The Emu Sky Knowledge of the Kamilaroi and Euahlayi Peoples

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Abstract

This paper presents a detailed study of the knowledge of the Kamilaroi and Euahlayi peoples about the Emu in the Sky. This study was done with ethnographic data that was not previously reported in detail. We surveyed the literature to find that there are widespread reports of an Emu in the Sky across Australian Aboriginal language groups, but little detailed knowledge available in the literature. This paper reports and describes a comprehensive Kamilaroi and Euahlayi knowledge of the Emu in the Sky and its cultural context.

Notice to Aboriginal and Torres Strait Islander Readers

This paper contains the names of people who have passed away.

1. Introduction

Archaeoastronomy is defined as the interdisciplinary study of ancient, prehistoric, and traditional astronomy and its cultural context (Krupp, 1994: ix). Cultural astronomy is defined as the study of the effect of astronomical knowledge or theories on ideologies or human behaviour (Campion, 2003: xv). Fuller et al (2014: 3-4) give a more complete review of the history of archaeoastronomy in the Australian Aboriginal context. They report that while there is a rich knowledge of Aboriginal astronomy, the literature on Kamilaroi and Euahlayi astronomy, based on ethnography from the 19th century, was often very limited in detail, and contained many contradictions between the stories reported. For that reason, the Fuller et al.'s Kamilaroi astronomy project included an ethnographic phase to collect knowledge of the sky from the current Kamilaroi and Euahlayi communities. That project confirmed the hypothesis that the knowledge gained could add to the current body of knowledge of Aboriginal sky culture. This smaller study presents unpublished data from that project to test whether the knowledge gained on the Emu in the Sky in the course of the larger project adds a deeper level of understanding into the sky culture of the Emu in the Sky as described by the Kamilaroi and the Euahlayi peoples.

Like most Aboriginal stories, those collected in the project do not just entertain and describe some physical object in the sky. Aboriginal culture is oral in nature, and oral transmission of knowledge is extremely important, particularly in regards to Law. Aboriginal Law governs all aspects of Aboriginal life, establishing a person's rights and responsibilities to others, the land, and natural resources (Law Reform Commission of WA, 2006: 64). Cultural stories transmit Law, and in this respect can have different levels of meaning. Sveiby & Skuthorpe

(2006: 45-51) describe four levels; one being for children (to explain nature), others being for relationships between people, relationships between the community and country, and ceremonial practices. A participant in the project said that some stories could have up to "30 levels" of meaning. Here we avoid references to the ceremonial level.

2. The Kamilaroi and Euahlayi Peoples

The Kamilaroi and Euahlayi peoples are an Australian Aboriginal cultural grouping located in the north and northwest of New South Wales (NSW). The Kamilaroi language groups are described as "Gamilaraay", and "Yuwaalaraay/Yuwaalayaay" (Ash et al, 2003: 1), while the Euahlayi have an associated but different language. They are descendants of people who left the Middle East approximately 70,000 years ago according to DNA research (Rassmussen et al, 2011: 98). Their ancestors may have settled in southeast Australia as long as 40,000 years ago, as the Mungo Man burial at the Willandra Lakes region of NSW was dated to then by archaeologists (Bowler et al, 2003: 840), but participants in this project dispute these figures, saying that they believe the archaeological evidence points to much older dates.

The geographical boundaries of the area defined for this study of the Kamilaroi and the Euahlayi are based on the language group boundaries reported by Austin (2008: 2), which is very similar to that proposed by Sveiby and Skuthorpe (2006: 25). Fig 1 shows the approximate area of the cultural group and languages. We speculate that the map is incorrect, in that Yuwaalayaay and Yuwaalaraay are gradations of the same Kamilaroi clan dialect, that this clan grouping, indicated by the area "6", is actually further north, and that the Euahlayi language group covers the area "7", the southern part of area "6", and westwards towards the Culgoa River.

The population of this cultural grouping was estimated at 15,000 in 1788 (discussion with participants leads us to speculate this could have been as large as 60,000 with the resources available in the area of the study), and as low as 1000 in 1842 (ibid: 25-6). As a result of pressure from European settlers, there was a displacement of Aboriginal people in this group towards the northwest. The current population of people identifying as Kamilaroi and/or Euahlayi ancestry is approximately 29,000 (estimates from Kamilaroi Nation Applicant Board).

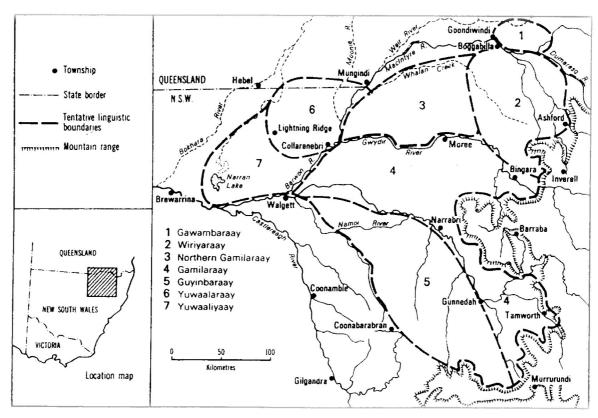


Fig 1 language location in northern New South Wales (Austin, 2008) note: 1-7 are Kamilaroi dialects

3. The Emu in the Sky Across Australia

We searched for references to an Emu in the Sky across Australian Aboriginal literature, and found them in the literature about Aboriginal culture in South Australia (SA) (Nullarbor and central desert), West Australia (WA) (Kimberley, Tanami, and Murchison regions), Northern Territory (NT), Victoria (VIC), Queensland (QLD) (Gulf country and southeast), and NSW (Sydney basin).

The earliest reference to the Emu in the Sky was by Stanbridge (1857: 139), who reported that the Boorong people of west central VIC said that an emu (Tchingal) resided in the dark patch (the Coal Sack) under Crux. The next mention in the literature was by Ridley (1873: 273-4), who spent an evening under the sky with an Aboriginal man from near Walgett, NSW called King Rory, who informed Ridley that there was an Emu (gao-ergi) in "the dark space under the tree", meaning the Coal Sack (the tree being the Southern Cross). King Rory, who was most likely Euahlayi, used *gao-ergi*, which is phonetically very similar to the current Kamilaroi/Euahlayi Gawarrgay/Gawarghoo (Ash et al, 2003: 82). We can confirm that Gawarrgay/Gawarghoo is the correct word for the Emu in the Sky, as dhinawan is used for the emu bird. Fuller et al (2014: 29) argued that King Rory had been taught this knowledge by his grandfather when he was around 15, and Ridley estimated him to be about 60 in 1871, so his description of the Emu was learned well before any European explorers or settlers had reached the Walgett area, giving strong support to the idea that the Emu in the Sky is pre-European contact in origin. Ridley also gave King Rory's tribal name as *Ippai Dinoun*, *Ippai* being one of the Euahlayi marriage classes, and *Dinoun* being Ridley's spelling of the current dhinawan, which is the emu name, and was his totem, so he should have been knowledgeable about the Emu in the Sky.

Later references include Palmer (1885: 174) who has a reference from the Gulf country in QLD, and Bates (1972: 59-60, and date unknown: 13) who said that the emu in the "Yamminga times of long ago", went up into the sky and "became Wej Mor – the dark patch in the Milky Way". Bates is believed to have collected this story at Ooldea, SA, around 1904 from the Ngalea language group (south central desert).

Basedow (1925: 315, 332-4) has several references to the Emu in the Sky from northern Australia. Some unknown Aboriginal groups from the Musgrave Ranges of the Tanami Desert (WA) spoke of a "resting emu" (*kaleya pubanye*) in the Coal Sack. The Larrakia from near Darwin (NT) had a very complete view of the Emu in the Sky which is remarkably like that of more recent investigations, and told Basedow that "the Coal Sack was the head of a gigantic emu" which was made up of dark patches in the Milky Way as far as Scorpius, with the legs extending further.

In his field notes of an expedition to the Warburton Ranges, Tindale (1935: 457-9) refers to a story from the Pitjandjara (central desert) about an emu in the sky called Kalaia. Worms (1940: 271) has a reference to the Emu from his work with a Kimberley (WA) group.

Love (1987: 4) refers to Ford (1985: Art. No. 3) by describing the Emu in the Sky as follows: "to the Aboriginal this dark constellation was the Emu, its head being the Coal Sack, its body being in Scorpius and its legs in Ophiuchus". In Hafner et al (1995: 34) Ngitji Ngitji told of stories of the Emu and the Milky Way from northern SA. More recently, Cairns (1996: 9-10) suggested that a rock engraving of an emu at the Elvina Track site in Kuringai National Park (NSW) could represent the Emu in the Sky. Norris & Norris (2009: 6-7) have shown that the engraving mirrors the Emu in the Sky, in both shape and azimuth, in April, which is the time of the year when emus lay their eggs.

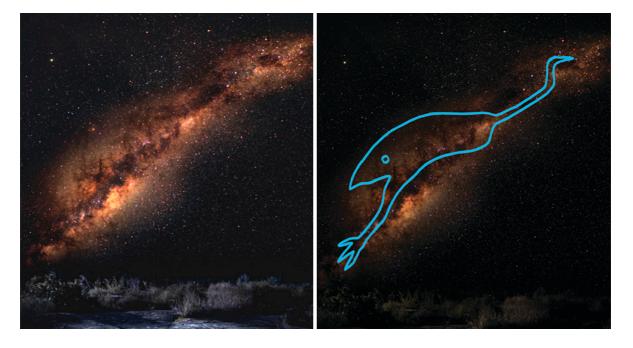


Fig 2 Kuringai Emu in the Sky (images courtesy Barnaby Norris and Ray Norris)

Cairns and Harney (2003) describe the "Cosmic Emu" of the Wardaman people and their neighbours in the area bounded by the Victoria and Daly Rivers of the NT, based on the

knowledge of Bill Yidumduma Harney, a Wardaman elder. They connect the Emu in the Sky to songlines and rock art, and to descriptions by previous writers.

4. The Emu of the Kamilaroi and Euahlayi

There are a limited number of written sources about the culture of the Kamilaroi and Euahlayi, mostly from the latter half of the 18th century. These were Ridley (1856, 1873, 1875, 1878), Fraser (1888), Greenway (1878, 1901), and Fison & Howitt (1880). Mathews (R.H.) had a number of published works, including publications relevant to this study in 1900, 1904, and 1905. K. Langloh Parker, a contemporary of Mathews who lived on the Narran River in the late 1800's, collected a large body of folklore about the Euahlayi (Parker, 1898, 1914; Parker & Lang 1897, 1905). Sveiby & Skuthorpe (2006) have more recently described the culture of the Nhunggabarra band of the Kamilaroi/Euahlayi language group.

It has been established that the idea of an Emu in the Sky, as a cultural object used in stories, rather than the emu bird, existed across Australia at the time of European invasion. Basedow's information from the Larrakia, Ford's description, and the more recent investigation of the Kuringai people's stone engraving of an emu near Sydney (Fig 2), all point to at least some Aboriginal groups seeing the Emu as a long, stretched out figure in the dust clouds of the Milky Way from the Coal Sack to beyond Scorpius. Most of the participants in the ethnographic phase of the Kamilaroi astronomy project referred to the Emu in the Sky as an emu figure stretching from the Coal Sack to Scorpius. However, the story reported in this article is the only complete story collected, including linkage to the Kamilaroi/Euahlayi culture and resource management.

The Emu in the Sky as seen by the Kamilaroi and Euahlayi changed from season to season, as the Milky Way containing the Emu changed position in the night sky. As the Emu changed position, it also altered in appearance, and that alteration was linked to cultural and resource matters. All of the images of the Emu's appearance in this study are seen mid-evening, around 9 PM local time.

While the Emu can be seen in the sky as early as March, it reaches its first appearance of note in April and May, when it is seen stretching from the South to the southeast (Fig 3). In this appearance, the Emu has legs, and appears to be running. The reason for this is that this is the time for mating and laying of eggs by the emu bird, and as the Emu in the Sky at this time is female, the female emu birds chase the males during mating. Because the eggs are being laid at this time, seeing the Emu in this way is a strong reminder that the emu egg resource is available, and eggs can be taken when they are laid.

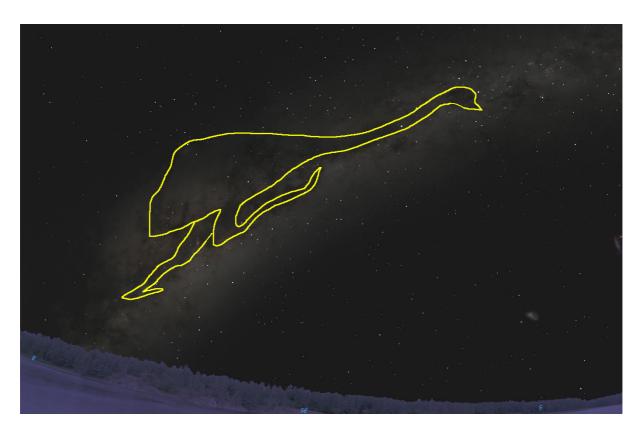


Fig 3 the Emu in autumn (April-May), running after a mate (image courtesy of Starry Night Education)

In June and July, the appearance of the Emu changes. The legs disappear, and the male Emu is now sitting on its nest, hatching the new chicks (Fig 4). The eggs are still an available resource, and can be taken from the nest.

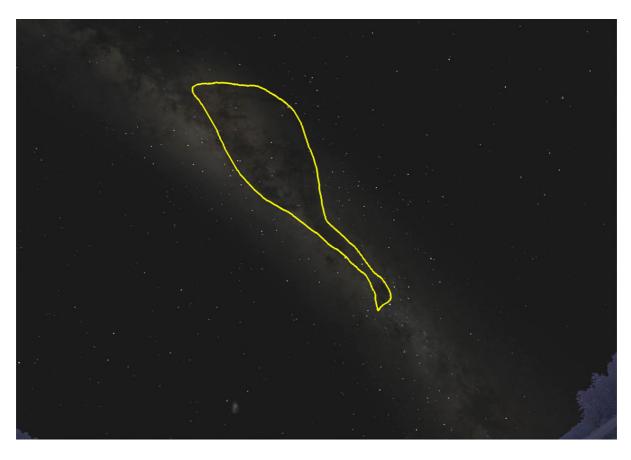


Fig 4 Emu in winter (June-July), sitting on its nest (image courtesy of Starry Night Education)

The Kamilaroi and Euahlayi have in common their male initiation ceremony, the *bora*. Many language groups in southeast Australia used a similar ceremony, sometimes using the borrowed word, *bora*. For the Kamilaroi and Euahlayi, the preferred months for their *boras* are after August, possibly because the Milky Way, which is connected closely to the ceremony, and behind which is the location of their culture hero, *Baiame*, was vertical in the sky to the southwest in August and early September. *Baiame's* son, *Daramulan*, was given to the people and it is through *Daramulan* that *Baiame* sees all (Fraser 1883: 208, Howitt 1884: 458). *Baiame* is worshipped at the *bora* ceremony (Ridley 1873: 269) and *Daramulan* is believed to come back to the earth by a pathway from the sky (Fraser 1883: 212). Eliade (1996: 41) reports that *Baiame* "dwells in the sky, beside a great stream of water (Milky Way)". Fuller et al (2013: 36) have proposed that the orientation of the *bora* ceremonial circles aligned to the Milky Way in the South-southwest. The histogram in Fig 5 shows the preference in 68 known *bora* sites in NSW and southeast QLD, which is strongly in the southern quadrant.

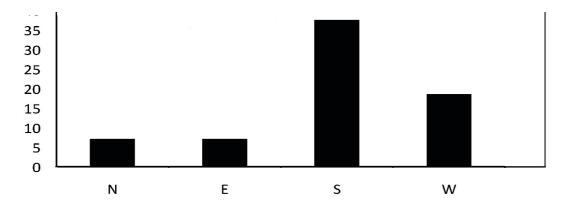


Fig 5 frequency of alignment of bora sites to cardinal quadrants (Fuller et al, 2013)

In late winter (August to September), the neck of the Emu becomes indistinct, leaving the body to represent an emu egg. This was taken as a sign that the chicks were hatching, and that the egg resource was no longer available. Because the male emu bird looks after the emu chicks, this has led to some speculation (Love, 1987: 3) that this connects the Emu in the Sky to the *bora* ceremony, as the male emu hatches and raises the chicks, so the Aboriginal elders nurture the male initiates. Further to this theme, the head of the Emu is still visible in the sky, and together with the body, they form a large and small ring in the Milky Way, which may be representative of the small and large *bora* rings that are laid out on the ground. The head represents the smaller, sacred, *bora* ring, and body the larger, public ring, and looking at the rings in the sky, they mirror the layout of the *bora* rings on the ground. If Fuller et al (2013) are correct in their alignment hypothesis, this may be the reason that *bora* sites are aligned to the southern quadrant. At this time of year, Aboriginal people in the area of the study would be leaving their winter camps to travel to ceremonial sites, including *bora* sites.

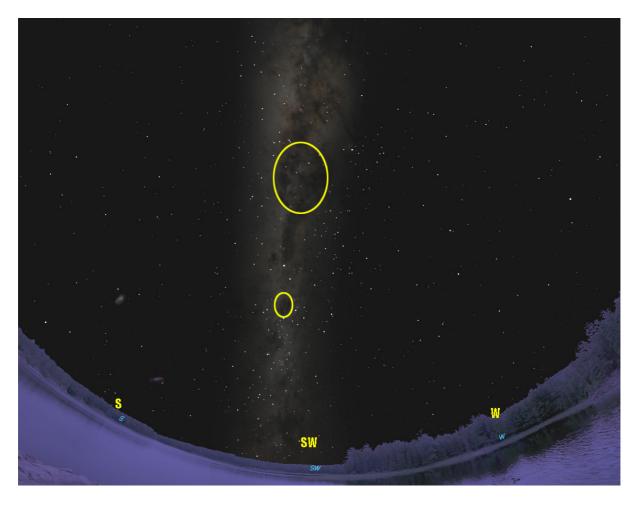


Fig 6 Emu in late winter (August-September) over the South-southwest (image courtesy of Starry Night Education)

In the spring, around November, the Emu once again has a transformation. For the Kamilaroi and Euahlayi, the Emu is also *Gawarrgay/Gawarghoo*, a featherless emu who travels to waterholes and looks after everything that lives there. Come November, the Emu is now (along with the Milky Way it inhabits) low on the horizon in the evening, and due to atmospheric extinction, the neck and the head are difficult to see, so the body of the Emu seems to be "sitting" on the horizon. This is because the Emu is now sitting in a waterhole, and because of this, the waterholes in country are believed to be full (which would normally be the case in southeast Australia after winter rains). The Kamilaroi have another name for the emu bird, *ngurran.gali (Euahlayi: dthnarwon.gulli)* which means "an emu sitting" or "emu in the water", which may well relate to this view of the celestial Emu.

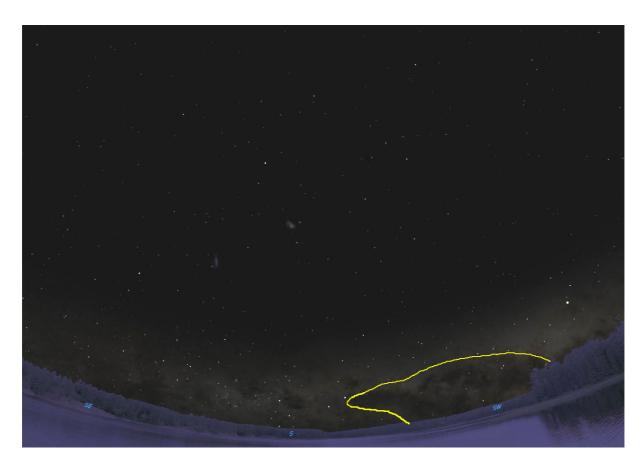


Fig 7 Emu sitting in a waterhole in spring (November) (image courtesy of Starry Night Education)

Later in the summer, the Milky Way and the Emu have dipped even lower, and the Emu has become almost invisible on the horizon. At this time, the Emu is believed to have left the waterholes, and because of this, the waterholes in country are dry, which may well be the case in the summer. The Emu in the Sky will not be visible again until its head peeks above the horizon in February, followed by the body in March.

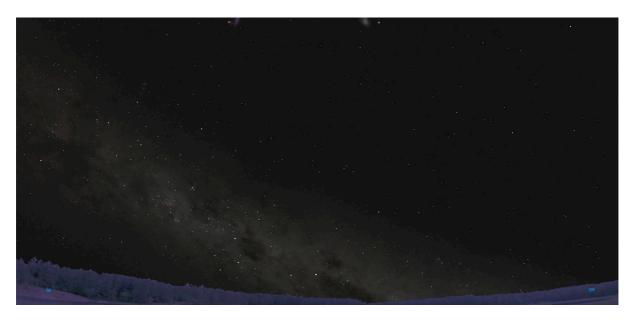


Fig 8 Emu no longer visible in summer (image courtesy of Starry Night Education)

Some of the major themes of the Kamilaroi astronomy project, such as "what's up there is down here", are reflected in the Kamilaroi/Euahlayi stories of the Emu in the Sky. A number of participants commented on their belief that, at one time, the sky and everything in it was "down here", and "down here" was in the sky. For that reason, what is seen in the sky now is also on the ground, and the varying views of the Emu also have close connections with things on the ground, in particular the emu bird, which was an important resource. The view of the Emu in the Sky was closely connected to the resource management of the emu bird, possibly the ceremonial aspects of the male initiation ceremony, and in regards to waterholes, the management of country. An author has had experience with other ceremonial dances and songs connected to the Emu in the Sky.

5. Conclusions

The Emu in the Sky has been shown to be an important cultural figure in many different parts of Aboriginal Australia, and while many of the reports in literature have only the barest details, where traditional knowledge still exists, there is the possibility of working with the knowledge holders to restore a more complete knowledge to the public record. The support of the participants in the Kamilaroi astronomy project has provided a very detailed picture of how the Emu fitted into the sky knowledge of the Kamilaroi, Euahlayi, and possibly some of their neighbours, the Murrawarri and Ngemba. We believe the knowledge gained in this one aspect of culture more than meets the aims of the hypothesis to add to the overall understanding of the sky knowledge of the Kamilaroi and Euahlayi peoples.

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