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MEGALITHIC AND NON-MEGALITHIC MONUMENTS IN THE KELABIT HIGHLANDS OF SARAWAK

(MONUMEN MEGALITIK DAN BUKAN MEGALITIK DI KELABIT HIGHLANDS, SARAWAK)

Nicholas Gani

Abstract

The megalithic and non-megalithic monuments of the Kelabit Highlands gained prominence in archaeological circles and in public eyes through the pioneering research conducted by Tom Harrisson from the late 1940s to the 1970s. From the mid-1970s to 2000, however, there was a lack of new archaeological research on the monuments of the Kelabit Highlands. This changed beginning in the 2000s with new interests in the monuments of the Kelabit Highlands in terms of their preservation and conservation (Cluny and Chai 2007; Hitchner 2009), as well as in archaeological research (Barker et al. 2008; Barker et al. 2009; Lloyd-Smith et al. 2010; Lloyd-Smith 2012; Lloyd-Smith et al. 2013; Lloyd-Smith et al. 2017). With new findings coming to the fore in recent years, this paper reviews the present state of knowledge on the megalithic and non-megalithic monuments in the Kelabit Highlands of Sarawak. This review is based on the study of existing literature and archival research, as well as archaeological excavations and surveys, and ethnographic research conducted in the field by the author. First, this article discusses previous archaeological research conducted on the monuments. Following that, this article discusses the chronology of the monument building tradition in the Kelabit Highlands and the typology of monuments. Next, this article focuses on the social contexts of monument building, as well as the cultural significance of monuments to the Kelabit people. By employing both archaeological and ethnographic perspectives, this article contributes a more holistic and nuanced understanding of a monument building tradition in the Kelabit Highlands that began more than 2,000 years ago and continued until around the middle of the 20th century.

Keywords: Megalith, Monument, Kelabit, Kelabit Highlands, Sarawak

Abstrak

Monumen megalitik dan bukan megalitik di Tanah Tinggi Kelabit, Sarawak mulai dikenali dalam dunia arkeologi dan masyarakat umum hasil daripada kajian yang dilakukan oleh Tom Harrisson dari akhir tahun 1940-an hingga 1970-an. Walau bagaimanapun, dari akhir tahun 1970-an sehingga 2000, monumen-monumen di Tanah Tinggi Kelabit ini kurang mendapat tumpuan kajian arkeologi. Keadaan ini telah berubah selepas tahun 2000 dengan adanya usaha yang baharu untuk memelihara dan memulihara tapak monumen di kawasan tersebut (Cluny and Chai 2007; Hitchner 2009), di samping kajian-kajian arkeologi yang terkini (Barker et al. 2008; Barker et al. 2009; Lloyd-Smith et al. 2010;

Lloyd-Smith 2012; Lloyd-Smith et al. 2013; Lloyd-Smith et al. 2017). Makalah ini membincangkan maklumat terkini berkenaan monumen megalitik dan bukan megalitik yang dijumpai di Tanah Tinggi Kelabit di Sarawak. Perbincangan ini adalah hasil daripada kajian kepustakaan, ekskavasi dan survei arkeologi, dan kajian etnografi di lapangan yang telah dijalankan oleh penulis. Pertama sekali, makalah ini akan membincangkan kajian-kajian arkeologi lepas yang telah dijalankan ke atas monumen-monumen di Tanah Tinggi Kelabit. Kemudian, makalah ini akan membincangkan kronologi tradisi pembinaan monumen, serta tipologi monumen yang terdapat di Tanah Tinggi Kelabit. Seterusnya, makalah ini membincangkan konteks sosial yang menjadi asas kepada pembinaan monumen dan kepentingan monumen-monumen tersebut kepada budaya masyarakat Kelabit. Dengan mengaplikasikan perspektif arkeologi dan etnografi, makalah ini menyumbang satu pemahaman yang lebih holistik dan terperinci terhadap tradisi pembinaan monumen di Tanah Tinggi Kelabit yang bermula lebih daripada 2,000 tahun dahulu, dan telah berlangsung sehingga pertengahan kurun ke-20.

Kata kunci: Megalit, Monumen, Kelabit, Tanah Tinggi Kelabit, Sarawak

INTRODUCTION

No other Bornean people (as far as I know) have such an active megalithic life today or in the recent past. Indeed, the whole area is rich with a vigorous mythology of culture heroes and monsters and with complicated social competition and material exchange, centred on the priorities of those who pay for the monuments, which are superficially no more than 'loving reminders' of the late great (Harrisson 1954: 107).

The megalithic and non-megalithic monuments of the Kelabit Highlands (see Fig. 1) constitute one of the best known examples of funerary and commemorative monuments in Borneo. Distributionwise, megalithic and non-megalithic monuments are found throughout the Kelabit Highlands (Harrisson 1958a; Hitchner 2009). First encountered and described by European colonial officers in the first half of the twentieth century (Douglas 1912; Banks 1937), they gained prominence in archaeological circles and in public eyes particularly through the research of Tom Harrisson from the late 1940s to the 1970s (e.g. Harrisson 1949, 1958a, 1958b, 1962, 1973, 1974). From the mid-1970s to 2000, however, there was a lack of new archaeological research on the monuments of the Kelabit Highlands. This changed beginning in the 2000s with new interests in the monuments of the Kelabit Highlands in terms of their preservation and conservation (Cluny and Chai 2007; Hitchner 2009), as well as in archaeological research (Barker et al. 2008; Barker et al. 2009; Lloyd-Smith et al. 2010; Lloyd-Smith 2012; Lloyd-Smith et al. 2013; Lloyd-Smith et al. 2017). With new findings coming to the fore in recent years, this paper reviews the present state of knowledge on the monuments of the Kelabit Highlands. This review is based on the study of existing literature and archival research (both primary and secondary sources), as well as archaeological surveys and ethnographic research conducted in the field by the author. Firstly, this paper discusses the previous archaeological research that has been conducted on the monuments of the Kelabit Highlands. Following that, this article discusses the chronology of the monument building tradition in the Kelabit Highlands and the typology of monuments. Finally, this article focuses on the social contexts of monument building, as well as the cultural significance of monuments to the Kelabit people of Sarawak.

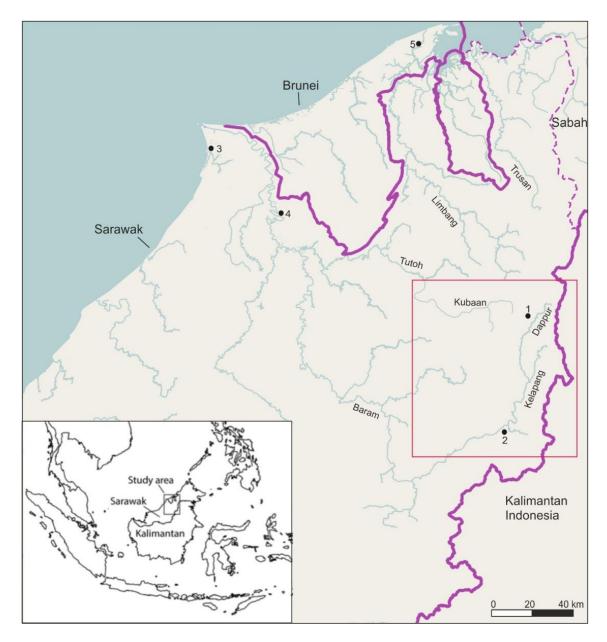


Figure 1. Map showing the location of the Kelabit Highlands (indicated by the red-lined box) in Sarawak, Malaysian Borneo, and major towns: 1) Bario; 2) Long Banga; 3) Miri; 4) Marudi; and 5) Bandar Seri Begawan.

(Map data ©OpenStreetMap contributors. Inset map from Nyiri [2016])

PREVIOUS ARCHAEOLOGICAL RESEARCH ON THE MONUMENTS OF THE KELABIT HIGHLANDS

Despite the availability of a rich body of material and ethnographic evidence of megalithic and non-megalithic monument building activities, archaeological research on the monuments in the Kelabit Highlands has been rather limited and has focused primarily on the megaliths. Although they were the subjects of exploratory investigations by Tom Harrisson between the late 1940s and the 1960s, it is only in recent years that systematic archaeological research has been conducted on the megalithic remains of the Kelabit Highlands, beginning with the Cultured Rainforest Project (Barker et al. 2008; Barker et al. 2009; Lloyd-Smith et al. 2010), and followed by the Early Central Borneo Project (Lloyd-Smith et al. 2017). As such, the history and past significance of the megaliths are still poorly understood. In the paragraphs below, I will discuss briefly the previous megalithic

research conducted by Tom Harrisson, the Cultured Rainforest Project, and the Early Central Borneo Project.

Some of the earliest diggings at megalithic sites in the Kelabit Highlands (in fact, also in the whole of Sarawak) were conducted by Tom Harrisson in the late 1940s with the primary aim of obtaining materials for the Sarawak Museum collection (Harrisson 1951). Unlike his excavations at other archaeological sites in Sarawak (most notably, at the Niah Caves and the Sarawak River Delta area), Harrisson's excavations at megalithic sites in the Kelabit Highlands were largely exploratory. Although various articles documenting the megalithic tradition of the highlands were produced (see Harrisson 1949, 1958a, 1958b, 1962, 1973, 1974), no detailed reports of the excavations of megalithic sites were ever published. However, we know that these investigations were carried out because field notes and photographs that document the work exist in the archives of the Sarawak Museum. Further, brief mentions of the excavation were made by Harrisson in some of his publications. For example, in an article that discussed the megalithic culture of upland Borneo, Harrisson (1958b: 700) mentions diggings that were carried out under the 'Batu Tokid Rini' dolmen (see Labang (1958) for a legend of this stone monument) near Pa' Mada, which recovered local and imported (pre-14th century) pottery. In another article, Harrisson (1970: 26) vaguely mentions the diggings at "some of the largest megaliths", which produced findings of imported Siamese ceramics, some of which were dated to the 13th or 14th century. One particular series of excavations was conducted at several megalithic sites in the Kelabit Highlands by Tom Harrisson and the Sarawak Museum in 1962. These excavations, although crudely executed, revealed findings of imported (Chinese Ming and Song-period, as well as Siamese or Thai) ceramics, earthenwares, metal objects, beads and cremated bones.

Lacking radiocarbon dates for the upland megaliths, Tom Harrisson could only speculate on the origins of the megalithic tradition of the Kelabit Highlands. Harrisson (1958a, 1958b) opines that the height of megalith building in the Kelabit Highlands occurred during the Bronze Age or Iron Age, and not before the second half of the first millennium AD. This conclusion was largely based on the assumption that the carving of stones required the use of metal tools (Harrisson 1958b: 695), and based on comparison with the *Batu Gambar* (a stone carved with a human figure) in Sungai Jaong, in the Sarawak River Delta area in western Sarawak, which was associated with findings of iron slag dated to between AD 700 and AD 1000 (Harrisson 1958a: 396). Harrisson thus notes, "they [the upland megaliths] in all cases can be dated without doubt to or *later than* the same period as the finds in [Sungai] Jaong around Batu Gambar" (1958a: 399, emphasis in original). As will be seen below, however, the results of recent archaeological research would suggest earlier dates for some of the megaliths, in particular the large stone mound (*perupun*) type (see below for a discussion on the typology of monuments).

Based on the results of his surveys and excavations, Harrisson divided the megaliths into three broad ages: those that were made in recent times (i.e. their origins are known), those that were ancient but with folk explanations, and those that were prehistoric (i.e. their origins are unknown, or attributed to spirits) (Harrisson 1958b: 695, 1973: 127).

Due to their often unknown origin, carved stones (batuh narit), especially those decorated with symbolic patterns, were considered by Harrisson to be the oldest (prehistoric) type of stone monument in the Kelabit Highlands (Harrisson 1973: 127). Stone mounds and dolmens were for the most part considered to be prehistoric. Slab or cist graves (batuh nangan), and stone vats (lungun batuh), on the other hand, were regarded as either prehistoric or ancient, as they were sometimes reused, or their existence explained by folk stories (see Labang 1958, 1962). Menhirs (batuh senuped), as well as non-megalithic monuments such as ridge cuttings (kawang) and ditch cuttings (nabang), many of which have known histories, or have been observed in historical times, were all considered as belonging to recent times. Thus, Harrisson concluded that the upland megaliths were part of a long and continuous tradition. Harrisson (1958b: 695, emphasis in original) notes:

Although the Kelabits know nothing of some of the megaliths in their country, there can be little doubt that these do not *merely* represent the carry-over of any

separate, earlier, very ancient culture drastically severed in time and continuity from the present people who actively continued working stone into the second half of the 20^{th} century.

From 2007 to 2010, a multi-disciplinary team of researchers led by Graeme Barker of the University of Cambridge conducted the Cultured Rainforest (CRF) Project that examined the history of past and present land use and human-environment interactions in the highland region of Borneo. Primarily based around Pa' Dalih in the southern Kelabit Highlands, the project included anthropological, archaeological and palaeoecological investigations, which revealed a long and complex history of how people have shaped, and in turn, have been shaped by the environment as evidenced in folk stories, forest material use, settlement and megalithic sites, human modifications of the landscape and attachments to places. The results of the various strands of the CRF Project have been extensively documented (Barker et al. 2008; Barker et al. 2009; Lloyd-Smith et al. 2010; Ewart 2011; Janowski and Langub 2011; Janowski and Barton 2012; Jones 2012; Lloyd-Smith 2012; Lloyd-Smith et al. 2013; Jones et al. 2016). In this section, I wish to highlight the archaeological investigations that were conducted.

The archaeological component of the CRF Project included the excavations of "five settlement sites, two rock shelters, four megalithic cemeteries (or monuments), and two humanly-cut ditches (nabang)" (Lloyd Smith et al. 2010: 96). The four megalithic sites referred to are namely Perupun Payeh Telipa, Perupun Long Kelit, Menatoh Long Kelit and Menatoh Long Di'it (Lloyd-Smith et al. 2013). The excavations of these megalithic sites represent, arguably, the first systematic archaeological excavations of megalithic sites in Sarawak (as opposed to Tom Harrisson's earlier but more crude and exploratory investigations), and perhaps, even Borneo.

Perupun Payeh Telipa (or Perupun Payeh Pali Pa' in Barker et al. 2008), measuring 14-15 metres in diameter and 1.5 metres in height, is a large stone mound that was entirely reconstructed and relocated after it was destroyed by a bulldozer during land clearance. Thus, its excavation failed to yield significant archaeological results owing to the monument's disturbed nature or lack of intact archaeological deposit. On the other hand, excavations at another stone mound site, Perupun Long Kelit (small stone mound measuring around 4 metres in diameter and 0.8 metres in height), revealed a date of 501 ± 22 BP or cal. AD 1408-1441 (UBA-1221), based on radiocarbon dating of a charcoal sample obtained from buried soil under the basal stone layer of the stone mound. There was also evidence to indicate past looting at the site (Lloyd-Smith 2012). Nevertheless, artefacts such as Chinese brittleware sherd dated to the $13^{th}/14^{th}$ century and a whetstone fragment were recovered (Lloyd-Smith 2012; Lloyd-Smith et al. 2013: 46).

At Menatoh Long Di'it, archaeological investigations revealed the presence of 14 stone jars (average dimensions: 1.6 metres high by 0.6 metres wide) and 5 stone slab structures, one of which incorporated a re-used stone jar fragment as one of its upright (Lloyd-Smith et al. 2010; Lloyd-Smith et al. 2013). Excavations at the base of one of the stone jars recovered various artefacts found in stratified sequences, including earthenware vessels and cylinder-shaped objects thought to be ear-lobe stoppers, as well as stoneware (Thai Sawanhalok bowl, 14th/15th century) and Late Ming-period (16th century) porcelain bowls, whetstones, iron blades, bronze ear-rings and bells, and more than 400 glass beads. In addition, cremated human remains (bones and teeth) were found. Overall, these findings represented "depositional events associated with (since decayed) secondary cremation burials" (Lloyd-Smith et al. 2010: 70). Furthermore, the findings of cremated human remains represented a significantly early use of the site as a burial ground, with probable links to the stone jars and/or slab structures, since cremation of the dead is unknown in Kelabit tradition (Lloyd-Smith et al. 2010). Radiocarbon dating of charcoal sample obtained from the packing stone foundation revealed a date of 1238 ± 22 BP or cal. AD 688-870 (UBA-12420), which was thought to relate "to the erection of the stone jar or pre-megalithic activity at the site" (Lloyd-Smith et al. 2010: 71).

In contrast to the large stone jar burial site of Menatoh Long Di'it, Menatoh Long Kelit consists of a solitary stone jar. Amongst the packing stones in the stone jar foundation, the excavations recovered findings of "iron blades, glass beads, bronze bells, and whetstones in near perfect condition", as well as unburnt fragments of human skull (Lloyd-Smith et al. 2013: 44). Additionally, earthenware pottery sherds, possibly belonging to the same vessel, were found in the basal fill of the foundation trench. From the lower packing fill, a charcoal sample was obtained and dated to 240 ± 40 BP or cal. AD 1510-1960 (Beta-237848) (Lloyd-Smith et al. 2013). This significantly younger age compared to the date obtained from Menatoh Long Di'it, however, was taken to represent the stone jar's relocation to its present position. The stone jar itself was assumed to be much older, and in fact, stone jars in general were thought to be some of the oldest megalithic monuments in the southern Kelabit Highlands (Lloyd-Smith et al. 2013: 49). This was supported by the stone jars' general state of preservation, re-use (see above), and the early date obtained at Menatoh Long Di'it.

The CRF project also included the side-study of small cremated bone sample (of a medium-sized mammal) originally thought to be collected from the large stone mound site of Perupun Rayeh in Pa' Lungan (from the depth of 24-36 inches) by the Sarawak Museum in 1962. Radiocarbon dating of the bone sample, which was conducted by the Cultured Rainforest Project in 2010, returned a date of 1980 ± 40 BP or cal. 87 BC – AD 124 (Beta-280504) (Lloyd-Smith 2012: 121). Further investigations by the Early Central Borneo (ECB) Project in 2013, however, suggested Batuh Ritung to be the likelier origin of the cremated bone sample (see Lloyd-Smith *et al.* 2017). This was especially because no evidence of cremated bones was observed during excavations at Perupun Rayeh in 2013 (see below). Furthermore, detailed examination of the 1962 excavation field notes suggested the possibility of the mixing of artefacts from Batuh Ritung and Perupun Rayeh (Lloyd-Smith et al. 2017). Despite that, this radiocarbon date was significant because it revealed a possibly early age for large stone mound construction. This early date was later on substantiated by the further dating of the Perupun Rayeh and Perupun Arur Ritan stone mound sites in Pa' Lungan by the ECB Project (see below).

The CRF Project's team of investigators proposed the development of megalithic practices that corresponded with two "cultural waves of human-plant interactions" (Jones et al. 2016: 80). The first wave, which began around 3,000 BP, was characterised by the beginning of the exploitation and management of sago palm (Eugeissona) and was marked by the appearance of openair and large stone mound sites. The second wave, on the other hand, began from about 450 BP, possibly corresponding with trade with the coastal areas and the introduction of iron and Chinese ceramics. Also during the second wave, rice farming became important and there was a proliferation in megalithic activity and palm management (Jones et al. 2016). Historically, successful rice farming was associated with the attainment of high social status, and the consumption of rice and rice beer (burak) featured prominently in status-giving feasts (iran) held during death and other rites of passage, in conjunction with which megalithic monuments were traditionally constructed (Janowski 2003). The connection between megalithic activities and rice cultivation has also been made by other scholars. For example, Hitchner (2009) notes that one of the cultural factors which enabled megalith building in the Kelabit Highlands is the wet rice farming system employed by the Kelabit, which generated food surplus and did not require all day labour.

Building on the results of the CRF Project, the Early Central Borneo (ECB) Project (a project I was personally involved in) conducted its first two seasons of fieldwork in 2013 and 2014 in the village of Pa' Lungan in the northern Kelabit Highlands. Its aims were to excavate the stone mound sites of Perupun Rayeh and Perupun Arur Ritan, and the open-air old settlement site of Ra'an Ubud Pa'it, as well as to record the Nabang Pa' Libong circular ditch monument. Here, as in my overview of the CRF Project above, I wish to highlight the main results of archaeological investigations conducted at megalithic sites, namely at Perupun Rayeh and Perupun Arur Ritan. A more detailed discussion of other findings of the research is available in a report written by Lloyd-Smith et al. (2017).

Perupun Rayeh is a large stone mound site measuring 15 metres in diameter and 1.5 metres in height. Lying on top of the mound are three large stone slabs, which are possibly the remains of a fallen dolmen (*batuh nangan*) structure. Excavations at Perupun Rayeh in 2013 recovered a variety of artefacts including earthenware, stoneware and porcelain sherds, glass and stone beads and a whetstone fragment, most of which were likely to be associated with the fallen dolmen. Compared to Perupun Arur Ritan (see below), no cremated bones were observed during excavations at Perupun Rayeh. A charcoal sample was obtained from buried soil under the basal stone layer of the mound and it was dated to $2,540 \pm 30$ BP or 700-405 Cal. BC (Beta-400542) (Lloyd-Smith et al. 2017). This date represented the earliest possible date for the construction of the stone mound. If it does prove to date the monument, and not some pre-megalithic activity, this date is thus far the oldest date for a stone monument not only in the Kelabit Highlands, but also Borneo.

Perupun Arur Ritan, on the other hand, is a stone mound measuring 10 metres in diameter and about 1 metre in height. Two broken stone slabs were found on top of the stone mound, one of which was partially buried. These stone slabs may have also been parts of a former dolmen structure. Excavations at Perupun Arur Ritan in 2014 recovered glass beads, cuprous metal fragments, earthenware sherds, two possible stone flakes, as well as cremated bones and teeth remains. Like Perupun Rayeh, Perupun Arur Ritan may have been constructed more than 2,000 years ago. This is indicated by the date of 2,430 \pm 30 BP or 750 - 405 Cal. BC (Beta-400542) obtained from the dating of a charcoal sample obtained from a burnt layer under the basal stone layer of the mound. In addition, the dating of a cremated bone sample, recovered from amongst stone and the backfill of the 1962 excavations, revealed a date of 2,200 \pm 30 BP or 370-180 cal. BC (Beta-443080), which is about a couple of centuries earlier than the bone date from Batuh Ritung mentioned earlier.

While the radiocarbon dates suggest that large stone mounds were possibly constructed between 2,500 and 2,000 years ago, the discovery of more recent artefacts such as stoneware and porcelain ceramics (Perupun Rayeh), metal objects and beads (Perupun Rayeh and Perupun Arur Ritan) indicates subsequent re-use of the mounds within the last 500 years. This was presumably when dolmen structures were added on top of the large stone mounds.

CHRONOLOGY OF MONUMENT BUILDING

Admittedly, due to the fact that systematic archaeological investigations and radiocarbon dating of the megalithic sites in the Kelabit Highlands only began within the past two decades, the accumulated archaeological evidence is still too limited to suggest a definite timeline for the development of the monument building tradition. Nevertheless, based on the results of previous studies, a few observations can be made.

The Kelabit Highlands' monument building tradition developed in at least three different phases defined by a combination of monument typology, radiocarbon dates and ethnographic evidence (Table 1). It appears that possibly the earliest monument construction began around 2,500 years ago in the form of stone mounds (*perupun*), based on radiocarbon dates obtained for Perupun Rayeh (2,540 ± 30 BP or 700-405 Cal. BC) and Perupun Arur Ritan (2,430 ± 30 BP) or 750 - 405 Cal. BC in Pa' Lungan. Since these dates were obtained through the radiocarbon dating of charcoal samples gathered from buried soil beneath the basal layers of the stone mounds, and assuming that they were the results of activities related to the building of the stone mounds (e.g. land clearing), these early dates represent the maximum possible age for the stone mounds. At present, the possibility that these dates represent pre-megalithic activities at the stone mound sites also could not be discarded. However, the similarity of the two dates is suggestive.

Many questions regarding the functions of large stone mounds, however, remain unanswered. In the oral tradition of the Kelabit people, these stone mounds or *perupun*, are said to be the final repositories for the properties of heirless Kelabit aristocrats (see below). Whether or not they were built for human burials is still uncertain. While cremated bones were recovered at Perupun Arur Ritan and at the stone mound under the Batuh Ritung monument, they were not

observed at Perupun Rayeh. Based on their location and distribution, however, Lloyd-Smith et al. (2017) suggest that the stone mounds could have been used as gathering places.

The second phase of the upland monument building tradition consists of the construction of small stone mounds, dolmens and stone jars between AD 1400 and AD 1800. This is evident based on findings at Perupun Long Kelit (which produced a radiocarbon date of 501 ± 22 BP or cal. AD 1408-1411 and the recovery of a 13th-14th century brittleware bowl), as well as at Batuh Ritung, Perupun Rayeh and Perupun Arur Ritan in Pa Lungan (where slab structures or dolmens were erected on top of large stone mounds, perhaps as early as around 400-500 years ago, based on associated findings of stoneware and porcelain ceramics, metal objects and glass beads). In addition, despite the early radiocarbon date (1238 ± 22 BP or cal. AD 688-870) obtained from the packing stone foundation of a stone jar at Menatoh Long Diit (and hence, could represent pre-megalithic activity), it appears that the stone jars were more likely to be associated with burials accompanied by goods such as Thai Sawanhalok (14th/15th century) stoneware, and Late Ming-period (16th century) porcelain bowls, iron blades, bronze ear-rings and bells, and glass beads. Furthermore, the findings at Menatoh Long Kelit indicate that stone jars were used (in this case, possibly re-used) until around 240±40 BP or AD 1510-1960, or within the past 400 to 500 years.

Table 1. Monument building phases and their associated dates in the Kelabit Highlands (based on Lloyd-Smith and Gani 2014).

Timeframe	Monument	Dating	References
c. 2,500 years ago until?	Large stone mounds	Batuh Ritung (not Perupun Rayeh as originally thought, see main text above) C-14 date: 1980 ± 40 BP or cal. 87 BC – AD 124 (Beta-280504) (Cremated bone sample from Sarawak Museum).	Lloyd-Smith 2012; Lloyd- Smith et al. 2017
		Perupun Rayeh C-14 date: 2,540 ± 30 BP or 700-405 Cal. BC (Beta-400542) (Charcoal sample from buried soil under the basal stone layer of the stone mound).	
		Perupun Arur Ritan C-14 date: 2,430 ± 30 BP or 750 - 405 Cal. BC (Beta-400542) (Charcoal sample obtained from burnt layer under the basal stone layer of the mound).	
		2,200 \pm 30 BP or 370-180 cal. BC (Beta-443080) (cremated bone sample obtained from amongst stone and 1962 backfill).	

Table 1. (cont.)

Timeframe	Monument	Dating	References
	type		
Post AD	Small stone	Perupun Long Kelit (stone mound)	Lloyd-Smith
1400 until c.	mounds,	C-14 date:	2012; Lloyd-
AD 1800	dolmens, and	$501 \pm 22 \text{ BP or cal. AD } 1408\text{-}1441 \text{ (UBA-}$	Smith et al. 2010;
	stone vats or	1221) (Charcoal sample from buried soil under	Lloyd-Smith et
	jars	the basal stone layer of the stone mound).	al. 2013
		Associated artefacts:	
		Chinese brittleware sherd dated to the	
		$13^{th}/14^{th}$ century and whetstone fragment.	
		Menatoh Long Diit (stone jars)	
		C-14 date:	
		$1238 \pm 22 \text{ BP or cal. AD } 688-870 \text{ (UBA-}$	
		12420) (Charcoal from packing stone	
		foundation. Date represents pre-megalithic	
		activity?).	
		Associated artefacts:	
		stoneware (Thai Sawanhalok bowl, 14th/15th	
		century) and Late Ming-period (16th century)	
		porcelain bowls, whetstones, iron blades,	
		bronze ear-rings and bells, glass beads, and	
		cremated human remains.	
		Menatoh Long Kelit (stone jar)	
		C-14 date:	
		$240 \pm 40 \text{ BP}$ or cal. AD 1510-1960 (Beta-	
		237848) (Charcoal sample from the lower	
		packing fill. Relatively late date possibly	
		representing the re-use and relocation of stone	
		jar.)	
		Associated artefacts:	
		iron blades, glass beads, bronze bells, and	
		whetstones.	
		(continued on next page)	

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Table 1. (cont.)

Monument	Dating	References
type		
	Dolmen structures built on top of older stone	
	mounds: Batuh Ritung, Perupun Rayeh, and	
	Perupun Arur Ritan	
	Associated artefacts: stoneware, porcelain ceramics, metal objects, and glass beads possibly dating to 400-500 years ago.	
	possibly during to 100 300 years ago.	
Standing	No C-14 dates, but constructions were known	Banks 1937;
stones, ridge	in historical and ethnographic times.	Bulan 2003;
canopy		Douglas 1912;
cuttings and	Note, however, that for carved stones, most	Harrisson 1958a,
ditch cuttings,	are of unknown origin. Thus, carved stones	1958b; Hitchner
carved stones	may have been made from prehistoric until	2009; Lian-
	recent times.	Saging 1976/77;
		Schneeberger
		1979; Talla 1979
_	Standing stones, ridge canopy cuttings and ditch cuttings,	Dolmen structures built on top of older stone mounds: Batuh Ritung, Perupun Rayeh, and Perupun Arur Ritan Associated artefacts: stoneware, porcelain ceramics, metal objects, and glass beads possibly dating to 400-500 years ago. Standing No C-14 dates, but constructions were known in historical and ethnographic times. canopy cuttings and Note, however, that for carved stones, most ditch cuttings, are of unknown origin. Thus, carved stones may have been made from prehistoric until

The third and final phase of monument building is characterised by the erecting of menhirs (batuh senuped), which coincided with the making of monumental landscape modifications (e.g. kawang and nabang, see below). In many cases, the origins of these monuments are known (Bulan 2003; Hitchner 2009; Lian-Saging 1976/77; Talla 1979). For instance, Bulan (2003: 44) notes, "people are still able to tell the exact ridges where they or their ancestors created a perupun, kawang, batu sinuped, or nabang, many of which may have been done by them or their parents." This most recent phase of monument building may have begun around 200-300 years ago based on the association of the batuh senuped with Martavan or 'dragon' jars (Lloyd-Smith et al. 2010) and lasted until the middle of the 20th century, before the adoption of Christianity resulted in the abandonment of most traditional practices. In addition, carved stones (batuh narit) were also known to have been made until around 1950. Most, however, are of unknown origin, while some are attributed to the activities of legendary figures. Thus, most of the carved stones may actually belong to prehistoric times, or to a time longer than existing memory, as Harrisson opined (see above). Without solid radiocarbon dating, the origin of carved stones remains a conjecture.

TYPOLOGY OF MONUMENTS

The monuments of the Kelabit Highlands can be classified into two main categories: megaliths and landscape modifications. These two main categories can be further divided into several subcategories, as described below (see also Table 2).

Table 2. Typology of monuments in the Kelabit Highlands.

Category	Sub-category	Function/significance
Megalith	 Megalithic cemetery slab-built structures (i.e. dolmen) and cist graves (batuh nangan) stone vats or jars (lungun batuh or batuh nann) rock-cut grottoes 	Burial ossuaries. Usually associated with secondary burials.
	 Non-cemetery megalith Stone mounds (perupun) Standing stones (batuh senuped) Carved rock (batuh narit) Rarer types include the stone bridge (apir batuh) and the stone 'seat' 	All types were built during funerary events for the commemoration of the deceased. Certain types are associated with more specific functions as below. Function of <i>perupun</i> : built as repository of property for heirless aristocrats. Function of <i>batuh senuped</i> : built as show of strength, rite of passage into manhood, boundary markers, and symbolic passage into the afterlife for the spirit of the dead. Function of <i>batuh narit</i> : built as commemoration of people and events (e.g. death, successful war or headhunting, and hunting success). Some <i>batuh narit</i> were attributed to the activities of cultural heroes or mythical figures.
Landscape modification	 Ridge canopy cuttings (kawang) Ditch cuttings (nabang) Oxbow (taka) Path widening (bakut) 	Built during funerary rites for the commemoration of the deceased, and family achievements. **Kawang* and *nabang* are also symbolic passages into the afterlife for the spirit of the dead.**

Megaliths

The first type of megalith is the megalithic cemetery, which is associated with the Kelabit practice of secondary burial or *nulang* (see below). Megalithic cemeteries can be divided into several different types. The local (Kelabit) term *batuh nangan* ('propped stone') is used to refer to a range of slab-built

structures (including small and large dolmens, as well as cist graves), which functioned as ossuaries (Harrisson 1958a). Among the Lun Dayeh or Lun Bawang, such stone structures are known as *batuh angan* (Cluny and Chai 2007). Large slab-built dolmens were usually constructed on top of stone mounds, as exemplified by the Batuh Ritung monument, the only large dolmen still standing today in the Kelabit Highlands (Fig. 2).



Figure 2. Batuh Ritung in Pa' Lungan, Kelabit Highlands *Source*: Own photo

Another type of megalithic burial is the stone vat or jar (Kelabit: *lungun batuh* or *batuh nami*), used for secondary burial of human bones. In terms of distribution, they are normally found in the southern part of the highlands. The *lungun batuh* ('stone coffin') is usually a cylindrical container (i.e. like a jar) hewn out of stone, occasionally topped with a flat stone slab (Fig. 3), although some may also be found shaped like troughs (see Gani 2019). In general, the *lungun batuh* are not dressed, although some are carved on the outer surface. It is thought that burials in stone jars were the precursor to the more recent Kelabit practice of using stoneware jars for burials (Nyiri 2016).

Other than in dolmen graves or in stone vats or jars, burials were also placed in rock-cut grottoes (Harrisson 1958b; see also Fig. 14 in Barker et al. 2008: 158). In variations of this practice, burials may also be placed near rockshelters or in rock crevices.



Figure 3. Stone jars at Menatoh Long Di'it *Source*: Cultured Rainforest Project

The second category of megaliths are the non-cemetery megaliths, the most common of which are standing stones or menhirs (Kelabit: batuh senuped) and stone mounds (Kelabit: perupun, but also known as terupun, or pelpuun in the Kerayan region of East Kalimantan, see Arifin and Sellato [2003]). Less common are the stone bridge (Kelabit: apir batuh) and the stone 'seat' (Harrisson 1958a). The batuh senuped is usually in the form of a single standing stone, although some may be found in pairs or in clusters (Fig. 4). Besides commemorating the deceased during secondary burial events, the batuh senuped is also associated with a range of different uses. They were built as a show of strength and as a rite of passage into manhood. They may also be used as boundary markers. In connection with death rites, they also symbolise the passage into the afterlife for the spirit of the dead.

A peculiar function of standing stones has also been suggested by Schneeberger (1979) based on information gained from informants from Pa' Imai in the Upper Bahau in East Kalimantan. That is, standing stones serve as astronomical-calendrical aids and are used to determine the start of the planting season. Although Schneeberger doubted the suggestion – because the menhir pairs pointed out by his informants were "standing on either side of a much travelled path" (1979: 64) – he acknowledges (citing Nieuwenhuis 1904) that such use of stone pairs has been reported in the Upper Mahakam. Schneeberger (1979) further mentions (citing Hose 1929) the use of sundials among the Kenyah of Borneo, although as Ammarell has shown, the solar gnomons – "simply a vertical pole or other similar devide that is used to cast a shadow" (1988: 88) – of the Kenyah are made of hardwood. Nevertheless, the astronomical-calendrical function for menhirs and dolmens in Southeast Asia has also been suggested by Christie (1979). As far as I know, however, this kind of function has never been associated with any of the standing stones in the Kelabit Highlands.



Figure 4. A pair of *batuh senuped* in a paddy field in Bario, Kelabit Highlands *Source*: Own photo

The *perupun* on the other hand are stone mounds of various sizes, which were built not only as memorials, but also as final repositories for the property (valuables such as beads, jars, and gongs) of heirless aristocrats (Fig. 5). It is said that this serves to prevent potential squabbles among close relatives over rightful inheritance of the property of the deceased. In his book, 'World Within: A Borneo Story', Tom Harrisson (1959: 111-112) describes the construction of a stone mound for such a purpose, in the voice of a middle-aged, wealthy aristocrat:

On the last day I will declare my monument. All my imperishable property is to be collected in a heap on the ground over there, a dart's flight from the long-house ladder. Every man present will come out when it has stopped raining and form a line from the fine old dragon jar in the centre of the slope down to the shingle bank in the stream bed. Along this living chain, from hand to hand, should pass first the small surface stones and gradually, as the work goes down, larger stones and then boulders. All this will travel from the river bed up the bank on to the little knoll above flood level, slowly shaping a pile of stone. Presently this will grow into a mound higher than the long-house is off the ground, and twice the width anyone can leap. All mine.

Thus will my belongings be secured for ever. Thus my own memory will stand to eternity. It will be larger than any ordinary man's can be, because so many come to my feast and are so well entertained - since I have nothing to keep and pass on, I can, I will spend the lot in one great final display; and in consequence make a mighty effort to do well by me, piling rock upon boulder upon pebble upon stone.



Figure 5. Perupun Pa' Buda, near Batu Patong in the southern Kelabit Highlands, photographed in 2015

Source: Lindsay Lloyd-Smith

Batuh narit (in Kelabit, and also in Lun Dayeh (see Hoare 2002)) is the local term for stone boulders that are decorated with incised or relief carvings of human or animal figures and/or symbols (Harrisson 1958b). These carvings are commonly connected to local myths and legends. For example, Batuh Narit Arur Bilit in Pa' Umor is a stone boulder with a carved human figure (Fig. 6) that is believed to be a self-portrait carved by Upai Semaring, a cultural hero of both the Kelabit and the Lun Dayeh/Lun Bawang (Cluny and Chai 2007). Additionally, the batuh narit is connected to past headhunting practices. The presence of a series of engraved lines on some batuh narit is said to signify the number of heads a brave warrior has taken. Due to the carved stones' connection with local myths and legends, they are thought to be perhaps some of the oldest

monuments in the highlands (Harrisson 1958b). Nevertheless, carved rocks were also made in historical times. In the southern Kelabit Highlands in the 1930s, the Kelabit artist, Anyi (see Manis 1949), was commissioned to carve a *batuh narit* to commemorate the death of the Kelabit Chief, *Penghulu* Tinggang (Janowski and Langub 2011). In the Apo Kayan and the Upper Bahau in East Kalimantan, stones with carved designs have been called *batu kalong* (see Arifin and Sellato 2003; Schneeberger 1979; Sellato 2016).



Figure 6. Batuh Narit Arur Bilit in Pa' Umor, Kelabit Highlands *Source*: Faculty of Applied and Creative Arts, University Malaysia Sarawak

Landscape modifications

As mentioned previously, monumental constructions in the Kelabit Highlands consist not only of megaliths, but also of commemorative marks made in the landscape. Four common types are what the Kelabit call as *kawang*, *nabang*, *taka* and *bakut*, each of which is described below.

The *kawang* is a cut or notch on a prominent mountain ridge, achieved by the felling or clearing of trees, and made so as to be visible from the distant valleys. In a secondary burial event, a jar containing the bones of the deceased would sometimes be placed near a *kawang*. A modern-day *kawang* can also be seen today in Bario, Kelabit Highlands. Known as the Millennium Kawang, it was made around the end of 1999 to commemorate the turn of the new millennium (Fig. 7).

The *nabang*, on the other hand, is a ditch cutting, traditionally cut using simple tools such as the *parang* (similar to a machete or a bush knife) and the *ukat* (wooden spade). In general, *nabang* are straight ditches, although circular ditches are also known. According to Talla (1979: 240), besides serving as commemorative monuments, the *nabang* also have some practical uses. They are constructed in order to make a pass across a mountain ridge, or to redirect water into or around rice fields. A *nabang* can also be intended to change a river's course by the cutting of a bend in a river, with an oxbow lake (*taka*) being the end result.

Traditionally built during burial events or other distributive feasts (*iran*, see below), the *kawang* and the *nabang* commemorate important people and events, as well as family achievements. They are also seen by the Kelabit as symbolic passages for the spirit in the journey to the afterlife (Lian-Saging and Bulan 1989: 96). With conversion to Christianity beginning in the 1940s, the primary motivation for such monumental constructions shifted towards practicality and the communal benefit. Thus, in modern times, the *bakut* (path widening) has replaced the *kawang* and *nabang* as the preferred type of monumental construction (Bulan 2003: 44). Nevertheless, the principal purpose for the commemoration of individuals and the gaining of prestige is retained.



Figure 7. The Millennium Kawang in Bario, Kelabit Highlands *Source*: Own photo

THE SOCIAL CONTEXTS OF MONUMENT BUILDING

Traditionally, the Kelabit are a stratified society, with different groups or classes occupying different social strata (Rousseau 1990). Generally, the traditional Kelabit society can be divided into the aristocrats or the nobles (*Lun Paran* or *Lun Doo*), the intermediate class (*Lun Pupa* or *Lun Upa-Upa*), the follower class (*Anak Katu*) and slaves (*Demulun*) (see Bala (2016), Lian-Saging (1976/1977) and Talla (1979) for a more detailed discussion on Kelabit social stratification). Among the Kelabit, commemorative monuments are usually associated with the funerary rites of aristocrats (although according to S. B. Bala (2014: 143), they could also be built as part of other commemorative occasions, for instance during the *ngelua* or initiation rite for children). Traditionally, elaborate headhunting and death rites, which are usually accompanied by expensive communal feasts, constitute the field where members of the Kelabit society compete for prestige. As Rousseau notes, "maintenance of high status is linked to the performance of feasts with conspicuous consumption", and that among the traditionally stratified Kelabit society (as well as among other related groups such as the Lun Bawang or Lun Dayeh), there is a high social competition, where "leaders must compete for followers" (1990: 209).

There are two stages (primary and secondary) in a Kelabit funeral. During both stages, guests from all neighbouring longhouses would be invited and an *irau* (feast) will be held, where and when food and *burak* (rice beer) will be prepared and served to all. The funerary *irau* is arguably the grandest occasion in upland life. As Banks (1937: 429) notes: "I really believe that the Kelabits' greatest joy is mourning or burying his own and other people's relations." This observation, I would argue, not only reflects the grand nature of the *irau*, but also the centrality of funerary rites in Kelabit culture. Further, Harrisson (1958b: 697) notes that an *irau* consisted of "maybe 500 guests eating and drinking all they can for 4-5 days."

In the primary burial, the dead is placed in an elaborately carved wooden coffin (*lungun*) or in a stoneware jar. The coffin is then kept in a small shelter or a hut built adjacent to the longhouse (Maran 1969; Talla 1979), or in the family's longhouse apartment (Lian-Saging 1976/77). The deceased's body is left to decompose for about a year or two, during which time, mourning continues.

After a year or two have passed, during which time the family of the deceased has made enough preparation to accumulate rice, rice beer and animals (e.g. pig and buffalo), the *burak nulang* (secondary burial feast) is held and once again invited guests would come from all over. Before the arrival of the guests, the deceased would be commemorated by his or her family by the making of megalithic and/or non-megalithic monuments, which "were meant to be admired and brought prestige to the sponsoring head of the family" (Talla 1979: 237). The bones from the coffin used in the primary burial are then cleaned and transferred into a burial jar, which is subsequently interred in a burial ground (*binatuh* or *menatoh*) or tied to a tree (Talla 1979). Alternatively, the bones are placed directly into a stone cist, a slab-built grave, a dolmen or a stone vat, or in caves or among huge rocks. The *iran* then continues for about a month, or until the rice beer is finished.

The building of monuments in conjunction with death rites and the holding of the accompanying *irau* are massive undertakings in terms of both labour and cost. Therefore, monument building is often associated with wealthy aristocrats, as only they would have the necessary means to sponsor the costly *irau* and to commission the building of monuments. Additionally, members of the aristocratic class have the social standing and influence to attract the attendance of faraway visitors and to organise the huge amount of labour involved. Thus, death feasts are occasions to emphasise or to enhance one's status or to gain prestige. As Talla (1979: 219) notes, "the distinction between social classes was emphasized at death. The aristocrats practiced complex funerary rites while the lesser class had unelaborated ones." Status is also displayed in the type of coffin used in a primary burial. For aristocrats, the coffin is made of fine timber and is ornately carved with specific motifs indicating rank. For Kelabit aristocrats, the *lungun* is carved with a tiger or deer motif (Lian-Saging 1976/77; Talla 1979). Also during primary burial ceremonies, expensive family heirlooms comprising "jars, beaded skull caps, necklaces, etc." are displayed, with the belief that the spirits of the heirlooms would also accompany the deceased in the afterlife (Talla 1979: 231).

As noted above, in the Kelabit society, there is a high level of social competition in the accumulation of wealth and prestige, which in turn offers upward social mobility for one's own self and family. How the funerary *irau* figures in this is demonstrated by LeBar (1972: 163), who observes:

aristocratic families vie with one another with respect to the elaborateness of these 'feast of merit' for deceased members. A deceased aristocrat is remembered for the size and expense of his *iran*, and the relative status of aristocratic families is in part determined by remembered headhunting prowess and expensive death feasts of former members.

Further, "those heirs or in-laws who contribute or intrigue the most on these occasions can lay claim to the largest share of the inheritance" (LeBar 1972: 161).

Death ceremonies are also of considerable political and social importance. During death feasts, new debts are made and old ones are settled (LeBar 1972: 163; Lian-Saging and Bulan 1989). In an *irau*, all longhouse community members and invited guests contribute labour and/or rice, rice beer, animals, and firewood. The males would also contribute their labour for the gathering and transporting of stones for the building of megaliths, or the cutting of trees and digging for the building of non-megalithic monuments. In turn, the family of the deceased is obliged to repay this debt during future *irau* organised by other families. Before returning to their respective longhouses, guests are given salt and other small items (Talla 1979), or "rice cooked in bamboo and meat...to eat on the way home" (Lian-Saging 1976/77: 148). Additionally, during death feasts, political and marriage alliances are made (LeBar 1972) and headhunting expeditions are planned (Talla 1979: 252).

In making monuments, the Kelabit do not differentiate between the various types: they all serve the same purpose, which is to make marks in the landscape. As Harrisson (1958b: 696) notes, "any combination, overlap or intermix could occur in Kelabit inspiration and execution", depending on family tradition, the wish of the deceased, the local topography of the longhouse, the climatic season, omens or dreams, and current trends (Talla 1979), as well as the ability of the sponsors and the availability of materials (Lian-Saging and Bulan 1989). The construction of megaliths makes use of locally available sandstone, and in the case of the stone mound, of riverrolled stones. Stones from older monuments are also reused in the making of newer megalithic graves or monuments (Lloyd-Smith et al. 2010).

THE CULTURAL SIGNIFICANCE OF MONUMENTS

The Kelabit megalithic culture is unique because of its continuity into modern times. Ethnographically, megalithic monuments are known to have been built right up to the middle of the 20th century. Schneeberger (1979: 63) notes, while conducting a geological survey in the Kerayan-Kelabit Highlands in 1939 that the megaliths he encountered were "an integral part of a lively megalithic tradition whose bearers are the peoples of the Kelabit tribal groups." In his study of the upland megaliths, Harrisson claims to "have seen new ones [megaliths] erected" (1958a: 397), and to have "participated in their [the Kelabit] megalithic rites extensively" (Harrisson 1958b: 694) between the years 1949 and 1951.

Nevertheless, Harrisson also notes the decline of the upland megalithic tradition in his description of the last erection of a megalithic monument, which he claimed took place in 1951 (Talla [1979:241] however, claims that this took place in 1948. See also B. Harrisson [1977:5]). Harrisson (1958b: 699, emphasis in original) notes:

Under Christian pressure, probably the *last* fully megalithic act took place at [Pa' Umor] soon after, when two rather poor sandstone slabs were carried up to a hill on poles and erected at the summit, on the edge of an earlier ditch-cut.

Aside from this brief note however, Harrisson did not offer much detail regarding the context of the construction, although Talla (1979: 241) mentions that the building of the monument was "sponsored by Pun Ngidir of [Pa' Umor]" (see also Lian-Saging 1976/1977: 74), and that "these stone slabs were brought up from the foothills or the streams." Beside that, another stone monument built in historical times is the standing stone erected in 1948 (based on the legible engraving on the stone, which clearly states the date of 27 June 1948) in the village of Pa' Lungan in the northern Kelabit Highlands as a memorial to a person named Pun Pitan. An additional example is the aforementioned stone carving made to commemorate the death of a Kelabit leader, *Penghulu* Tinggang, in the 1930s (Janowski and Langub 2011).

Although some megaliths certainly date to historical times, many others are of unknown antiquity and origin, which suggests that they are older than the living population's memory. Nevertheless, the Kelabit people who believe that they have inhabited the highlands since time immemorial regard the presence of megalithic remains as marks left behind by their ancestors (Bala

2016). A number of the megaliths are attributed to the activities of mythical figures or spirits. A Kelabit origin story, for instance, tells of how Seluyah, a cultural hero and ancestor of the Kelabit, "made holes in rocks as caves...Some of these rocks were given designs upon them, pictures of men and of animals" (Balang 1965: 152). Meanwhile, some megalithic sites are linked to the legends of Tuked Rini (Labang 1958, 1962; Janowski 2014).

According to Kelabit oral history as collected by the Kelabit anthropologist, Poline Bala (2016), the mythical ages of the Kelabit can be divided into six different periods, all named after great legendary figures, whose exploits were told in various songs or poems (Table 3). The first age was the time of the first man, Buyun. Megalithic activities began in the Seluyah Age, as attested by the story of how Seluyah carved rocks as mentioned above. The Seluyah Age is followed by the Agan Tadun Age and the Balang Lipang Age, which were characterised by the intensification of cultivation. Interestingly, the connection between agriculture and the beginning of megalithic constructions in the Kelabit Highlands has been suggested by Jones et al. (2016) (see above). It was also in the Agan Tadun Age that the Kelabit were said to have acquired iron technology and valuable items or ornaments such as beads, both of which have been found in some early settlement and megalithic burial sites in the highlands.

In some areas in the highlands, recent graves were placed near (ancient) megalithic ones that are of unknown origin, but which were nevertheless believed to belong to Kelabit ancestors. For example, in Pa' Dalih in the southern Kelabit Highlands, megalithic sites were used for burials until around 1950. According to Barker et al. (2008: 163), "the makers of the megalithic site were believed to be ancestors of the people of Pa' Dalih even though their names were not known, and it was important for the recent dead to be with their ancestors."

In her study of the Kelabit relationship with the forest, Janowski (2003) suggests that the Kelabit perception of the megaliths in the landscape is related to their beliefs about the 'wild', and the life force (lalud) contained in the natural environment. Certain topographical features in the landscape - high mountain ranges, especially craggy ones, as well as rocky places in general - are believed to possess higher concentrations of lalud, and therefore have powerful spiritual significance. Thus in the animistic past, burials were often placed near rocks, on mountain ranges, or in megalithic graves (see also Phelan (1997) and Sheppard (1936) for discussions on the spiritual potency of megalithic sites in Sabah and Peninsular Malaysia, respectively). The erection of the standing stone (batuh senuped) among the Kelabit in particular, is said to emulate the twin limestone peaks of the Batuh Lawi (Janowski 2003), which is an important landmark that features in the origin stories of the upland peoples (B. Bala 1993; Balang 1965; Clement 1911). Elsewhere, the construction of megalithic monuments that mimic natural features or landmarks in the landscape has also been suggested by Scarre (2002), who pointed out the example of the prehistoric monuments on the Grée de Cojoux, in Brittany, northwest France. In the Kelabit Highlands, some mountains or rocks are connected to beliefs about batuh baliu ('transformed stone'). The batuh baliu are commonly said to be petrified longhouses caused by the breaking of the taboo of laughing at animals (masab), which illustrates the potentially dangerous nature of lalud. The building of megalithic monuments is also considered as making 'marks' (etuu) on the landscape, which is seen as a way how the Kelabit actively engage with or manipulate the cosmic power present in the environment (Janowski and Barton 2012).

Table 3. Mythical ages of the Kelabit according to oral history (translated and adapted from Bala 2016).

Age	Myth	
Buyun Age	Buyun (or Guyun in Balang (1965)), the first man, lived in the highlands with wife. There, they subsisted by hunting wild game and gathering forest product	
Seluyah Age	The upland population increased. The people were led by Seluyah, who is believed to be the first man to have roamed the entire highland plateau. In this age, people were physically larger and stronger, which enabled them to build	

megalithic monuments, the remains of which are now seen throughout the highlands.

Agan Tadun Age This age is the longest period of all, and is named after the famed warrior, Agan Tadun. During this time people began to obtain weapons like spears, *parang*, shields. Cultural practices such as the wearing of earrings, bangles, necklaces and bead hat (*peta*), and the making tattoos also began in this age. Population pressure led to infighting as people competed for land for cultivation.

Balang Lipang Age This age is named after the warrior Balang Lipang. During this period, people continued to cultivate the land in the highlands. The cultivation of wet rice began in this period.

Upai Semaring Age The cultural hero Upai Semaring was known to be strong and capable of hacking stones using his *parang* (bush knife). During this time, Upai Semaring led all of the Apo Duat groups (this includes the Kelabit, the Lun Dayeh and other related groups of northern interior Borneo.

Semaun Age

During this time, a conflict with his brother caused Semaun to migrate to Brunei where he became influential. The absence of Semaun from the highlands led to a period of tribal warfare and headhunting. Beginning this period, there was increased contact with outsiders, which led to the transition into the historical or modern period. This time was also marked by political, economic and social changes. This was also the time that saw the rule of the Brookes and the modern day separation of Apo Duat communities by the international border.

Why is stone a spiritually potent material? Certain scholars believe that stones are seen as powerful because of their durability (Phelan 1997; Janowski 2003). In tropical environments, where most things are made using forest materials such as wood, bamboo and rattan that rot away rapidly, a high value is placed on things made from stone and other materials that are relatively more permanent. Thus, in the interest of preserving the memory of the deceased, and at the same time, to display status and to record individual and family achievements, various monuments were built out of stone. As Phelan (1997: 4) notes for the stone monuments of Sabah, but which can also be applied to the megaliths of the Kelabit Highlands:

The predominant factor determining the use of stone in Sabah as a historical record is its durability; this fact can hardly be fully appreciated by people who have never lived in Southeast Asia. Here everything is very transient with the result that records of the past are very scarce and in extensive areas none seem to exist.

However, as the Kelabit non-megalithic monuments (e.g. the *nabang, kawang*, and *bakut*, see above) show, it is clear that not all monuments were made from stone. This can be explained in a manner that does not necessarily discount the significance of stone as discussed above. As mentioned previously, and as Talla (1979) explains, one of the factors determining the choice of monument that one builds is the availability of suitable material in the local environment. In areas that are further downriver, it has been observed that mausoleums for elites among peoples such as the Berawan (see Metcalf 1976, 1982) and the coastal Melanau (see Jamuh 1949) were built out of ironwood (*Eusideroxylon zwageri; local name belian*). In terms of durability, ironwood lasts more than a hundred years. Meanwhile, in terms of availability, compared to large stones, ironwood is more readily available in the downriver areas. In the opposite way, the simple reason why megalithic graves are more prominent in the highlands is that stone is more ubiquitous, while ironwood trees do not grow in upland areas. Thus, ironwood mausoleum constructions echo similar ideas of achieving permanence for both the monument and the memory of the deceased. Furthermore, there are indications to suggest that while monuments like the *kawang* and the *nabang* were not built

from stones, they were often constructed near spiritually potent places (e.g. on mountain ridges), and their constructions were accompanied by rituals to placate the spirits (see Talla 1979: 239).

CONCLUSION

This article has reviewed the present state of knowledge on the monument building culture in the Kelabit Highlands in Sarawak. From the discussions provided in this article regarding the archaeology, chronology and typology of monuments, as well as the traditional contexts of monument construction and the cultural significance of monuments, it is clear that the monuments of the Kelabit Highlands in Sarawak belong to a long and possibly continuous tradition, beginning at least around 2,500 years ago with the constructions of large stone mounds (perupun), which corresponded with the appearance of open-air settlement sites and initial evidence of the exploitation and management of sago palm in the Kelabit Highlands. Over time, various configurations of stone-made monuments were constructed, including slab-built structures or dolmens (batuh nangan), stone vats or jars (lungun batuh), standing stones (batuh senuped) and rock carvings (batuh narit). These megaliths functioned as graves and memorials, which were usually built in conjunction with the secondary burial rites of the Kelabit elites. They are also part of the wider Kelabit culture of making funerary and commemorative monuments, which included nonmegalithic ones such as ridge canopy cuttings (kawang) and ditch cuttings (nabang), oxbow lakes (taka) and path widening (bakut). Ethnographically, it is known that monuments were constructed by the Kelabit people until around the middle of the 20th century, before conversion to Christianity and the adoption of more modern ways of life resulted in the abandonment of most traditional beliefs and practices, including the practice of monument building.

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Nicholas Gani Lecturer Faculty of Social Sciences and Humanities Universiti Malaysia Sarawak 94300 Kota Samarahan, Sarawak Email: gnicholas@unimas.my

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