A MUTUAL CORRESPONDENCE? COMPARING THE ROCK ART OF WEST ARNHEM LAND WITH THE SOUTH AUSTRALIAN MUSEUM’S AUSTRALIAN ABORIGINAL MATERIAL CULTURE COLLECTION

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Abstract

The rock art of the northern Kakadu region of the Northern Territory of Australia has a large range of paintings that depict human figures interacting with material culture items such as spears, spearthrowers, clubs and boomerangs. The paintings are often rendered in fine detail allowing for identification of specific artefact types. Many of the artefacts depicted in the rock art are recognisable as similar to those collected by ethnographers from Arnhem Land and the surrounding regions during the late 19th and early 20th centuries. South Australia's interests in the Northern Territory during the second half of the 19th century ensured that a large number of collected items found their way to the South Australian Museum’s ethnographic collection. Whilst no direct association is made between particular ethnographic objects as subjects in rock art paintings, there are some observations that can be made about the object/subject relationship in general. The first pertains to artefact types, in which paintings appear to depict actual types found in the collection. Another relates to what an artefact represents, functionally and symbolically, and whether these concepts are transferable between ethnographic observations and the rock art image. A third refers to the contexts in which both museum objects and rock art paintings are found and the ways that context can influence meaning and interpretation. This paper explores these issues and the possible correspondence that exists between the South Australian Museum’s Australian Aboriginal Material Culture Collection and the rock art of Kakadu, concluding that a combined and comparative study of both can reinforce a mutual understanding of each.
Introduction

The rock art of west Arnhem Land in the Northern Territory (NT) is one of the most diverse and complex examples of ancient Aboriginal art in the continent. Amongst the subjects such as fish, macropods, thylacines, spirit figures, sorcery figures and many others depicted on shelter walls, are paintings that depict human figures with material culture items such as spears, spearthrowers, clubs, boomerangs, bags and headdresses. These images of people using and interacting with a range of objects make up a notable proportion of all documented images found in the region and provide a fascinating insight into the lives of past Aboriginal cultures not usually accessible through other archaeological methods. A number of the artefacts depicted in these images are rendered accurately enough as to be identifiable as specific types found in most ethnographic collections around the country, including the South Australian Museum (SAM).

Around the beginning of the 20th century, anthropologist Walter Baldwin Spencer thought that the SAM had the finest ethnographic collections of Australian Aboriginal artefacts in the country (Jones 1996:93), with many of these artefacts sourced from the Arnhem Land region. During the expansion of the colonial frontier in the NT in the first half of the 19th century a number of ethnographers were already active in British colonies on the north coast of Arnhem Land. However, it was not until South Australia’s annexation of the NT in 1863 that ethnographic material collected by early surveyors such as Finniss and Cadell, and later Goyder’s Northern Territory Expedition of 1869, was acquired by what was then the South Australian Institute, later to become the SAM (Hale 1956).

This paper looks at correlations between the SAM’s ethnographic collection, specifically the ‘Australian Aboriginal Material Cultures Collection,’ and documented rock art images of Mirarr country in a discrete region of west Arnhem Land, and explores some of the issues that rock art researchers face when using ethnographic information as comparative material. These issues include many of the accepted limitations of ethnographic data but also considers how, and if, the meaning and significance of objects as recorded and collected by ethnographers and anthropologists can be transferred to rock art images. A
connected issue, which occurs when any material object is translated into a graphic image, is the semiological relationship that is established between the object and the objectified; a relationship that can upset, disrupt, or complicate established interpretations.

In the first section of this paper I give an account of ethnographic collecting in Arnhem Land and detail the numbers and sorts of artefact types the SAM holds in its collection from the region. The next section describes the range of rock art depictions of material culture items from the Jabiluka region of Kakadu National Park, where the data for this paper were collected. In the third section I make comparisons between the SAM collection and the rock art through selected case studies and by identifying the similarities and differences between specific artefact types.

In doing so I aim to demonstrate that Arnhem Land rock art and the SAM’s Australian Aboriginal Material Cultures Collection exist in a symbiotic relationship. I argue that, despite the limitations and semiological difficulties in applying any direct interpretation of ethnographic significance to rock art images, there are good reasons to apply ethnographic awareness to rock art understanding, and, conversely, rock art ‘evidence’ to ethnography.

The South Australian Museum and Ethnographic Collecting in West Arnhem Land

The South Australian Institute Museum, which was housed in the Institute Building on North Terrace in Adelaide, was officially opened on 2 January 1862 (Hale 1956:13). Throughout the 1820s–1840s, before the SAM was established or South Australia (SA) had any colonial interests in the NT, there were already a significant number of ethnographers in the British colony of Port Essington, on the Arnhem Land coast (Jones 1996:83). Among them was George Samuel Windsor Earl who, as well as being the linguist and draftsman for the North Australia Expedition, was an active promoter of ethnography in

SA’s colonial expansion into the NT during the 1860s and 1870s ultimately led to the first concerted ethnographic collecting on behalf of the museum in Adelaide (Hale 1956; Jones 1996:118). Goyder’s Northern Territory Survey Expedition of 1869, which aimed to collect natural history specimens for the botanic gardens, also had as part of its brief instructions to record information about ‘Aboriginal customs and habits’ (Jones 1996:85). During the expedition the naturalist Schultze and his assistant Hoare, as well as collecting a large selection of botanical items, also acquired a number of ethnographic objects from the Port Darwin and Arnhem Land regions (Jones 1996:87).

There was initially a lack of interest in Australian Aboriginal culture by the museum, with the extent of Aboriginal ethnography on display by 1870 being limited to a small selection of local artefacts, and the remainder of the collection, including Aboriginal objects from Western Australia, northern Queensland and the NT, being relegated to storage, and largely unclassified (Jones 1996:40). The major stimulus for interest in ethnographic artefacts as objects of display was the rise of the International Exhibition, which brought with them new models of classification and new audiences (Jones 1996:61, 63; Willis 2003:52). These exhibitions, two of which were held in Melbourne (1861 and 1866) and three in Sydney (1870, 1879 and 1882), despite having a focus on national trade and innovation, were influential in how ethnographic artefacts were presented to the public and which in turn influenced how ethnographic museums displayed their collections (Jones 1996:61).

The rise of interest in Australian Aboriginal artefacts during the 1870s from overseas exhibitions led to not only a large number of artefacts being sent out of the country, but also a renewed interest in artefacts being exhibited in major cities around Australia (Jones 1996:70). The SAM, for example, sent objects collected by Police Inspector Paul Foelsche, to the Sydney International Exhibition in exchange for weapons and implements from the South Sea Islands (Hale 1956:20; Jones 1996:70). Foelsche, a policeman based in Port Darwin and Port Essington during the 1870s, also had an intense interest in
natural history and ethnographica. During his time at Port Essington, which attracted local Aboriginal people as a camping and trading place (Cole 1979:71), Foelsche was able to acquire artefacts for the SAM’s collection, supplying artefacts to them well into the 1890s (Hale 1956:20).

The decline in Aboriginal populations in areas adjacent to the capital cities during the 1880s followed a similar decline in the number of ethnographic artefacts being supplied to institutions; however, the NT colonial frontier provided a new source for collectors that was encouraged by the SAM’s third director, Edward Stirling (Hale 1956:71). During the mid-1890s, Stirling put out a request to collectors (principally to police stations and telegraph station masters) to step up the acquisition of particular articles including ‘spears, boomerangs, and other weapons’ from locations where the SAM’s collection was under-represented (Stirling, SAM—AA309/1/52). There was a degree of urgency in Stirling’s request as it was perceived at the time that Aboriginal culture was dying out and the ‘rapid disappearance of the Aborigines of Australia’ was imminent (Stirling, SAM—AA309/1/52; Jones 1996:94). In 1891, Stirling himself acquired 110 items from Port Essington during an overland trip from Port Darwin to Adelaide (Hodgson 1995:58).

Besides Port Essington, the other main collecting centres in the vicinity of Arnhem Land were Oenpelli (Kunbarlanja), east of the East Alligator River, Kapalga (Kapalrgoo) on the South Alligator River, and Katherine (Hodgson 1995) (Figure 1). As mentioned, Port Essington was the principal centre for ethnographic activity before 1880, but there was an increase in artefacts being sent to the museums from the other centres after 1890, with a spike in numbers in the first decade of the 1900s (Hodgson 1995:77). This increase was largely fuelled by the expanding quantities of artefacts being acquired from Kapalrgoo Mission between 1901 and 1906, and Oenpelli after 1907 until 1924 (Hodgson 1995:77).
Figure 1 Map of the region showing the four major ethnographic collecting centres and the rock art survey area of Djawumbu Madjawarnja massif in Mirarr country.
Oenpelli (Kunbarlanja) began as a leasehold pastoral station that was established by buffalo shooter Paddy Cahill, who arrived there in 1910 (May 2006:68). In 1912 the station was visited by the acting Chief Protector of Aborigines, Walter Baldwin Spencer, who, during that visit started commissioning bark paintings from the local artists (May 2006:74). Spencer had, in 1899, already been appointed as honorary Director of the Museum of Victoria, which is why most articles collected by him ended up at there (Hodgson 1995:50).

Kapalga, or Kaparlgoo, was established on a lagoon on the northern part of the South Alligator River some 40 km from the coast by the missionary A.H. Lennox in 1899 (Braithwaite 1995:9; Fraser 2008:17; Jones 1996:244). During its ‘brief and unsuccessful existence’ (Fraser 2008:17, 20) Kaparlgoo Mission attracted between 40–70 Aboriginal people and had a school with 12–20 students. The gardens produced a range of fruit and vegetable crops including tobacco (Braithwaite 1995:9; Fraser 2008:20). The mission was also a centre of artefact production and supplied ‘sets’ of artefacts, which were numbered with ‘native’ names and description of function attached, specifically for ethnographic collectors (Fraser 2008:28; Jones 1996:245). Some of the artefacts made there have Gagudju names, documenting the connection with tribes further to the east who used the place as a camping ground when traveling (Hodgson 1995:43). One set of 62 Kaparlgoo artefacts was donated to the SAM in 1902 by R.T. Maurice, and further collections from others such as William Ifould, R. Buring, Richard Lindsay Johnson and Mrs L.G. Rogers, amongst others, also found their way into the SAM’s collection during the early part of the 20th century (Hodgson 1995:77; Jones 1996:247).

Katherine, which is on Jawoyn country and approximately 200 km south of Jabiru, was part of the Oenpelli trade complex (Hodgson 1995:51). Many of the boomerangs found in Arnhem Land would have come from the Katherine region (Thomson 1949:70), which was also on the trading route from places such
as Tennant Creek, the source of hooked boomerangs that were often traded in pairs (Jones 1996:66).

The collecting centre names as well as the number of artefacts in Table 1 were derived from a search of the SAM’s Australian Aboriginal Material Culture Database. The artefact types itemised are those principally seen and identifiable in the rock art of Mirarr country (see below). The category of ‘plumes’ account for objects that are described as being made of feathers and which are possibly headdresses, but could also be other forms of adornment. ‘Fans’ are goose-wing fans, which are depicted in some of the recent paintings.

Hodgson’s (1995:75) analysis of museum ethnographic collections around Australia found that there was a total of 727 artefacts held by the SAM, which had been acquired from the major collecting centres of Port Essington, Alligator River and Katherine. This number accounts for 26% of all the artefacts collected from the centres represented in the major Australian collections. The largest collection is held by Museum Victoria, which has 43% of all artefacts collected from the West Arnhem Land region (Hodgson 1995:75).

The nomenclature used for provenancing artefacts on the SAM’s database presented some problems. For example, a search for ‘Alligator River’ could potentially include any of the three Alligator Rivers: West, South and East, which are a considerable distance from each other. Many of the artefacts collected by R.T. Maurice are labelled as coming from ‘Alligator River’ but were probably sourced from Kaparlgoo Mission, which was situated near the South Alligator River, and from where Maurice purchased as many as 730 artefacts (Jones 1996:245–256). Others with the listed provenance of East Alligator River may have come from Oenpelli, which is not far from the river. Results from a search for ‘Arnhem Land’ in the database produced results from a wide region including specifically East Arnhem Land, West Arnhem Land, Western Arnhem Land, NW Arnhem Land etc. The numbers of objects listed as coming from Arnhem Land in Table 1 excluded those specified as having been sourced from East Arnhem Land. Another complicating factor is that items collected at any one place may not have originated from there due to the exchange and trade system that imported and exported items over vast distances (Thomson 1949), as is discussed below. Taking into
consideration all the inaccuracies in provenances and possible duplications of the same artefact being listed from different regions, the numbers in Table 1 are an estimated guide to the quantities of each artefact type in the SAM’s collection.

**Table 1** Summary of artefacts in the SAM Collection listed as from the vicinity of Arnhem Land.

<table>
<thead>
<tr>
<th>Artefact Type</th>
<th>Arnhem Land</th>
<th>Oenpelli</th>
<th>Port Essington</th>
<th>Alligator River – inc. Kaparlgoo</th>
<th>Katherine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spears</td>
<td>150</td>
<td>4 (spearheads)</td>
<td>60</td>
<td>51</td>
<td>30</td>
</tr>
<tr>
<td>Spearthrowers</td>
<td>10</td>
<td></td>
<td>9</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>Bags and baskets</td>
<td>35</td>
<td>4</td>
<td>26</td>
<td>52</td>
<td>4</td>
</tr>
<tr>
<td>Clubs</td>
<td>13</td>
<td></td>
<td>26</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Fans</td>
<td>6</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Digging sticks</td>
<td>2</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Boomerangs</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Ornaments</td>
<td>63</td>
<td></td>
<td>86</td>
<td>109</td>
<td>23</td>
</tr>
<tr>
<td>Plumes</td>
<td>13</td>
<td></td>
<td>2</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>297</td>
<td>9</td>
<td>210</td>
<td>266</td>
<td>99</td>
</tr>
</tbody>
</table>
The Rock Art of Mirarr Country

The rock art of Arnhem Land is renowned for its antiquity, density and diversity, providing insights into a culture that has used the painted image as a means of understanding the world for many thousands of years (Chaloupka 1993:23; Taçon 1989:5). This world view is represented in images found in rockshelter sites scattered throughout the landscape, which include depictions of animals, reptiles, fish, spirit figures, human figures, material culture items, and stencils of hands, feet and implements.

The rock art data presented herein was collected by myself and other members of the Mirarr Gunwarddebin (Rock Art) Project during three dry season field trips focused on the Djawumbu Madjawarinja massif between 2012–2014. Mirarr country is in the north east section of Kakadu National Park and, as well as including the Djawumbu Madjawarrinja massif, some of the Arnhem Land escarpment and the northern section of Mt Brockman (Djidbidjidbi), also contains the township of Jabiru, and the Ranger and Jabiluka Mineral Lease areas (Figure 1). During the first three seasons of field surveys, 528 cultural sites were recorded, of which 225 (42.6%) contained rock art with depictions of material culture items in one form or another.

The earliest known depictions of material culture in the region can be found in the Dynamic Figure paintings (Chaloupka 1984), which Chippindale and Taçon (1998:107) placed at the transition of their ‘old’ to ‘intermediate’ chronological periods, some 10,000 years ago. Dynamic Figures are usually depicted carrying boomerangs and wearing large headdresses but are also often depicted running dynamically with spears, occasionally appearing to launch them by hand. A range of human figure types that are thought to have been painted after Dynamic Figures, known as Post-Dynamic Figures, display an increased material culture repertoire that includes hooked sticks and different headdress designs (Chaloupka 1993:125). After the Post-Dynamic period, a vast new range of material culture items was introduced into the paintings, including many types of composite spears that were launched with spearthrowers (Lewis 1988:35, 43, 324), boomerangs were replaced with throwing sticks (Lewis 1988:100), plus clubs, axes, digging sticks and new bag types appear. In the most
recent paintings, objects such as didjeridu, goose-wing fans and watercraft are depicted, reflecting the newly established freshwater environment (Chaloupka 1993:185), and new spearthrower types are seen for the first time (Hayward in press).

Compositionally, there are two basic types of paintings that include depictions of material culture: individual human figures, or groupings of human figures. Individual figures make up 49.2% of all paintings recorded that depict material culture. Group motifs constitute 45.6%, and the remaining 5.2% represent artefact stencils and depictions of individual artefacts not directly associated with human figures. In most paintings there is a compositional association between the human figures and the material culture items they are depicted with, although there are some discrete depictions of groupings of artefacts with no human association that I refer to as ‘artefact assemblages’.

This summary of the material culture types found in the rock art of Mirarr country does not reflect the full diversity and range of artefacts that have been depicted over many thousands of years. It does, however, illustrate that the tradition of depicting human figures interacting with material culture is a long and enduring one, and also indicates that, over time, conventions of how and what implements were depicted, changed. Boomerangs, for example, which were commonly depicted in the earlier art traditions of Dynamic, and some Post-Dynamic paintings, became much less numerous in more recent paintings. This phenomenon, though, does not parallel ethnographic records that show boomerangs being widely used, principally as clapsticks in music-making (Chippindale and Taçon 1998:98), and traded well into the period of European contact (Jones 2004; Thomson 1949). The emergence of new spear types with a diverse range of hafted tips that appeared in paintings after the boomerang became scarce, seems to coincide with previously unseen figure types such as Yam Figures, and mythological creatures such as the Rainbow Serpent. Many of the spear types from this burgeoning period, such as multi-pronged spears, trident spears and others with serrated tips, were less commonly depicted in more recent paintings, and by
the time of European contact were unknown or at least unrecorded; subsequently no equivalent types are found in ethnographic collections (Lewis 1988:61).

The change in spear technology from heavy single piece hardwood spears depicted in Dynamic Figures, to lightweight composite spears with bamboo or reed shafts and hafted stone or hardwood tips, also heralded the ‘innovation’ of the spearthrower, which was needed to propel the differently balanced and lighter spear with more efficiency (Allen and Akerman 2015:82–83; Cotterell and Kamminga 1990:168; Palter 1977:162). If rock art chronologically emulates the excavated sequence, stone projectile points first appeared in the archaeological record around 4000–5000 years ago (Allen 2011:70; Allen and Barton 1989:93; Schrire 1982:238–239), giving some indication when composite spears and spearthrowers might have first appeared in the paintings. Composite spears are generally recognisable in rock art by the presence of a hafting material between the shaft and a complex tip, rather than by the differentiation in materials, which cannot be depicted. The first spearthrowers to be depicted are known as ‘cylindrical spearthrowers’ (Figure 2) and have a similar appearance in rock art to the hooked stick in that they also have a hooked end which, in this case, articulates with the proximal end of the spear.

Figure 2 Examples of spearthrower types from rock art: cylindrical, broad, long-notched lath, sabre, goose and long-necked spearthrowers.
In my analysis of hundreds of photographs from the Mirarr Gunwarddebin (Rock Art) Project and first-hand experience of the paintings, cylindrical spearthrowers are the only spearthrower types to be depicted with non-ethnographic spear types. This is a point of difference with Lewis, who found in his study that broad spearthrowers (see Figure 2) were also depicted with these archaic spears along with cylindrical spearthrowers and are, therefore, a maximum of 6000 years old (Lewis 1988:64, 102, 111). I argue, however, that broad spearthrowers in rock art appear in the more recent art and represent types that originated from outside of Arnhem Land such as from the more arid regions of the Central Desert, and were possibly traded into the region as speciality items and depicted as such.

Two unusual broad spearthrower types collected by Spencer from Roper River in East Arnhem Land during the 1911 Preliminary Scientific Expedition (Mulvaney and Calaby 1985:265, 268), housed at Museum Victoria (Figure 3), are morphologically similar to number of artefacts depicted in the Mirarr rock art, and one stencil of a similar item was found at Djawumbu. The cylindrical spearthrower continued to be depicted from their inception with composite spears until the most recent paintings and are also found in most ethnographic collections from the region. All spearthrower types are seen in recent paintings. These include cylindrical, broad, long-notched lath (Figure 2), sabre, goose and long-necked spearthrowers. Of the 667 paintings of spearthrowers of various types recorded from all sites in the Djawumbu region, cylindrical spearthrowers represent 22.6%; broad spearthrowers 8.2%; long-notched lath spearthrowers 38.2%; sabre 0.5%; goose 4.2%; and long-necked spearthrowers 20.7%. All of these types, other than the long-necked spearthrower, can be found in ethnographic collections. The reason why long-necked spearthrowers are not represented in ethnographic collections is unknown but is speculated upon in a forthcoming chapter in a book that focuses on the rock art of the Arnhem Land region (Hayward in press).
Comparing Rock Art Motifs with Ethnographic Artefacts

The limited scope of this paper does not allow for a comprehensive analysis of a wide range of artefacts from the collection and therefore I have chosen a selection of rock art motifs that depict specific ethnographic equivalent artefacts as case studies for points of discussion.

Case Study 1. Site #10078. Standing Figure with Barbed Spear

The elongated standing human figure (Figure 4) is typical of a number of motifs that depict a human figure with outstretched arms holding implements in each hand. In this case the male figure holds two barbed spears in one hand and a broad spearthrower in the other.
Figure 4 Standing figure holding two barbed spears in one hand and a broad spearthrower in the other.

The barbed spears are identifiable as a particular type known as ‘marrgidjba’ in the local Kundjeyhmi dialect and is thought to have originated in Central Arnhem Land (Chaloupka 1993:148). They characteristically have a number of delicate barbs carved into the hardwood tip that terminate parallel with the shaft of the tip. Those in the SAM’s collection have between
6–9 barbs, although in many specimens several of the tips are broken, leaving only a stump. One on display in the Australian Aboriginal Cultures Gallery (A50970), which has all seven barbs intact and is known by its local name of ‘kumorna’ from Kaparlgoo Mission where it was collected in about 1900, was described as having been carried around on important occasions as a highly prized trade item (Figure 5).

![Figure 5](image.jpg)

**Figure 5** SAM A50969. Marrgidjba or Kumorna—a barbed spear collected by Mrs L.G. Rogers from the Alligator River region has remnants of a pipe clay design on the last barb.

The two spears depicted in the painting have many more barbs than any seen in ethnographic collections. Also, the proportion of the spear length to the figure is not an accurate representation, as these spear types in ethnographic collections have been measured at an average of 2790 mm long, at least 1000 mm longer than the average person.

The spearthrower, seen held in the other hand, is not one commonly associated with the region at the time of European contact, and it was for this reason that Lewis (1988) concluded that this broad spearthrower type, and consequently the paintings that depict them, are of great antiquity. However, the association between these spearthrowers and recent painting traditions in Mirarr country, plus the discovery of two morphologically similar spearthrowers in the Spencer Collection at Museum Victoria (Figure 3), indicate that they were actually present in the late painting phase of the region. The broad spearthrowers in Museum Victoria were collected in 1911 from the Roper River region of East Arnhem Land (X17180/1), approximately 400 km from Jabiru, by Spencer. That similar types were not uncommonly painted in the Kakadu region
indicate that these spearthrowers were also in the region, or at least known in the region, and were possibly part of the intricate ceremonial exchange system that defined and mediated social relationships between contiguous groups and saw artefacts being traded over long distances (Thomson 1949; Warner 1958).

**Case Study 2. Site #30012. A Group of Spearthrower Figures**

This scene of four, possibly five, elongated male figures is painted in red pigment over other figures painted in yellow and a large female figure (Figure 6). The figures vary in scale and density of pigment but are consistent in how they are painted and what they depict. All the figures have long bent penises (bent both up and down), elongated bodies and an uncomfortable articulation of the legs with the body. Each figure is launching a barbed spear of the *Marrgidjiba* type with a spearthrower that has a wide curved body and a distinct narrow handle and proximal end. Three figures launch spears to the right of the picture frame and two launch to the left. The figure on the far left is wearing a small bag around the neck and appears to be holding a bundle of implements, possibly throwing sticks, in the other hand. The others are also holding implements in the non-spear hand except for the main large figure, which is launching the spear with two hands.

The spearthrowers depicted in this painting, as with the other painting, are not generally associated with this region but are morphologically similar to types found in the more arid regions of the Central Desert (Figure 7), where they generally have a body that is slightly concave in cross-section and a stone flake inserted into resin gum on the bulbous handle which was used for cutting and carving. Of two specimens housed in the Australian Aboriginal Material Culture Collection and collected by R.T. Maurice, one is a typical Central Desert type, with a curved cross-section and a stone insert in the handle, while the other is flat in cross-section and has no resin or stone in the handle. Unfortunately, because these spearthrower types are not typical of the Arnhem Land region, the provenance of these
artefacts is in doubt, as Maurice collected from numerous parts of Australia and, conceivably, they could have been mixed up with a batch from elsewhere (P. Jones pers. comm. 2015). However, a number of recent paintings recorded during the Mirarr Gunwarddebin (Rock Art) Project depicted spearthrowers of similar morphology, which tended to indicate that spearthrowers of this shape were known to the artists and possibly represented artefacts that were also traded into the region or were considered as speciality items in the exchange network.

**Figure 6** A group of four or five elongated figures launching barbed spears with bulbous broad spearthrowers.

**Figure 7** Two broad spearthrowers with curved bodies. The top one (A32267) and the bottom (A32268) are both listed with Alligator River as the provenance. Both were presented to the SAM by R.T. Maurice in 1902.
The small bag hanging around the neck of one figure appears to be a biting bag, called *kulungunjungunj* in Kundjeyhmi dialect (Figure 8). Biting bags, also known as ‘fighting’ or ‘power’ bags, are generally suspended from the neck or forehead and worn on the chest by men, in which they carried secret or magical objects, which have the dichotomy of not only placing the wearer in danger but also providing them with a connection to a power source (Hamby 2010:264). The bags would be padded with soft material, such as wild cotton or paperbark, and are said to have been held in the mouth and bitten into when confronted with fear or anger, such as during mortuary rituals, circumcision ceremonies and in actual conflicts (Chaloupka 1993:224; Morphy 1991:263). The contents of the bag not only give power and courage to the wearer but are also a means of controlling and focusing emotions through ‘positively valued objects’ (Morphy 1991:263).

![Figure 8](image-url) 

*Figure 8* This biting bag made of string and covered in pipe clay was collected from Port Essington in March 1891. Edward Stirling recorded the Iwadja name of these bags as *baa-lack* (A3556).
These bags were commonly depicted in the recent rock art, and the making of them is a tradition that has been continued by contemporary artists from Injalak Arts and Craft Centre in Kunbalanja (Oenpelli). Correspondingly, they are also well represented in the SAM’s collection, which holds 19 such objects from the four collecting centres and which illustrate the diversity and individuality of these items.

**Case Study 3. Site #20112. Running Spearthrower Figures**

The human figures in this scene are running with an array of different artefacts (Figure 9). The central figure is ‘launching’ a long slender spear, which has a lanceolate shaped tip, with a long-notched lath spearthrower. The front figure is holding a similar spearthrower towards the distal end and the rear figure carries a bag in one hand and a spear in the other. The central figure appears to be wearing a headdress and the rear figure has an elbow tassel. All three figures are wearing waist bands.

![Figure 9](image-url) Three running ‘energetic stick figures’ carrying and wearing a variety of material culture items.
These human figure types have distinctive stylistic features and have been classified by both Taçon and Lewis, but with different names. Taçon (1989:135) called them ‘energetic stick figures’ and Lewis (1988:63) ‘Oenpelli spearthrower figures’. Whilst there are a number of sites with these figure types around the Oenpelli (Kunbalanja) region, their geographic spread is much wider and therefore I defer to Taçon’s nomenclature, even though they are not all in ‘energetic’ poses. They are thought to be fairly recent figure types in the rock art chronology of the region, being associated with the current x-ray painting tradition and depicting material culture items that have ethnographic parallels (Lewis 1988:63).

The spear depicted in this scene has a spear tip that is leaf, or lanceolate, shaped. Lewis (1988:107) described depictions of these spearheads with a dividing line along the axis that ‘probably represents the spine of a stone blade and when the relative size and shape of these blades is taken into account, it is virtually certain that these spearheads represent the large (20–30 cm) unretouched or minimally retouched quartzite ‘leilira’ blades recorded in use as spearheads and knives at European contact’. However, Lewis also conceded that they could be wooden or iron forms.

During the recording of artefacts in museum collections I did not come across a quartzite spear tip that is leaf shaped or anywhere near 30 cm long. The average length of quartzite tips I have recorded is 11.8 cm, with the longest being 14 cm, although I am aware of longer blades, also called *leilira* or *djaperi*, which were used as hafted knives or picks and have been documented ethnographically (Akerman 2007:23; McCarthy 1967:32; Murgatroyd 1991). I have, however, recorded metal and wooden tips which are unambiguously leaf shaped and over 30 cm long, and some with a ridge shape backing similar to stone points (Figure 10). Based on these ethnographic observations, I differ from Lewis and consider that lanceolate spears in rock art are principally wooden or metal tipped. The metal tip was recently developed for the hunting of buffalo due to its sharpness and strength to penetrate the strong animal hide and were called *murrnginj* (Chaloupka 1993:148) (Figure 11). The wooden form,
known as *belbban* (Chaloupka 1993:148), probably had a different function. One example from the SAM (A52984) has a painted design over the tip, suggesting a symbolic or trading item (Figure 11).

**Figure 10** Hard wood lanceolate spear tip with a dividing ridge. Collected by E.C. Stirling from Port Essington (A5240).

**Figure 11** A metal lanceolate spear tip collected by Maurice at Alligator River (A5241).

**Figure 12** Wooden lanceolate spear tip attributed to P.K. Evans and presented to the museum in 1960. From Arnhem Land (A52984).
The spearthrower types these spears tend to be associated with, and depicted in this scene, were recorded by Thomson as being made with iron axes likely introduced by Macassan sailors (Lewis 1988:109). These spearthrowers have been variously classified as the North Australian type by Davidson (1936), and the North Australian notched lath spearthrower by Cundy (1989:107) and Lewis (1988:63), but also as the long [notched lath] spearthrower by Lewis (1988:107). I call them ‘long-notched lath’ spearthrowers (Hayward in press) (Figure 13). The local name *chinaingoo*, used by the SAM, derives from Kaparlgoo Mission (Tindale AA 338/9/3/5), whereas Chaloupka (1993:150) used the name *borndok* from the Kundjeyhmi dialect of the Bininj Kunwok language. Mark Djandjomerr, a Bolmo man who has lived on Mirarr country for most of his life, also referred to a sturdy spearthrower made from hardwood called *borndok* (from transcript of Bininj Manbolh project at Gunrodjbe Baborroi—red ochre hit the water—Mark Djandjomerr and May Nango 1.7.2013).

![Figure 13: Three long-notched lath spearthrowers from Arnhem Land. These artefacts were in the collection of the Royal Adelaide Hospital and presented to the SAM in 1981 (A67485, A54523 and A67485).](image-url)
Not all of these spearthrower types are shaped from hardwood. In fact, Cundy (1989:113) stated that most are made from a much lighter timber, principally from the Malabar silk cotton tree (*Bombax malabaricum/cebia*), which make them very efficient with lighter spear types. The leading figure in the scene is holding a long-notched lath spearthrower towards the distal hooked end, which is a non-launching position. Given the lightness and slender form of the artefact, it would not have been particularly effective as a weapon, which this holding position could suggest. There are several scenes in the region where figures held these spearthrowers at the distal end, and both Warner (1958:263) and Welch (1997:95) observed that this alternative method of holding the implement was for ritual or ceremonial use. A number of examples found in ethnographic collections had painted designs on them (Figure 14), possibly distinguishing the object as a ceremonial item, in a similar manner to many boomerangs (Jones 2004:26), or as objects for trade and barter (Jones 1996:345).

![Figure 14](image-url) Two long notched lath spearthrowers with painted designs on the notched proximal end (A4109 and A4115). Both collected by Maurice and listed as coming from Alligator River.
The central spear throwing figure in the group is wearing what appears to be a form of headdress or head decoration. The wearing of a headdress was not an everyday activity in Aboriginal cultures and it is therefore assumed that these objects were primarily associated with ritual or ceremony (see Hamby 2010:254; Welch 1997:94) and used in rock art to communicate sacred concepts (Layton 1992:60). Despite being very common in rock art images, previous researchers have provided very little information about the significance of the headdress in visual communication. This may be due in part to the objects having high ritualistic connotations and therefore are restricted knowledge. In most museum collections headdresses are kept in ‘secret sacred’ rooms and are only allowed to be seen by initiated men from the associated community. Despite the lack of cultural information, and based upon what is known, it can be concluded that depictions of headdresses in rock art images are associated with ritual and ceremony. The stylistic group of ‘Energetic Stick Figures’ did not commonly wear headdresses, or any other types of adornments. Of all of these figure types recorded during the Mirarr Gunwarddebim (Rock Art) Project project only 4.8% were found to have headdresses, while 8.3% wear elbow tassels and 6.6% wear waist bands.

In summary, the human figures in this scene are depicted wearing adornments that are not usual for this figure type and are generally associated with non-secular activities. Furthermore, the artefact types and the manner in which they are being held are more associated with ritual than hunting or fighting, and could also be indicative of a wider range of meanings. The use of ethnographic objects and documentation as a comparative method for analysing these rock art images indicates that a wider range of interpretations can be offered for the possible meaning of each painting. There are, however, questions relating to ethnographic analogies that need to be considered in more detail, such as: can the function and meaning of an ethnographic object be directly translated to a graphic medium; how does the semiotic translation affect both the object and the subject; and what are the limitations of ethnographic analogy?
Discussion

The main objective of this paper was to consider whether material culture objects in the collection of the SAM could be used as comparative material to interpret rock art paintings. The correspondence between the museum and rock art artefact collectors is manifest in the ethnographic items having been collected from the same region in which they are depicted, as well as having morphological similarities to those in the paintings. The main differences are that the objects in the museum collection are the result of a colonial intervention (Jones 1996) and are therefore out of context; have been influenced by the collector/dealer relationship (Harrison 2011); and are un-animated objects, often away from the gaze of people and interaction with other objects (Byrne et al. 2011:4). The objects in rock art images are, on the other hand, animated by the human beings and objects they are associated with and are, by their physical nature, firmly constituted in their spatial context. These distinctions are relevant to the enquiry and are discussed in this section in terms of the semiological relationship between the object as signifier and object as signified, and how the context of the object affects its reading.

Objects in ethnographic collections, including those in museum displays, have changed contexts a number of times, from where they were made and used, to where and how they were collected, to where and how they are now seen. Each context has its own set of social, ideological, historical, political and cultural associations (Pearce 1994a:19): meaning, function and interpretation is fluid depending upon those contexts. The objects were made as an integral part of culture; as a useful object, as an aesthetic object, as a gift or an item of trade, or with some other purpose, and as such represent a form of entanglement between the culture, the maker and the thing (Hodder 2012). To the collector, the object may have either been a prized find as part of a collection, a cultural interaction between seller and buyer, or an important acquisition for a museum (Pearce 1994b:194); and for the viewer of the museum display they are at once signifiers of another culture and symbolic objects of the authority and secular ritual of the museum (Duncan 1994:281). Pearce (1992:257) suggested that
ethnographic objects have a dual status of both ‘real’ and ‘constructed’ objects, where ‘objects in general are the passive result of social action, and museum collections enshrine the results of objective enquiry which has yielded real understanding; in other words, the metaphorically constructed understandings have been seen as superior to the concrete, contextual reality of the things’.

When referring to depictions of material culture in rock art images, one needs to be careful not to infuse the ‘metaphorically constructed understandings’ with any other understandings. It may be the case that the painted image refers to the ethnographic object or text, or vice versa, but they all exist in a fluid state of open interpretation. In one sense, the rock art image should be seen as the authoritative source of reference, as rock art remains in its own context, is a direct means of communication from the individual artist, and as such, a representation of ‘the concrete, contextual reality of the things’ (Pearce 1992:257).

Both types of ethnographic records, the text and the collected object, are subject to a range of collector biases, both conscious and subconscious, and, therefore, are subject to certain limitations. The initial motives of the collector of ethnographic material were probably wide and varied but these motives and methods of procurement have had a permanent legacy in the form that a collection takes.

The expansion of the colonial frontier in places like Arnhem Land had an immediate influence on the kind of artefacts that were offered and collected. Initially, colonial collectors had an interest in the ‘curios’ being offered, and the makers and dealers of the curios had an interest in the goods being used as currency (Harrison 2011:55; Jones 1996:7), but as Jones (1996:8) explained, very few of these early frontier items ended up in colonial museums. The network of exchange, barter, souvenir and curio hunting that existed once colonial centres became established led to ‘colonial objects of desire’ (Harrison 2011:55) being ‘manufactured’ to meet a demand that brought into question the authentic ‘primitive’ nature of the object (Torrence 1993:467). We have already seen that centres of
production were established at places like Kaparlgoo Mission where artefact ‘sets’ were being sold to collectors, many of which found their way into museum collections. Jones (1996:11), however, whose study of ethnographic collections of Aboriginal material culture in the SAM covered up until the 1930s, stated that it was after 1940 when the contents of collections ‘tended less and less to reflect the technology and cultural practices of hunter-gatherer peoples’. He maintained that ethnographic objects in museums collected before 1930 were ‘socially constituted rather than simply ‘collected’ and were part of a cultural process of trade that was ‘loaded with social meaning’ (Jones 1996:111).

As well as the obvious cultural, political and power differences that influence an ethnography, the sex of the collector could have had a profound effect upon a collection (Belk and Wallendorf 1994) and Jones (1996:128, 222) noted that the SAM’s ethnographic collection has a prevalence of men’s ‘weaponry’. He suggested that this artefact preference at the time of collection not only confirmed a European view of Aboriginal people as being ‘simple’ and ‘primitive’ hunter-gathers but, as a collection, also distorted the perception of a hunter-gatherer warlike character further (Jones 1996:97–98; Willis 2003:52). A similar perception was also shared in 19th century European rock art studies, where the prevalent view was deeply rooted in the notion of a ‘Palaeolithic barbarism’ (Ucko and Rosenfeld 1967:117, 152). Rock art research in Australia has also been influenced by this ideology and one can find numerous examples of a range of artefacts being generically labelled as weaponry, as well as images of people with spears and boomerangs being described as either hunters, fighters or warriors, despite not explicitly engaging in these activities (i.e., Brandl 1973:174; Chaloupka 1993:86; Coles and Hunter 2010; Lewis 1988:25, 100, 309, 357; Mountford 1956:161; Taçon and Chippendale 1994; Walsh and Morwood 1999:49–54). It is in such instances that ethnography and ethnographic objects can play a role in changing prevailing attitudes.

Specifically, this paper has outlined some examples of how ethnographic records have shown that trade and ceremonial exchange were at the heart of many interactions and associations that people had with material culture. Depictions of exotic artefacts in the rock art of Mirarr country affirmed that
items from neighbouring regions were valued enough to be the subject of paintings. Observations of artefacts such as spears in the museum collection confirmed that some were too fragile to be used as hunting implements, and others where carefully decorated to be used in ceremonies. Museum records have noted that specific spears, which were often painted in rock art, were paraded and carried around as prized trade objects.

Despite the limitations of ethnographic analogy, its role in explaining rock art has a place, but needs to be used cautiously. Some previous researchers have had some success in combining western perceptions of rock art scenes with local Indigenous knowledge. One scene, for example, at the Djulirri (Anuru Bay) complex of rock art sites, which was thought to be a fight scene by academics, was re-interpreted by the local Elders, who recognised certain material culture objects in the painting as being associated with a ceremony related to a funeral (Domingo et al. 2016:13). There is no doubt that material culture depictions in many rock art paintings are a key element to their interpretation and previous researchers have recognised this aspect (Lewis 1988; Welch 1997). There is, however, little possibility of a complete understanding of Indigenous material culture objects from either ethnographic or rock art studies, but what can be understood from both media is that artefacts did not have one singular function and were not just extrasomatic objects that were used purely for articulation with the environment or for survival. They were complex expressions of people and their culture and had multiple meanings depending upon context (Tilley 1994:70).
Conclusions

Many of the artefacts from west Arnhem Land housed in the SAM’s Australian Aboriginal Material Culture Collection were collected from the region during the early colonial expansion into the NT. Artefacts acquired during that period were a part of the cultural processes of trade and ceremony and, therefore, still reflected traditional techniques and social values (Jones 1996:111).

Rock art depictions from west Arnhem Land are approximations of their material object counterparts and, therefore, cannot graphically reproduce the finer details of how an artefact was made, its raw materials, patterning and decoration, all of which become apparent in the materiality of the ethnographic object. Rock art images, however, appear to depict how artefacts were used in a range of secular and non-secular contexts, as well as symbolically representing the more complex association that people had with things. On the one hand, the cross-referencing of rock art objects with their ethnographic counterparts, provides a more complete understanding of the graphic object, and on the other hand, illustrations of artefacts in rock art scenes, re-contextualise material culture objects that inhabit ethnographic collections. Despite having been disassociated from their original primary context and, consequently, having their significance changed, objects in the SAM’s material culture collection still have correspondence, albeit complex, with many artefacts depicted in the rock art of west Arnhem Land. I have argued in this paper that a combined and comparative study of both ethnographic and rock art sources can reinforce a mutual understanding of each other.
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References

Akerman, K. 2007 To make a point: ethnographic reality and the ethnographic and experimental replication of Australian macroblades known as leilira. *Australian Archaeology* 64:23–34.


Bininj Manbolh Walking Tracks Project 2013 Mirarr Gunwarrdebin database.


Stirling, E.C. South Australian Museum Archives AA 309/01.


Tindale, N.B. South Australian Museum Archives AA 338/9/3/5.


