms. The revolvers popularly used on the frontier were initially all 'cap-and-ball', which meant that each chamber was loaded with a charge of powder and a bullet or ball

(which could be combined in a combustible cartridge of skin or paper). Percussion caps then had to be placed on all the nipples separately. Later in the period, such as the 1880s, metallic cartridge revolvers became available which did not require separate capping.

Advantages

The advantage of the revolver was its high rate of fire compared to single shot long arms. This allowed it to be used either in conjunction with long arms, or to deliver a rapid close range series of shots which would hopefully stop an Aboriginal attack. It was also relatively light and small, making it easy to carry.

Disadvantages

The main disadvantage of the revolver, at least compared to the long arms it was used concurrently with, was its short range. Its effective range was no more than 30-50 metres. Furthermore, unless one carried spare, preloaded cylinders to exchange with the empty one, it was not practical to reload in a close range combat situation. Because of these factors, the revolver was only really suited for use in emergency situations, such as the sudden appearance of attackers at close range, or when attempting to break out of a desperate situation.

The Repeating Rifle (ca 1875 – ca 1885+)

Figure 14. Model 1873 Winchester carbine. Courtesy of the South Australian Museum.

Figure 15. Spencer carbine. Courtesy of the South Australian Museum.

The 'repeater' was the last major step in the succession of weapon technologies used in colonial South Australia and the Northern Territory in the period under investigation here. The two main 'makes' of this type of rifles were the Winchester and the Spencer. These types of rifles were known as 'repeating arms' because they could fire a number of shots before needing to be reloaded. Their ammunition was a self-contained cartridge, similar to those used in single-shot breechloaders, comprising a brass case which held a primer, a charge of blackpowder and a projectile. Their basic principle consisted of a tubular magazine into which a certain number of cartridges were manually inserted. In the case of the Winchester, the magazine was located in the stock beneath the barrel and had a capacity of six cartridges. In the Spencer, the magazine was located in the butt and could hold seven cartridges at a time.

Advantages

The advantage of the repeater is obvious. It was the first generally available type of longarm that was able to fire several consecutive shots without having to reload. This gave it the capability of delivering a hail of bullets very quickly, which could stop a group of attackers in its tracks. Alternatively, it could still be fired slowly, allowing the firer to take deliberate aim. One settler with a repeater could now wield the same amount of firepower as three or four armed with single shot breechloaders and perhaps half a dozen with muzzleloaders.

Disadvantages

The only real disadvantage of the repeating carbines in use on the Australian frontier was their range. This was relatively short compared to the single shot breechloaders and even the rifled muskets. For example, the Model 1873 Winchester carbine was not considered effective beyond 90-160 metres (Halls, 1974: 148).

Aboriginal Weapons

Just like European weapons, in many areas of Australia, hunting and fighting weapons were interchangeable. However, in other areas, specific types of weapons were designated for hunting or fighting (Akerman, 1992: "Hunting and fighting weapons"). Whereas the weapons of the European settlers in Australia all originated from the industrial factories of Europe and the United States, those of the Aborigines were developed and produced by each individual Aboriginal group. Unlike the European situation, where access to weapon types was determined to a large extent by the arms trade and not geographical location, different Aboriginal nations across the country

sometimes used weapons which others did not. Nevertheless, the following provides a general description of the types of weapons used for fighting by Australian Aborigines.

Spears

Spears, although made in many different types, were used throughout Australia for fighting. In some areas of Australia, only one or two types were used, while in others over ten different types were used by the same people (Akerman, 1992: "Hunting and fighting weapons"). For example, an illustration in McCourt & Mincham (1987: 35), originally appearing in Angas (1969[1847]), shows five different types of spears that were used by the Aboriginal people of the Coorong in the south east of South Australia.

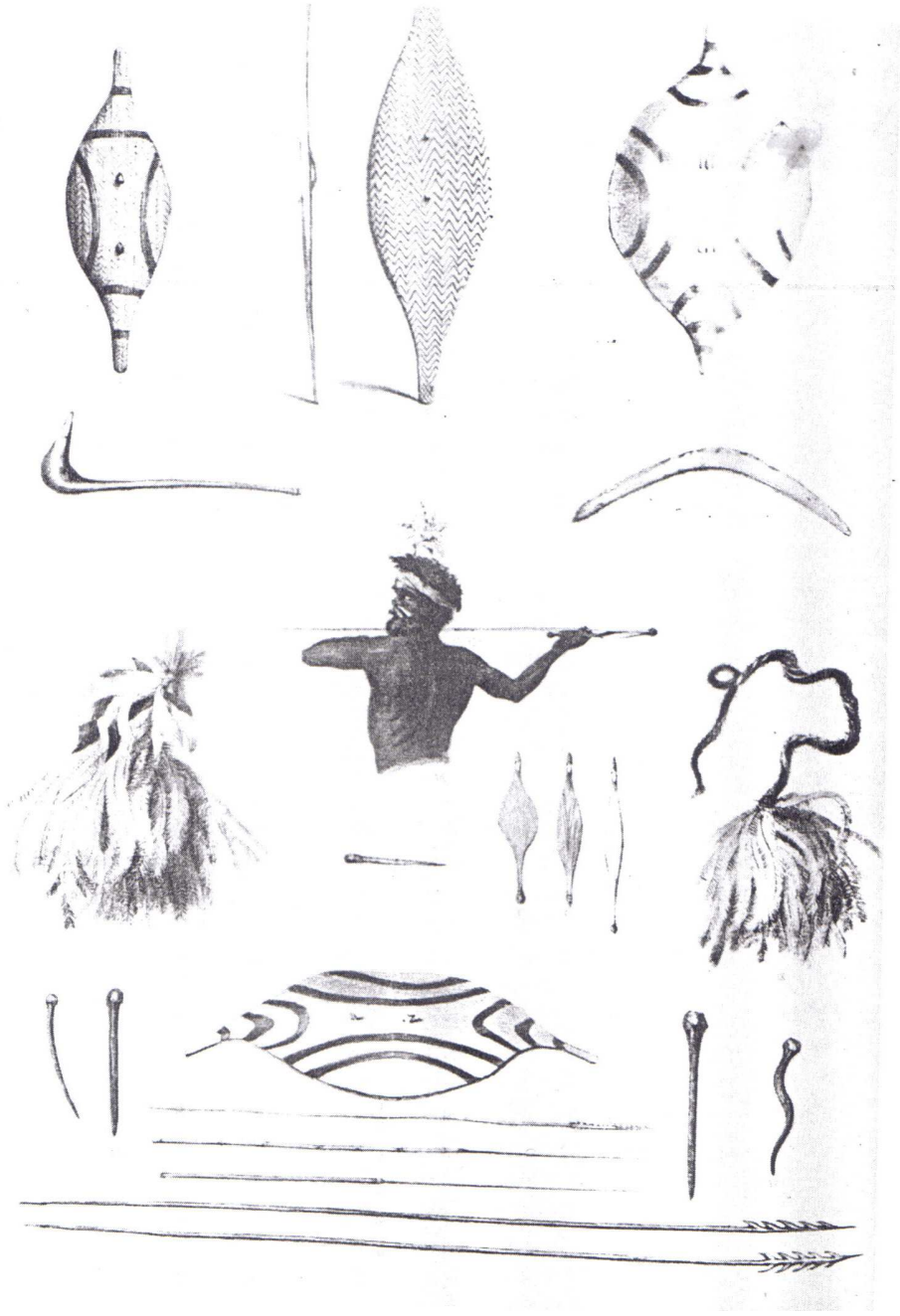

Figure 16. Weapons of the Aboriginal people of the Coorong region in South Australia's south east. Shown are shields, boomerangs, a warrior using a woomera along with some types, clubs and five types of spears. From Angas, 1847, reproduced in McCourt & Mincham, 1987: 35.

Spears, like all Aboriginal weapons, were made of wood. Those in the south east of South Australia, for example, were made of sheoak or ti-tree (Vaughan, 1986: 9). Their lengths, thickness of their shafts, and points varied considerably, depending on available materials, cultural tradition and use. Points could either be simply the sharpened, fire-hardened end of the shafts, a single point hafted stone-point, or an intricate series of barbs made of small, razor sharp pieces of wood, bone, stingray spines or stone (Akerman, 1992: "Hunting and fighting weapons"). The shafts were usually kept as light as possible to allow them to be thrown a reasonable distance. It was for this reason that some shafts were made of reed (Mckernan & Browne, 1988: 99).

As to the question of the spear's effectiveness, the South Australian writer Bull provides a valuable contemporary account of a display of Aboriginal war spear throwing from the late 1830s or 1840s (Bull, 1972[1884]: 84). Archery targets of the "full size" (approximately 1 metre in diameter) were placed at approximately 80 metres from the group of warriors. The leader of the Aborigines, however, said, "No, no, too much long way" (Bull, 1972[1884]: 84). One of the targets was then brought in to a range of approximately 64-68 metres, to which the leader said, "Blackfellow no throw big one spear that long way" (Bull, 1972[1884]: 84). However, at approximately 54 metres he decided to attempt a throw, though he also expressed much doubt in his ability to hit the target at this range. Using a woomera, he launched the spear, but only managed to strike the rim of the target with the side of the spear rather than the point. The other warriors also attempted to strike the target, but with no success, though they did get close (Bull, 1972[1884]: 84).

It can be concluded from the above account that at approximately 50 metres one would have to be lucky to spear an individual person. However, the fact that the Aboriginal leader quoted above remonstrated that he could not throw a "big one spear" such a distance implies that he knew he had the wrong type of spear for this distance and that a shorter or lighter spear was also used by this particular group for longer range targets. It appears that it was not so much a case of the Aboriginal people not knowing the capabilities of their weapon, but a case of the Europeans who set up the display failing to understand that different types of spears were chosen depending on the particular task.

This is further supported by other accounts that claim Aboriginal spear coulds be accurate at significantly longer ranges than 50 metres. For example, Lieutenant General Mundy observed that spears were given a quivering motion that they retained in flight, making them deadly accurate across as much as 100 metres (Mundy, Lt. Gen. G., cited in McKernan & Browne, 1988: 99). In addition, pastoralist Gideon Lang wrote in 1865 that he had known one man to be pierced in the thigh by two spears successively thrown at a range of approximately 64 metres (Lang, cited in McKernan & Browne, 1988: 99). Presumably spearing capabilities differed between different groups, but the above evidence does at least show that they could be very effective between 50 and 100 metres.

As for 'rate of fire', or more correctly, 'rate of launching', against muzzle loading firearms - and even single shot breech loaders - the spear had a clear advantage. Lang also noted that, "A blackfellow, with some eight or ten spears in his hand…will throw

them all while a white man is reloading after firing two shots" (Lang, cited in McKernan & Browne, 1988: 99).

The disadvantages of the spear were, however, still significant, becoming more so as European weapon technology developed. Compared to bullets, spears travelled much slower. So slow in fact, that it was actually possible to dodge and/or parry it with a long arm (McKernan & Browne, 1988: 99), the way Aboriginal people themselves did in their own traditional battles (Akerman, 1992: "Hunting and fighting weapons"). Another great disadvantage of the spear compared to the bullet was its relative lack of effectiveness. Unless one was speared in a vital organ, or was not helped in time, spear wounds were not usually fatal. Newspaper articles and police reports of the time contain numerous accounts of spearing victims whose wounds were not fatal. For example, Eyre Peninsula hut-keeper William Light received two spears in his body in 1851, and, although he was described as "dangerously wounded", he recovered (*Register*, May 27, 1851: 3A). One Victorian settler is recorded to have survived twelve spear wounds to revenge himself "amply" (Westgarth, cited in McKernan & Browne, 1988: 99).

Spear Throwers

Much of the range of the Aboriginal spears was due to the use of a spear throwing device, usually called by Europeans a woomera (or woomerah). These take the form of a length of wood of between 40 and 130 centimetres, with either a peg or a socket at one end to receive the butt end of the spear. The woomera was held at the opposite end and used to 'fling' the spear. However, not all Aboriginal groups used the woomera, and not all types

of spears were designed to be used with them (Akerman, 1992: "Hunting and fighting weapons").

Clubs and Throwing Sticks

Like spears, clubs and throwing sticks were used by all Aboriginal peoples (Connor, 2002: 5). These were fashioned from various lengths of hardwood, their size and shape depending on the particular group that made them. Often the two were one and the same, that is, the one weapon could either be thrown or used in hand-to-hand combat (Akerman, 1992: "Hunting and fighting weapons").

Although they could be quite effective due to their weight, the throwing stick, like the spear, could be avoided provided the target saw it coming (Connor, 2002: 6). However, the club was a very effective weapon for either finishing off already wounded victims, or for surprise attacks. Although it has been estimated that clubs were only used in about 20 per cent of attacks, this was the weapon that was most used to actually kill settlers (Connor, 2002: 6).

Boomerangs

The boomerang is thought to have developed as a modification of the throwing stick (Akerman, 1992: "Hunting and fighting weapons"). Fighting boomerangs were generally heavier than the returning type and, like all Aboriginal weapons, differed in design depending on the particular area they came from. These could be lethal weapons in the hands of experienced throwers (Akerman, 1992: "Hunting and fighting weapons"). The

Sydney Gazette recorded the use of one in 1805, writing that when "thrown at 20 or 30 yards distance [18 to 27 metres], [it] twirled round in the air with astonishing velocity, and alighted on the right arm of one of his opponents, actually rebounded to a distance of not less than 70 or 80 yards [64 to 73 metres], leaving a horrible contusion behind, and exciting universal admiration" (*Sydney Gazette*, Jan 27, 1805, cited in Connor, 2002: 5).

Shields

Shields were used in many, but not all, areas of Australia (Akerman, 1992: "Hunting and fighting weapons"). They were mostly used in the traditional formal battles, where they were effective for deflecting missiles and stopping clubs (Connor, 2002: 6). Constructed of both hardwood and softwood, they were made in many different shapes and painted with designs significant to the individual bearer or the group in general (Akerman, 1992: "Hunting and fighting weapons").

European Influences on Aboriginal Weaponry

The Aboriginal groups who came into contact with European material culture did not take long to adapt it to, or integrate it with, their own traditional weapon types. Tomahawks (small one-handed axes), originally traded to Aboriginal people by the settlers, became highly prized and efficient weapons used against the invaders. One example of their use in this way can be found in *The Northern Territory Times* of January 25th, 1879, which records the result of an Aboriginal attack in which the European victim's colleague returned to the camp and "…found that Mr Travers had been

murdered, his head being nearly cut off by two blows of a tomahawk" (*NT Times*, Jan 25, 1879: 2B).

Another major way that Aboriginal people made use of European material culture was by incorporating European materials into the construction of their weapons. For example, the Aborigines of northern Queensland traditionally made long, heavy sword-clubs out of wood. With the arrival of Europeans in this area, the Aborigines started making these weapons out of worn-out cross-cut saw blades (Akerman, 1992: "Hunting and fighting weapons"). Glass, ceramic and metal was also used when available for spearheads as a substitute for stone, bone or wood (Figure 19).

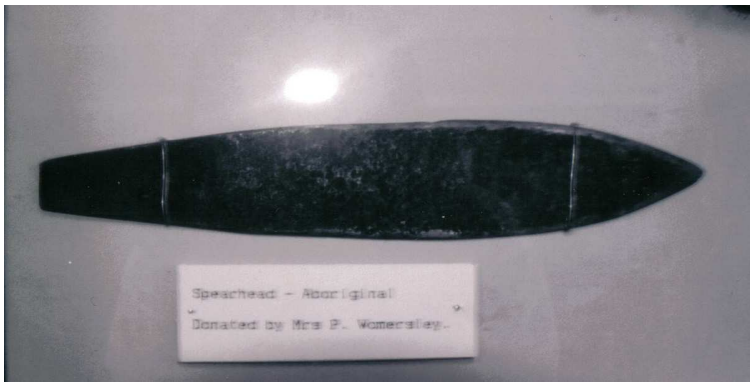

Figure 17. Aboriginal spearhead fashioned out of a piece of iron. Probably from the Katherine region of the Northern Territory. Katherine Museum, Katherine, N.T.

APPENDIX 2 – Spearings of Settlers in the Northern Territory 1879-1889

Spearings of People and Livestock Recorded by Giles and his Employees in the Springvale Station Diary (Giles, 1879-1894) and *The First Pastoral Settlement in the Northern Territory* (Giles, nd.:50):

9/1880 – Cattle speared at Springvale.

24/1/1884 – Cattle spearings near Delamere.

8/1884 – Two men speared and station burned at Anna's Reservoir.

14/9/1885 – Aborigines attempting to spear cattle at Delamere.

17/3/1886 – Two European men and one Chinaman speared on the Wilton.

28/4/1886 – One European man speared in the Victoria River district.

29/5/1886 – One European man and one Aboriginal man speared near Ingalary.

1/6/1887 – Cattle being speared on Haywards Creek.

1/10/1889 – One European man speared at Auvergne station.

Other spearings of people in the Northern Territory in the Late 1870s and 1880s, taken from contemporary Northern Territory Police reports (McLaren, 1997: 264-309):

12/1879 – One European man speared on Croker Island.

6/1879 – One European man speared at Limmen Bight.

3/1880 – One European man speared at Collet's Creek.

6/1880 – One European man speared at Limmen Bight.

12/1880 – Two European men speared at Virl's Spring.

5/1881 – One European man speared at Limmen Bight.

5/1882 – One European man speared at Elsey Station.

6/1882 – Two Chinamen speared between Rum Jungle and the Adelaide River.

29/8/1883 – One European man speared at Lawson Creek.

9/1883 – One European man speared at the McArthur River.

11/1883 – One Chinaman speared at Driffield.

2/1884 – Two Chinamen speared at Bowen Straits.

3/1886 – One European man and one Chinaman speared at Wongalara Station.

7/1887 – Attempted spearing of Constable Daer.

APPENDIX 3: Reports of Aboriginal Threats to Buildings in South Australia Between 1842-1851, Taken from the Commissioner of Police's Reports and Local Press.

Commissioner of Police's Reports:

GRG24/6/1842/471

"…at Port Lincoln Mr Biddle's station was attacked and himself and two servants murdered and his hut stripped of its contents."

"To the north Mr Peters' hut keeper was most desperately wounded and left for dead by two blacks."

"…several outrages of a less grave and serious nature have been perpetrated by the natives at the stations of Messrs Rodwell, Peters, Bagot and others whose sheep have been speared and their huts plundered."

GRG24/6/1843/1269 ½

"The Lake Tribe to the S.E. have been the most troublesome. Early in July they robbed the hut belonging to Messrs Jeffery and Bean near Currency Creek."

GRG24/6/1843/474

(at the station of Melrose) "...after binding the shepherd and hut keeper they robbed the hut…"

GRG24/6/1848/1156

Murder of hutkeeper Mr Hamp in Port Lincoln district.

One of Mortlock's hutkeepers speared.

GRG24/6/1849/238

"…at one of Mr Mortlock's stations in the N.W. coast about 85 miles from Port Lincoln, in the month of October last, a person named Smith, one of Mr Mortlock's shepherds hearing his dogs bark went out of the hut and looked around and stooping down for some purpose received a spear in his back, from some natives. It is presumed their object was to have robbed the hut, but seeing him in the act of seizing his gun, which was just within the door, they decamped at speed."

GRG24/6/1849/1404

"On the 3rd May Mr James Beevor, a gentleman of great respectability and a very old colonist, who occupied a sheep station about fifty miles from Port Lincoln was barbarously murdered at the door of his hut by the Aborigines."

"At a station belonging to Mr Vaux on Lake Hamilton…Corporal Geharty, on entering the hut perceived the body of the woman lying on a bed place dead."

"According to Mr Horn's account his hut had been stripped of everything it contained during his temporary absence."

GRG24/6/1849/802

"…at Port Lincoln …the native attacked the hut of a lonely shepherd for the apparent purpose of stealing and was shot by the shepherd in his own defence…"

GRG24/6/1851/2278

Flour and pistols stolen from Mr Pinkerton, Port Lincoln

GRG24/6/1851/1758

"No ordinary force could in fairness be expected to prevent similar occurrences if decrepit and infirm hutkeepers be left in charge of provisions and huts."

GRG24/6/1852/2822

"…from Tungatta, the police station on the western coast of this [the Eyre] peninsula – they are committing thefts continually at the huts of out-stations…"

GRG24/6/1855/1579

"Sometime in the month of January a hut of Mr Bothwick's was robbed of a considerable quantity of stores."

GRG24/6/1855/2547

"Wellunna and Wongary were charged with entering a hut of Mr Symes by breaking the padlock with their waddies and stealing therefrom a small quantity of flour and other food."

Local Press Reports:

***The South Australian*, Jul 21, 1848**

"Hamp was found dead in his hut."

***Adelaide Times*, Mar 19, 1849**

"Witness managed to escape into the hut. The two blacks afterwards dragged witness out of the hut."

***Adelaide Times*, Apr 9, 1849**

Describes the impudence of the blacks, which rendered it unsafe for him to leave anything in his hut during his absence. "A stalwart native deliberately entered the hut and coolly proceeded to carry away the carcass from the ridgepole to which it was hung."

***The South Australian*, Jun 8, 1849**

Murder of Eastone living at an out-station of Mr Vaux.

"…our hut-keepers are never safe."

***South Australian Register*, Aug 15, 1849**

Reports shepherd attacked in his hut.

***South Australian Register*, Sep 5, 1849**

"They…are patrolling the bush with their weapons, watching every opportunity to…rob the huts, and kill the men."

***South Australian Register*, Apr 29, 1851**

Murder of John Jinks in his hut and hut ransacked

***South Australian Register*, May 27, 1851**

Murder of George Jinks, hutkeeper of Mr. Tennant at Lipson's Cove station.

Murder of Crocker in Kulara hut.

REFERENCES

Archival Sources

(SRSA) State Records of South Australia

MRG36/4/00000 – Assessment Books.

GRG 24/4 – Letters Sent.

GRG 24/6 - Correspondence Files.

GRG 35/654 – Parliamentary Papers relating to the detailed valuation of runs with annotations by G.W. Goyder, Surveyor General – Surveyor General's Office

National Archives, Adelaide

Series A877, Item CL23893.

Northern Territory Archives

Giles, H. (nd.) Memoirs of H.S. Giles.

Office of Roads and Crown Support

South Australian Lands Department

Memorial No. 246 Bk 68.

State Library of South Australia

South Australian Government Gazette (SAGG).

PRG 206 O'Halloran Family Papers.

PRG 206/1 Family Records and Book of Reference.

PRG 206/2-3, 5-7 Correspondence and two pencil drawings (1851 & 1855).

PRG 206/4 Portraits of family members.

PRG 206/8-11 Miscellaneous correspondence.

D. 3746/3 [L].

PRG 532/3 Diary of Dr Handasyde Duncan, 1839-1842.

PRG 532/5 Hand written reminiscences of Annie Jane Duncan, 1922.

PRG 1160/3 Diary of Mary Thomas.

PRG 208/1 William Everard papers.

South Australian Deaths – Index of Registrations 1842-1915, Volume 3, I-M, (2000).

South Australian Pioneers Arriving 1836-1845 (Source 25, Volume 2, Manifests of Vessels Arriving from Overseas 1839-1840, Accession Number 1048).

South Australian Pioneers Arriving, 1836-1845. (Source 1, EAD Opie, Accession Number 1048).

Unpublished Documents

Allom, R. (1980) "A Report to the National Trust of Australia (Northern Terrtory) on the Old Fort, it's potential for restoration and recommended action".

Allom, R. (1984) "Springvale Homestead: Northern Territory, A report to the Northern Territory Department of Community Development Cultural Affairs Division, October 1984".

Bell, P. (1997) "Heritage Study of Glenthorne CSIRO Field Station".

Charter, G. (1989) "Frontier Violence, Vengeance and Myths: A study of Aboriginal resistance to European occupation of the Eyre Peninsula 1839-1855, and an assessment of later writings pertaining to the conflict" (Honours thesis submitted to the History Department of Flinders University of South Australia).

Franklin, Lady. (1952[1840]) "Lady Franklin's Diary of A Visit To South Australia in December, 1840" (Transcribed by Colin Thiele, 1952).

Giles, A. (1879-1894) "Springvale Station Diaries".

Giles, A. (nd.) "The First Pastoral Settlement in the Northern Territory".

Giles, H. (nd.) NTRS 298, Folder 1, Memoirs of H.S. Giles.

Macklin, S. (1978) Pastoral Pioneers of South Australia: A Quantitative Analysis (Honours thesis submitted to Flinders University of South Australia).

The Architects Studio (2000) "Springvale Homestead, Katherine, Northern Territory. Conservation Plan" (produced by The Architects Studio, Darwin).

Walshe, K. (1996) "Aboriginal Heritage Survey of CSIRO Property "Glenthorne", O'Halloran Hill, South Australia (A report to Corporate Property, CSIRO Australia)".

Wood, V. (1998) "Aboriginal Heritage Study of the Land Management Corporation's Land at Science Park (Warriparinga)".

Newspapers

Adelaide Times (*The*).

Age (*The*).

Australian Sketcher (The)

Northern Territory Times and Gazette (*The*).

Observer (*The*).

South Australian (*The*).

South Australian Register (Newspaper).

Other Published Sources

Aboriginal History, Vol. 28 (2002) (ANU Printing, Canberra).

Akerman, K. (1992) *Aboriginal Australia: Culture and Society* (ATSIC folio/information kit) (Craft Printing Industries Pty. Ltd., Enfield, NSW).

Alexander, F. (1969) *Moving Frontiers* (Kennikat Press, Port Washington, N.Y.).

Anderson, B. (1983) *Imagined Communities: Reflections on the Origins and Spread of Nationalism* (Verso, New York).

Angas, G. F. (1969[1847]) *Savage Life and Scenes in Australia and New Zealand, Vol.1* (Smith, Elder & Co., London).

Anonymous, (1870) *Overland Telegraph – Port Augusta to Port Darwin. Instructions to Overseers of Works* (Copy held in Mortlock Libarary of South Australia).

Armstrong, R.E.M. (1980) *The Kalkadoons: A Study of an Aboriginal Tribe on the Queensland Frontier* (William Brooks & Co. Pty. Ltd., Brisbane).

Atkinson, J. (1975[1826] *An Account of the State of Agriculture and Grazing in New South Wales* (Sydney University Press, Sydney).

Attwood, M. (1995) *Strange Things. The Malevolent North in Canadian Literature* (Clarendon Press, Oxford).

Attwood, B. & S.G. Foster (Eds) (2003) *Frontier Conflict: The Australian Experience*, (National Museum of Australia, Canberra).

Baillie, P. (1972) *Port Lincoln Sketchbook* (Rigby Limited, Adelaide).

Baillie, P. (1978) *Port Lincoln and District: A Pictorial History* (Lynton Publications, Blackwood, S.A.).

Banks, J. (1970) *Kingston Flashbacks (Part 1)* (Ladies Auxilliary of Kingston District Soldiers' Memorial Hospital, Kington, S.A.).

Barraclough, G. (1994) *The Times Concise Atlas of World History* (Harper Collins, London).

Barrowman, A. (1971) *Old Days and Old Ways* (A.H. Barrowman, Robe, S.A.)

Bates, D. (1938) *The Passing of the Aborigines: A lifetime spent among the native*s *of Australia* (Murray, London).

Bender, B. (2001) "Introduction", in Bender, B and M. Winer (eds), *Contested Landscapes: Movement, Exile and Place* (Berg, Oxford).

Bennett, T. (1995) *The Birth of the Museum* (Routledge, London and New York).

Bhabha, H. (ed.) (1990) *Nation and Narration* (Routledge, London).

Birch, T. (1992) "Nothing has Changed: The Making and Unmaking of Koori Culture", *Meanjin*, Vol. 51, No. 2. 1992, pp. 234.

Bird Rose, D. (1991) *Hidden Histories* (Aboriginal Studies Press, Canberra).

Blair St.George, R. (1990) "Bawns and Beliefs: Architecture, Commerce and Conversion in Early New England", *Winterthur Portfolio*, Vol. 25, No.4. (Winter, 1990), pp. 241-287.

Bodnar, J. (1992) *Remaking America: Public Memory, Commemoration, and Patriotism in the Twentieth Century* (Princeton University Press, Princeton, New Jersey).

Boyd, A. (1974 [1882]) *Old Colonials* (Sydney University Press, Sydney).
Boyd, R. (1961) *Australia's Home* (Melbourne University Press, Melbourne).

Bremner, L. (1999) "Crime and the emerging landscape of post-apartheid Johannesburg", in Judin, H. & I. Valdislavic (eds) *Blank – Architecture, Apartheid and After* (David Philip, Cape Town).

Broome, R. (1996) "Historians, Aborigines and Australia: writing the national past", in Attwood, B. *In the Age of Mabo: History, Aborigines and Australia* (Allen & Unwin, Sydney), pp. 54-72).

Brunskill, R.W. (1974) *Illustrated Handbook of Vernacular Architecture* (Faber & Faber, London).

- (1982) *Traditional Farm Buildings of Britain* (BAS Printers, Hampshire).

Bull, John, W. (1972[1884]) *Early Experiences of Life in South Australia* (Libraries Board of South Australia, Adelaide).

Burke, H. (1999) *Meaning and Ideology in Historical Archaeology: Style Social Identity, and Capitalism in an Australian Town* (Kluwer Academic/Plenum Publishers, New York).

Byrne, D. (1996) "Deep Nation: Australia's acquisition of an indigenous past", *Aboriginal History*, Vol. 20, 1996, pp. 82-107.

Camm, J.C.R. & J. McQuilton (eds) (1987) *Australians, A Historical Atlas* (Fairfax, Syme & Weldon Associates, Broadway, NSW).

Campbell, J. (1834) Geographical Memoir of Melville Island and Port Essington, on the Coburg Peninsula, Northern Australia; with some Observations on the Settlements which have been established on the North Coast of New Holland, *Journal of the Royal Geographical Society of London*, Vol. 4. pp. 129-181.

Cannon, M. (1973) *Life in the Country: Australia in the Victorian Age:2* (Thomas Nelson Ltd, Melbourne).

Cantlon, M. (1981) *Homesteads of Southern New South Wales 1830-1900* (Queensberry Hill Press, Carlton).

Carmichael, E. (ed.) (1982) *Happy Was Our Valley* (Douglas Book Committee, Torrens Park, SA).

Carter, T. (2006) *Ward's Ranch Revisited: Myth and History in Western Vernacular Architecture,* https://denix.osd.mil/denix/Public/ES-Programs/Conservation/Legacy/Settler/sett4.html (viewed 15/2/2006).

Casanova, J. (1992) *Fading Footprints: Pioneers, Runs & Settlement of the Lower Eyre Peninsula* (Jack Casanova, Port Lincoln, S.A.).

Cassierer, E. (1955) *The Philosophy of Symbolic Forms,* Vol. II, *Mythical Thought* (New Haven).

Clark, I. (1995) *Scars in the Landscape: a register of massacre sites in western Victoria, 1803-1859* (Aboriginal Studies Press, Canberra).

Clyne, R. (1981) "At War with the Natives: From the Coorong to the Rufus, 1841" in *Journal of the Historical Society of South Australia*, No. 9, 1981, pp. 91-110.

Clyne, R. (1987) *Colonial Blue. A History of the South Australian Police Force, 1836 1916* (Wakefield Press, Netley, SA).

Cockburn, R. (1927) *Pastoral Pioneers of South Australia, Vol. II* (Publishers Limited, Adelaide).

Colwell, M. (1972) *The History of the Noarlunga District* (District Council of Noarlunga, Christies Beach, S.A.).

Comaroff, J. (1985) *Body of Power Spirit of Resistance: The Culture and History of a South African People* (The University of Chicago Press, Chicago).

Comaroff, J. & J. Comaroff (1991) *Of Revelation and Revolution: Christianity, Colonialism and Consciousness in South Africa,* Vol. 1. (The University of Chicago Press, Chicago).

Connah, G. (1988) *'Of The Hut I Builded'*: *The Archaeology of Australia's History* (Cambridge University Press, Melbourne).

Connah, G., Rowland, M. & J. Oppenheimer (1978) *Captain Richard's House At Winterbourne: A Study in Historical Archaeology* (Department of Prehistory & Archaeology, University of New England, Armidale).

Connor, J. (2002) *The Australian Frontier Wars: 1788-1838* (University of New South Wales Press, Sydney).

Coulthard-Clark, C. (2001) *The Encyclopaedia of Australia's Battles* (Allen & Unwin, Singapore).

Cox, P. & W. Stacey (1972) *The Australian Homestead* (Lansdowne Press, Melbourne).

Cox, P. & C. Lucas (1978) *Australian Colonial Architecture* (Lansdowne Editions, Melbourne).

Crais, C. (1992) *White Supremacy and Black Resistance in Pre-Industrial South Africa: The Making of the Colonial Order in the Eastern Cape, 1770-1865* (Cambridge University Press, Cambridge).

Croft, J. (1965) *Murray Downs* (Mid-Murray Illustrated, Swan Hill).

Crosby, E. (1978) *Survey and Excavation at Fort Dundas, Melville Island, Northern Territory, 1975* (The Australian Society for Historical Archaeology, Sydney).

Csapo, E. (2005) *Theories of Mythology* (Blackwell Publishing, Carlton, Victoria).

Curthoys, A. (1999) "Expulsion, exodus and exile in white Australian historical mythology", in *Journal of Australian Studies* 61 (June 1999) pp. 1-22.

- (2003) "Constructing National Histories", in B. Attwood & S.G. Foster (eds) *Frontier Conflict: The Australian Experience* (National Museum of Australia, Canberra), pp. 185-200.

Davis, M. & K. Buckley (1987) *Archaeological Procedures* (Dept. of Lands and Wildlife, Hobart).

Davison, G. & C. McConville (Eds) (1991) *A Heritage Handbook* (Allen & Unwin, North Sydney).

De Heer, R. (Producer) (2002) *The Tracker* (Globe Films Australia) (Film).

Denholm, D. (1979) *The Colonial Australians* (Penguin Books, Vic.).

Dolling, A. (1981) *A History of Marion on the Sturt. The Story of a Changing Landscape and its People* (Peacock Publications, Frewville, S.A.).

Doolette, P. (1997) *Murder, Mishap & Misfortune: A Select History of the Coorong* (Coorong Publications, Adelaide).

Dunn, M. (1969) *A Man's Reach: The Story of Kingston in the South East of South Australia* (The South Eastern Times, Millicent, SA).

Dutton, G. (1967) *The Hero as Murderer. The Life of Edward John Eyre, Australian Explorer and Governor of Jamaica 1815-1901* (William Collins Limited, Sydney).

- (1985) *The Squatters* (Currey O'Neil, Victoria).

Edwards, R. (1964) "A former Aboriginal camp site on the Sturt River at Marion, South Australia", *Mankind* Vol. 6, No. 4, pp. 184-188.

Edwards, W (Ed.) (1987) *Traditional Aboriginal Society* (Macmillan, Melbourne).

Elkin, A. (1974) *The Australian Aborigines* (Angus & Robertson, Sydney).

Evans, R., Saunders, K. & Cronin, K. (1975) *Race Relations in Colonial Queensland* (University of Queensland Press, St Lucia, Queensland).

Eyre, E.J. (1964[1845]) *Journals of Expeditions of Discovery into Central Australia and Overland From Adelaide to King George's Sound, in the Years 1840-1* (Libraries Board of South Australia, Adelaide).

Flinders Ranges Research http://southaustralianhistory.com.au/surveys.htm (viewed 15/8/2007).

Foord, K (2004) "Frontier theory: displacement and disavowal in the writing of white nations", in Moreton-Robinson, A (ed.) *Whitening Race* (Aboriginal Studies Press, Canberra).

Foote, K.E. (1997) *Shadowed Ground: America's Landscapes of Violence and Tragedy* (University of Texas Press, Austin).

Forrest, P. (1985) *Springvale's Story and Early Years at Katherine,* (Murranji Press, Darwin).

Foster, R., Hosking, R. & A. Nettelbeck (2001) *Fatal Collisions. The South Australian frontier and the violence of memory* (Wakefield Press, Kent Town, S.A.).

- (1998) "The Legend of James Brown", *Australian Historical Studies*, Vol. 29, No. 111, October 1998, pp. 210-229.

Fox, R.A. Jr. (1993) *Archaeology, History, and Custer's Last Battle* (University of Oklahoma Press, Norman).

Freeland, J.M. (1968) *Architecture in Australia* (F.W. Cheshire Publishing Pty Ltd, Melbourne).

Furphy, S. (2007) "Aboriginal House Names and Settler Australian Identity", *API Network* Website, http://www.api-network.com/main/index.php?apply=scholars&webpage=default&flexedit=&flex_password=&menu_label=&menuID=homely&menubox=&scholar=136 , (viewed 12/7/2007).

Fysh, H. (1933) *Taming The North* (Angus & Robertson, Sydney).

Gardner, P. (1993) *Gippsland Massacres. The Destruction of the Kurnai Tribes 1800-1860* (Ngarak Press, Ensay, Vic.).

Gazin-Schwartz, A. & C. Holtorf (Eds) (1999) *Archaeology and Folklore* (Introduction) (Routledge, London), pp. 4-21.

Geoscience Australia http://www.ga.gov.au/education/facts/dimensions/areadime.htm viewed 15/8/2007 (viewed 15/8/2007).

Giles, A. (1995[1926]) *Exploring in the 'Seventies and the Construction of the Overland Telegraph Line* (Friends of the State Library of South Australia, Adelaide).

Goodall, H. (1996) *Invasion to Embassy: Land in Aboriginal Politics in New South Wales, 1770-1972* (Allen & Unwin, St Leonards, N.S.W.).

- (1999) "Telling Country: Memory, Modernity and Narratives in Rural Australia", *History Workshop Journal* 47, pp 160-190.

Grassby, A. & M. Hill (1988) *Six Australian Battlefields* (Allen & Unwin, St Leonards, NSW).

Greenbie, B.B. (1981) *Spaces: Dimensions of the Human Landscape* (Yale University Press, New Haven).

Grey, Sir George (1964[1841]) *Journals of Two Expeditions in North-West and Western Australia,* Vol. 2 (Libraries Board of South Australia, Adelaide).

Grguric, N. (2005) "How Re-enactment and Archaeology Combined in South Australia", *Broadsword Magazine*, Issue 4, Vol 2 (Mythical Publishing, Paradise Point, QLD).

Haggis, J. (2001) "The Social Memory of a Colonial Frontier", *Australian Feminist Studies*, Vol. 16, No. 34, pp. 91-99.

- (2004) "Beyond race and whiteness? Reflections on the new abolitionists and an Australian critical whiteness studies", *Borderlands e-journal,* Vol. 3, No. 2 file://F:\beyond race and whiteness.htm (viewed 22/06/2007).

Halls, C. (1974) *Guns in Australia* (Paul Hamlyn, Sydney).

Harrison, R. & A. Paterson (nd.) *Conference Reports: Workshop: The Archaeology of Culture Contact in Australia and Beyond* http://www.worldarchaeologicalcongress.org/site/bulletin/wab11/harrrison.php, (viewed 19/06/2007).

Haythornthwaite, P. (1990) *The Napoleonic Source Book* (Guild Publishing, London).

Hensel, B., McDowall, P. & J. Mugford (1986) *Life on the Range* (Community of Avenue Range, Naracoorte, South Australia).

Hester, T., Shafer, H. & K. Feder (1997) *Field Methods in Archeology* (Mayfield Publishing Company, Mountain View, California).

Hilton, J. & I Vladislavic (1999) *Blank – Architecture, Apartheid and After* (NAi Publishers, Rotterdam).

Hoagland, A. (1999) "Village Constructions: U.S. Army Forts on the Plains, 1848-1890", *Winterthur Portfolio*, Vol. 34, No. 4. (Winter, 1999), pp. 215-237.

Horton, D. (2000) *Aboriginal Australia* (Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra) (map).

Hughes, Q. (1974) *Military Architecture* (Evelyn, London).

Ireland, T. (2002) "Giving value to the Australian historic past: Historical archaeology, heritage and nationalism", *Australian Historical Archaeology*, Vol. 20, 2002, pp. 15-25.

Jenkin, G. (1989) *Calling Me Home* (South Australian College of Advanced Eduction, Adelaide).

Johnson (Ed.) (1976) *The Australian Pocket Oxford Dictionary* (Oxford University Press, Melbourne).

Jones, R. (1969) "Fire-stick Farming", *Australian Natural History*, Vol.16, No.7, 1969, pp. 224-228.

Kammen, M. (1991) *Mystic Chords of Memory: The Transformation of Tradition in American Culture* (Alfred A. Knopf, New York).

Kenzle, S. (1997) "Enclosing Walls in the Northern San Juan: Sociophysical Boundaries and Defensive Fortifications in the American Southwest", *Journal of Field Archaeology*, Vol. 24, No. 2. (Summer, 1997), pp 195-210.

Kristoff, L. (1959) "The Nature of Frontiers and Boundaries", *Annals of the Association of American Geographers*, Vol. 49, No. 3, [Part 1], Sep., 1959, pp. 269-282.

Lack, C. and H. Stafford (1964) *The Rifle And The Spear* (Fortitude Press, Brisbane).

Langley, S. (1982) "Archaeological Work on the Grounds of the Henry Whitfield House Museum", *Connecticut History*, No. 23 (April 1982), pp. 56-60.

Lester, A. (1998) "Reformulating identities: British settlers in early nineteenth-century Couth Africa", *Transactions of the Institute of British Geographers*, Vol. 23, Iss. 4., December 1998, pp. 515-531.

Lewcock, R. (1963) *Early Nineteenth Century Architecture in South Africa: A Study of the Interaction of Two Cultures 1795-1837* (A.A. Balkema, Cape Town).

Linenthal, E.T. (1991) *Sacred Ground: Americans and Their Battlefields* (University of Illinois Press, Urbana & Chicago).

Liston, C. (1986) *Researching Old Buildings* (Royal Australian Historical Society Technical Information Service, Sydney).

Lydon, J. and T. Ireland (2005) *Object Lessons: Archaeology & Heritage in Australia* (Melbourne Scholarly Publishing, Melbourne).

Macintyre, S. (2003) *The History Wars* (Melbourne University Press, Carlton, Victoria).

Marks, S. (1972) "Khoisan Resistance to the Dutch in the Seventeenth and Eighteenth Centuries", *Journal of African History,* Vol. 13, No. 1, (1972), pp. 55-80.

McCourt, T. & H. Mincham (1987) *The Coorong and Lakes of the Lower Murray* (The Beachport Branch of the National Trust, Adelaide).

McGuire, R. and R. Paynter (eds) (1991) *The Archaeology of Inequality* (Blackwell, Oxford, UK).

McKernan, M. & M. Browne (eds) (1988) *Australia, Two Centuries of War and Peace* (Australian War Memorial, Sydney).

McLaren, B. (1997) *The Northern Territory and its Police Forces*, *Vol.1,* (self published, place unknown).

Moorehead, A. (1966) *The Fatal Impact. The Brutal and Tragic Story of how the South Pacific was 'Civilised' 1767-1840* (Hamish Hamilton, Harmondsworth, Middlesex).

Mulvaney, D. (1989) *Encounters in Place* (University of Queensland Press, Australia).

Murdoch, W. (1915) *The Making of Australia: An introductory history* (Whitcombe & Tombs, Melbourne).

Murray, T. (2004) *The Archaeology of Contact in Settler Societies* (Cambridge University Press, Cambridge).

National Parks and Wildlife Service (1990) *O'Halloran Hill Recreation Park, South Australia. Management Plan.* (Department of Environment and Planning, Adelaide).

Nettelbeck, A. (1999) 'Mythologizing Frontier: Narrative Versions of the Rufus River Conflict, 1841-1899', *Journal of Australian Studies,* June 1999, pp. 75-83.

Nicholls, B. (1988) *The Colonial Volunteers. The Defence Forces of the Australian Colonies 1836-1901* (Allen & Unwin, Sydney).

Norris, K. (1976) *Australia's Heritage Sketchbook* (Books For Pleasure, Sydney).

Nosworthy, W. & M. Nosworthy (Eds) (1988) *Tjeiringa, The Story of the Sheringa District* (The Sheringa History Committee, Port Lincoln, S.A.).

Paisley, F. (2003) "White Settler Colonialisms and the Colonial Turn: An Australian Perspective", *Journal of Colonialism and Colonial History*, 4:3, Introduction.

Pearson, M. & S. Sullivan (1995) *Looking After Heritage Places* (Melbourne University Press, Carlton, Vic).

Pedersen, H. & B. Woorunmurra (1995) *Jandamarra and the Banuba Resistance* (Magabala Books, Broome, W.A.).

Pegler, M. (1998) *Powder and Ball Small Arms* (Crowood Press, Marlborough).

Persse, J.N. & D.M. Rose (1981) *House Styles In Adelaide – A Pictorial History* (Stock Journal Publishers, Adelaide).

Peters, A. (ed.) (1998) *Recollections. Nathaniel Hailes' adventurous life in colonial South Australia* (Wakefield Press, Kent Town, South Australia).

Pike, G. (1978) *Queensland Frontier* (Rigby, Hong Kong).

- (ed.) (1981) *Campfire Tales* (Pinevale Publications, Mareeba, Queensland).

Pikusa, S. (1986) *The Adelaide House 1836 to 1901* (Wakefield Press, Netley, South Australia).

Pope, A. (1989) *Resistance and Retaliation. Aboriginal-European Relations in Early Colonial South Australia* (Heritage Action, Bridgewater, S.A.).

Powell, A. (2000) *Far Country: A Short History of the Northern Territory* (Melbourne University Press, Carlton, South, Victoria).

Proceedings to the Royal Geographical Society, A Report on an Expedition to the SE District of South Australia, Vol. 14 Chap.3 para 3 line 7 – T. Burr.

Queensland Heritage Register (online version) www.epa.qld.gov.au (Place ID: 600026) (viewed 18/10/2006).

Reynolds, H. (1981) *The Other Side of the Frontier* (History Dept. James Cook University, Townsville, Qld).

- (1987) *Frontier* (Allen & Unwin, Sydney).

- (1998) *This Whispering in our Hearts* (Allen & Unwin, St. Leonards, NSW).

- (2001) *An Indelible Stain? The Question of Genocide in Australia's History* (Penguin, Australia).

Rickard, J. & P. Spearritt (eds) (1991) *Packaging The Past: Public Histories* (Melbourne University Press, Carlton, Vic).

Robinson, F. & B. York (1977) *The Black Resistance* (Widescope, Camberwell, Vic).

Roos, F. (1953) "Ohio: Architectural Cross-Road", *The Journal of the Society of Architectural Historians*, Vol.12, No.2 (May, 1953), pp.3-8.

Rowse, T. (1998) *White Flour, White Power* (Cambridge University Press, Melbourne).

Rubertone, P. (1994) "Archaeology, colonialism and 17th-century Native America: towards an alternative interpretation", in Layton, R. (ed.) *Conflict in the Archaeology of Living Traditions* (Routledge, London), pp. 33-45.

- (1997) "The Common Ground of Contested Space: Historical Archaeology and American Landscapes", *American Anthropologist*, Dec. 1997, Vol. 99, No. 4, pp. 827-9.

Ryan, L. (1996) *The Aboriginal Tasmanians* (Allen & Unwin, St Leonards, NSW).

Said, E. (1983) *The World, the Text and the Critic* (Harvard University Press, Cambridge, U.S.A.).

Schurmann, C.W. (1846) [facsimile] *The Aboriginal Tribes of Port Lincoln in South Australia, Their Mode of Life, Manners, Customs, etc.* (George Dehane, Adelaide).

Schwarzer, M. (1994) "Myths of Permanence and Transience in the Discourse on Historic Preservation in the United States", *Journal of Architectural Education (1984-)*, Vol. 48, No. 1. (Sep., 1994), pp. 2-11.

SA Memory http://www.samemory.sa.gov.au/site/page.cfm?u=93&c=1545 (viewed 15/8/2007).

Savage Life and Scenes in Australia and New Zealand, Vol.1 (Libraries Board of South Australia, Adelaide).

Shackel, P. (ed.) (2001) *Myth, Memory, and the Making of the American Landscape* (University Press of Florida, Gainesville).

Skennerton, I. (1978) *A Treatise on the Snider, The British Soldier's Firearm 1866-c.1880* (self published, place unknown).

Slee, M. (1988) *Service Arms of the South Australian Police, 1838-1938* (Antique and Historical Arms Association of South Australia, Adelaide).

Sligo, N. (1980[1894]) *Mates And Gold* (Hesperian Press, Victoria Park, WA).

Slotkin, R. (1993) *Gunfighter Nation* (Harper Perennial, New York).

Smith, J. (1963[1880]) *The Booandik Tribe of South Australian Aborigines: a Sketch of their Habits, Customs, Legends, and Language* (State Library of South Australia, Adelaide).

Smith, P., Piddock, S. & D. Pate (2005) Historic Sites and Landscapes, Vol. 4.

Smolicz, R. A. & W.W. Sharp (1983) *Australia's Early Dwellings and Churches* (Angus & Robertson Publishers, London).

Sonnichsen, C.L. (1979) *The Grave of John Wesley Hardin* (Texas A&M University Press, College Station, U.S.A.).

Spillett, P. (1972) *Forsaken Settlement: An illustrated history of the settlement of Victoria, Port Essington North Australia 1838-1849* (Lansdowne, Melbourne).

Stanner, W.E.H. (1974) *After the Dreaming* (The Australian Broadcasting Commission, Sydney).

Statton, J. (Ed.) (1986) *Biographical Index of South Australians 1836-1885* (South Australian Genealogy and Heraldry Society Inc, South Australia).

Steedley, M. (1993) *Hanging Without a Rope* (Princeton University Press, Princeton).

Taylor, P. (1988) *Station Life in Australia, Pioneers and Pastoralists* (Allen & Unwin, Sydney).

Tolmer, A. (1972[1882]) *Reminiscences of an Adventurous and Chequered Career at Home and at the Antipodes* (Libraries Board of South Australia, Adelaide).

Townsend, M. (nd.) *Springvale in a Nutshell* (self published, Katherine, NT).

Tuan, Y. (1979) *Landscapes of Fear* (Pantheon Books, New York).

Turner, F. (1920) *The Frontier in American History* (New York).

Van den Berghe (1967) *Race and Racism: A Comparative Perspective* (John Wiley & Sons, New York).

Vaughan, M. (1986) *Mount Benson* (Mount Benson Jubilee 150 Committee, Millicent, SA).

Ward, R. (1970) *The Australian Legend* (Oxford University Press, Melbourne).

Waterson, D. & M. French (1987) *From the Frontier: A Pictorial History of Queensland to 1920* (University of Queensland Press, St Lucia, Qld).

Whitworth, R.P. (Compiler) (1866) *Bailliere's South Australian Gazetteer and Road Guide, Containing the Most Recent and Accurate Information as to Every Place in the Colony* (F.F.Bailliere, Adelaide).

Willshire, W. (1896) *The Land of the Dreaming* (WK Thomas & Co, Adelaide).

Windschuttle, K. (2002) *The Fabrication of Aboriginal History, Volume One Van Dieman's Land 1804-1847* (Macleay Press, Sydney).

Winer, M. (2001) "Landscapes, Fear and Land Loss on the Nineteenth-Century South African Colonial Frontier", in Bender, B and M. Winer (eds), *Contested Landscapes: Movement, Exile and Place* (Berg, Oxford).

Yentsch, A. (1988) "Legends, houses, families, and myths: relationships between material culture and American ideology," in *Documentary Archaeology in the New World,* M. Beaudry (Ed.) (Cambridge University Press, Cambridge), pp. 5-19.