



KEYWORDS: *Rock art – Maritime – Contact art – Kinta Valley – West Malaysia – Orang Asli*

THE NEWLY DISCOVERED INDIGENOUS ROCK ART FROM THE KINTA VALLEY, WEST MALAYSIA

Chaw Yeh Saw and Hsiao Mei Goh

Abstract. This paper describes the newly discovered rock art motifs from Gua Toh Semelah in Kinta Valley, peninsular Malaysia. Red paintings are represented by single hue handprints and anthropomorphs. In contrast, the charcoal drawings are dominated by 'contact art' that portrays the local Indigenous experience with the maritime activities from the early to the mid-19th century. The study suggests that the local interaction with external contact broadly influenced the Indigenous rock art across Kinta Valley, and it is the visual evidence of the Indigenous encounter in the early socioeconomic activities during the 19th century in peninsular Malaysia.

1.0 Introduction

The archaeological investigations of the human past in Malaysia began in the early 20th century, but the rock art sites in this region are still largely unexplored. Our current understanding of the ancient rock art in Malaysia is mainly retrieved from the works of amateurs (e.g. Evans 1918, 1920; Taha 1993; Dunn 1964) and a few recent rock art studies that focused on the cave sites across northern and central west Malaysia (also known as peninsular Malaysia) (see Saidin and Taçon 2011; Tan and Chia 2011). Previous investigations at Gua Tambun in central west Malaysia inferred that the pre-Historic rock art tradition in this country might be extended back to as early as 4000 years ago, based on the Neolithic pottery sherds discovered at the site (Faulstich 1990; Jaafar 2003). Subsequent investigations conducted by Saidin and Taçon (2011) and Isa (2014) across a few other cave sites in northern west Malaysia had documented additional hundreds of Indigenous charcoal drawings attributed to the late 19th century.

Kinta Valley (Fig. 1) is one of the most significant areas located in central west Malaysia. Over the years, numerous studies have been carried out in the valley to explore the geology, biodiversity, ethnography and lifeways of its pre-Historic communities (e.g. Wray 1897; Sieveking 1956; Yong and Chooi 1989; Muhammad and Yeap 2000; Geyer et al. 2005; Muhammad 2010). However, investigations of ancient cultural expression such as rock art are often absent from these narratives. Gua Tambun is the only rock art site that has been extensively investigated and studied by researchers, while other rock art sites have been only sporadically investigated and documented (e.g. Taha and Jaafar 1990; Jusoh 2011). In an attempt to explore

the cultural expression of past populations and their interactions with the landscape, we have conducted an extensive rock art survey across the myriads of limestone hills in Kinta Valley between late 2019 and early 2020. As a result, a total of four new rock art sites were identified and investigated. This paper presents one of four newly discovered rock art sites in the Gunung Toh Semelah cave complex (Fig. 1). For clarification, the word '*gunung*' is a Malay word meaning hill or mountain, whereas '*gua*' is a Malay word meaning cave. A total of 87 motifs depicted in red and black (charcoal) were documented. This site presents a rare example of having two distinct rock art traditions in one single locality.

The other rock art sites documented are Gua Kintaly, Kroh Rockshelters and Gua Tempurung. Gua Kintaly consists mainly of contact period rock art, such as human stick figures holding 'weapons' and 'watercraft'. Kroh Rockshelters rock art motifs include 'watercraft', anthropomorphs, zoomorphs and geometric shapes. Unlike other rock art sites in west Malaysia, where the rock art is located in rockshelters or close to caves' entrance, the Gua Tempurung rock art is located inside a dark cave. It consists of both black and red rock art, with the latter usually depicted in a much larger size than the former. Few of the zoomorphic figures are strikingly similar to the ones from Gua Tambun, suggesting a possible connection between these two sites.

2.0 Archaeological and historical context of Kinta Valley

Kinta Valley is a river valley situated between two mountain ranges, Main Range to the east and the Kledang Range to the west (Fig. 1). It is served by the

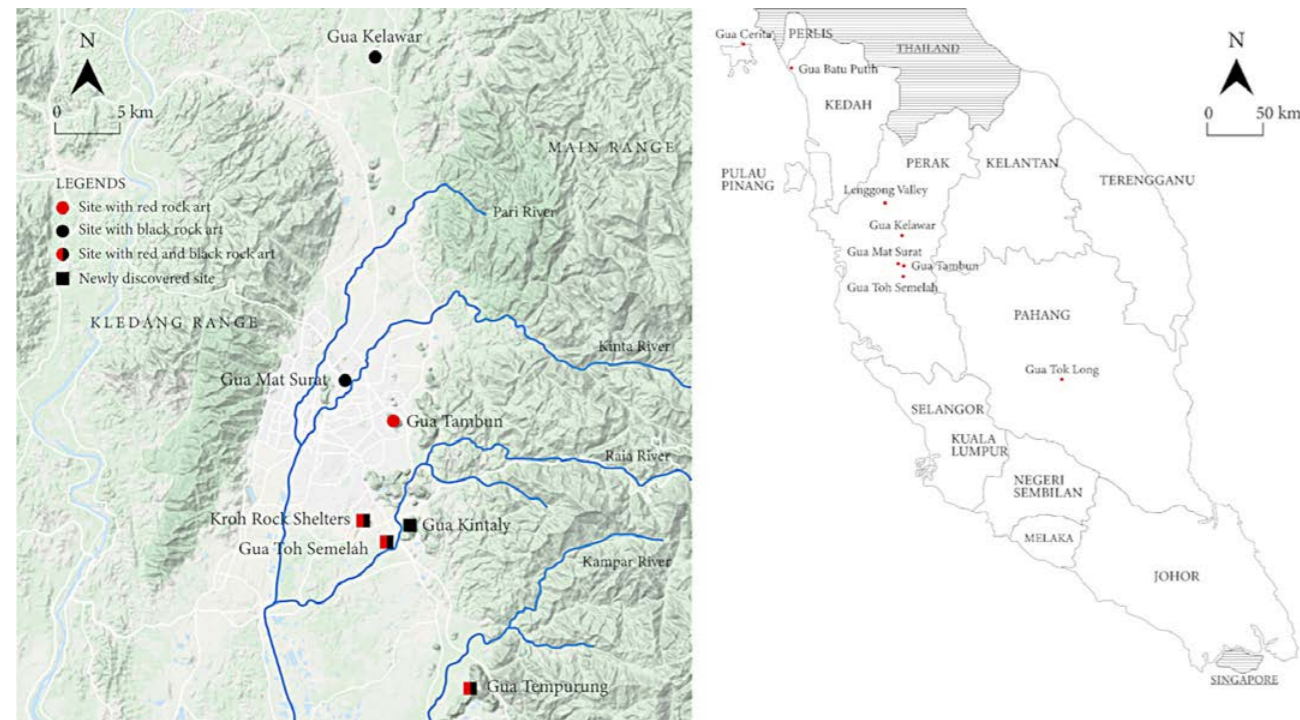


Figure 1. Rock art sites mentioned in this paper.

Kinta River, which flows southward with its tributaries in a herringbone pattern. Kinta River was one of the main transport routes in the 19th century, where five-ton boats regularly launched and travelled along the river (Peet 1983, as cited in Khoo and Lubis 2005). The valley is famous for its abundant tin resources and numerous limestone outcrops subject to limestone and marble quarrying. Due to extensive tin mining, several parts of Kinta Valley developed into small villages and river ports.

Nevertheless, the region's industrial development was slow, and tin production remained dominated by the locals until the mid-19th century (Khoo and Lubis 2005: 4). In 1876, the British took political power from Malay Sultanate and brought about a new development phase in Malaya. Since the early 19th century, numerous caves in Kinta Valley have been adaptively used as cave temples. To date, a total of 39 cave temples are still in use in the Kinta District (Tan and Toh 2017), and the majority of them were illegally built (Bunyan 2020). In 2018, Kinta Valley was named the second National Geopark in Malaysia.

The earliest archaeological investigations in Kinta Valley were conducted between 1886 to 1895 when Wray (1897) reported the recovery of human remains, stone implements, and some food remains, including marine shells. Such discoveries suggested a potential interaction between the early communities in Kinta Valley and the coastal communities (Wray 1897: 40). In 1955, another four human burials associated with an extensive collection of Neolithic pottery and stone tools of Neolithic and Hoabinh traditions were recovered from two rockshelters in Kinta Valley (Sieveking 1956: 200). Subsequent archaeological works at Gua Datuk

near Tambun (Peacock 1958: 180–182; Khoo and Lubis 2005: 330) and Gua Naga Mas near Gunung Lanno (Taha 1993: 71–73) all reported the discovery of animal fossils. Serendipitous discoveries of Historical artefacts in Kinta's tin mines are also not uncommon. Among them are dug-out canoes and an 18th-century bronze Bodhisattva statue (Sieveking 1956: 208–209). These archaeological finds indicate that Kinta Valley was occupied over different cultural periods and was part of the trading network of the region since pre-Historic times and up until the present.

2.1 Previous research of rock art sites in Kinta Valley

A total of three rock art sites were previously investigated in Kinta Valley, namely Gua Tambun, Gua Mat Surat and Gua Kelawar (Fig. 1). Gua Tambun is the only known surviving pre-Historic red painting rock art site in west Malaysia, and it is identified as the largest rock art site in Malaysia. A total of 640 rock art motifs of anthropomorphs, zoomorphs, geometric features, 'botanic' shapes and abstract shapes were previously recorded in Gua Tambun (Tan and Chia 2010, 2011, 2012). They were painted using haematite, the iron oxide-rich ochre locally sourced from the foothills. The colours range from different hues of red, yellow to dark purple. Matthews (1960) placed the site within the Hoabinhian context based on the stone artefacts found there, although he emphasised that the association between these artefacts and the rock art is uncertain. No chronometric dates are assigned to the rock arts of Gua Tambun. Still, the relative age of ~4000 to ~2500 years was widely accepted by archaeologists, based on the Neolithic assemblages recovered from the site (Faulstich 1990; Jaafar 2003). In 2010, Gua Tambun

was designated as a National Heritage Site.

Gua Mat Surat, on the other hand, contains solely charcoal drawings. The motifs include 'human' figures, 'animal' figures, 'trees', 'boats' and depiction of human activities such as 'man' riding an animal. Jusoh (2011) identified a striking similarity between the rock art motifs here with those recorded in Gua Kelawar — a cave site located in the Sungai Siput town, approximately 30 km from Gua Mat Surat, suggesting that communities of similar cultural backgrounds probably produced the rock art from both sites. Two phases of excavations were conducted in Gua Mat Surat in 2006. The excavation report was never published and was only briefly mentioned by Jusoh (2011); the team recovered some earthenware pottery fragments, riverine shells, bone fragments and metal objects, indicating that pre-Historic communities probably inhabited the cave from Neolithic to Metal Age (~4000–1500 BP).

Gua Kelawar (Fig. 1) is about 10 m long and has an upper and lower chamber. The excavation conducted in 1986 also uncovered pottery sherds, food remains and metal objects. In addition, Hoabinhian stone implements, bone implements and haematite chunks were also found (Taha and Jaafar 1990). This cave comprises charcoal drawings scattered across the walls and ceilings of both chambers. The motifs in Gua Kelawar include 'human' figures, 'animal' figures, abstract designs, a 'sun' and a 'boat'. Based on the stylistic analysis and lack of depictions of modern elements such as motorcars and firearms, it was suggested that the drawings are pre-British and produced by the local Indigenous (Orang Asli) communities (Taha and Jaafar 1990: 124).

2.2 Gunung Toh Semelah

Gunung Toh Semelah is a limestone outcrop in the Kinta Valley's southern part (Fig. 1). In 1977, the Department of Geological Survey Malaysia conducted a geological assessment of the hill to determine its potential for quarrying. The limestone hill stretches from west to east for about 220 m and extends southeast for approximately 275 m. The hill area is approximately 46 762 m² with a mean height of 30 m. It mainly comprises dolomitic limestone and high-calcium limestone (Ooi 1978).

Gunung Toh Semelah is located at the riverside of Raia River — a large tributary of Kinta River, with its volume nearly equal to Kinta River itself (Leech 1879: 24). The Raia River is also a natural boundary that marks the border of two Orang Asli cultural groups: Temiar people to the north and Semai people to the south. Both Temiar and Semai are subcultural groups of Senoi and speak Austroasiatic languages. Early Historical and contemporary anecdotal evidence shows that there were approximately 130 houses along Raia River in the 1820s; the area flourished during the second half of the 19th century, following the establishment of a small river port that served the local and international traders, especially those from China and Indonesia

(Anderson 1824: 184; Burns 1976: 269; Tok Haji pers. comm. Dec. 2019). However, its location near the river's lower reach has been severely affected by the extensive tin mining activities around the upper river since the 19th century. The shift from water to land transport in Kinta Valley in the 1880s also affected the river port, eventually causing its cessation. Consequently, while other parts of Kinta Valley began to prosper in the late 1880s, the settlements in our study areas around the Raia River were still referred to as small villages with no signs of imminent growth (Khoo and Lubis 2005: 20). At present, there are two Malay villages nearby, with some plantations made close to the foothills. One of the Malay villages, Kampung Kepayang, held an annual ritual for blessing inside or near the cave between 1850 to 1975 (Tok Haji pers. comm. Dec. 2019).

Gunung Toh Semelah itself has several caves. Our survey in 2019 documented some rock art at the main cave — Gua Toh Semelah — which is also locally known as Gua Jantan ('male cave'). Gua Toh Semelah was registered as a Chinese cave temple called Wan Sin Tung in 1895 but was abandoned during the Japanese occupation in Malaya between 1942 to 1945 (Khoo and Lubis 2005: 174). The landscape of the cave was largely disturbed by treasure hunters after the Second World War. Local communities from the nearby Malay villages revealed that the Orang Asli had frequented this site as a temporary camp until the early 20th century.

3.0 Methodology

Gua Toh Semelah was visited on four occasions between October 2019 and January 2020. The photos were taken using Canon Powershot G9X Mark II. Flash was used as the inside of the cave is rather dim. The photos were then enhanced using DStretch. Some of the rock art captured was then traced and drawn. The photos of the large panel of rock art were stitched together using Adobe Photoshop CC built-in Photomerge program. The stitched photos demonstrate a minor distortion due to angle constraints, but it is still useful to provide a complete panel view to investigate how the motifs relate to each other. The rock art motifs were interpreted based on their styles, superimposition and material used. The 'watercraft' motifs were analysed following the method employed by Sukkham et al. (2017), which is to identify the style of the motif, label the identifiable features of the watercraft, and then assign them to their closest boat typology. Finally, the rock art was cross-referenced with Historical and contemporary anecdotal accounts, as well as with similar rock art from other parts of Southeast Asia. This approach helped to profile the watercraft type and to gain an understanding of the chronology (Anderson 1824; Skeat 1900; Loewenstein 1958; Harrison 1959; Burns 1976; Taha and Jaafar 1990; Blake 1996; Nik Hassan Shuhaimi 1998; O'Connor 2003; Arifin and Delanghe 2004; Khoo and Lubis 2005; Saidin et al. 2008; Walker-Vadillo 2009; Jusoh 2011; Tan and Walker-Vadillo 2015; Hakim et al. 2018; Oktaviana 2018; Tan 2018).

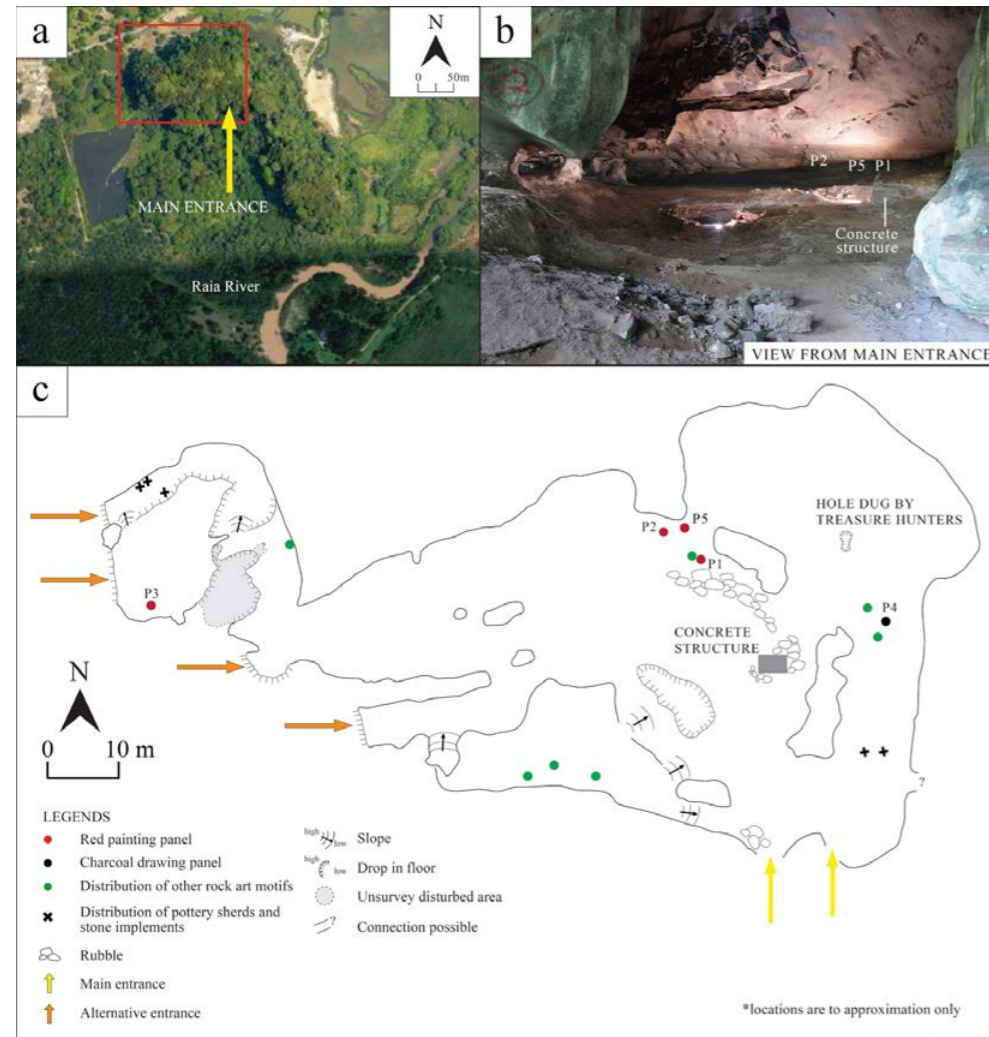


Figure 2. (a) Satellite image of Gunung Toh Semelah with red box indicating the cave; (b) view from main entrance into the cave; (c) sketch map of Gua Toh Semelah.

4.0 The rock art of Gua Toh Semelah

Gua Toh Semelah is a cave complex with multiple entrances (Fig. 2). The entrance is 2.5 m wide and 3.5 m tall and opens into a large spacious chamber, measuring approximately 34 m in length and 32 m wide. Upon entering, a large, crystallised limestone column is formed on the right. This column is thought to be sacred by the local villagers as it resembles an elephant



Figure 3. Stone implements recovered from Gua Toh Semelah.

and two chairs, and the locals refer to it as 'bridal couches'. Further into the chamber, there is a remnant of a temple structure made of bricks, concrete and stones. Red paintings are present in the main chamber and another chamber on the western side of the cave, whereas charcoal drawings are found scattered across a few locations in the cave (Fig. 2c). Our survey also recovered 39 pieces of pottery sherds and 11 stone implements from the surface finds (Figs 3 and 4).

A total of 87 motifs were documented, and the rock art at Gua Toh Semelah consists predominantly of black rock art (82.76%, N=72) (Table 1). Three of the motifs are categorised as indeterminate due to their poor conditions; hence they are not included in the table below. The majority of motifs presented are anthropomorphs, followed by 'watercraft', geometric shape, line art,

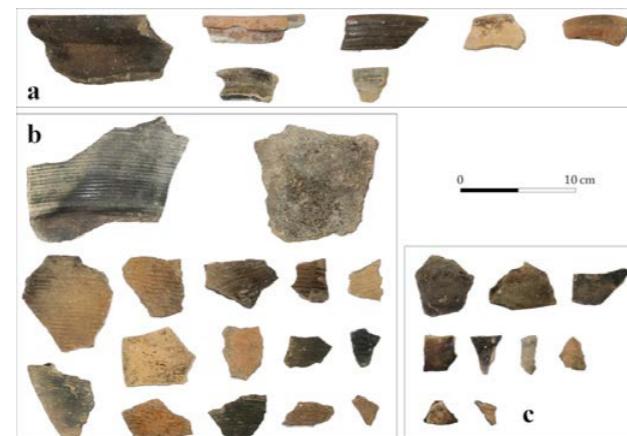


Figure 4. Pottery sherds recovered from Gua Toh Semelah. (a) rims; (b) cord-marked and incised; (c) plain.

'house', zoomorph, handprint, and one depiction of a 'human' riding an 'elephant'. A total of 13 motifs that do not fit into any of the above-mentioned categories were categorised under abstract.

This paper gives a greater emphasis on five main panels (P1, P2, P3, P4 and P5) and other 'watercraft' motifs scattered around many parts of the cave. Four of

Motif types	Colour		Total
	Black	Red	
Abstract	11	2	13
Anthropomorph	20	3	23
Anthropomorph and zoomorph: animal rider	1	-	1
Geometric shape	10	2	12
Handprint	-	2	2
Line art	5	4	9
Material culture:			
'house'	4	-	4
'watercraft'	17	-	17
Zoomorph	2	1	3
Total	70	14	84

Table 1. Number of rock art motifs according to type and colour.

the panels (P1, P2, P3, P5) comprise all the red paintings discovered at the site, whereas P4 is the longest panel



Figure 5. Gua Toh Semelah rock art - P1.



Figure 6. (Left) Gua Toh Semelah large stick figure beside P1 superimposed on red stains; (right) tracing image of a stick figure.

found in the cave — measuring approximately 5 m in length and appearing to be highly intact. Additional focus was given to the stylistic analysis of the 'watercraft' motifs as this contact art may be able to provide insights into the chronological context of the rock art of Gua Toh Semelah.

Panel 1 (P1)

Situated on a cave ceiling approximately 1.77 m above the cave floor, this panel consists of an anthropomorph and a zoomorph painted red (Fig. 5). Both figures are significantly larger than any other motif found in the cave, with the anthropomorph measuring about 1 m in length. The paintings are difficult to notice with naked eyes, and they are only identifiable when viewing from a certain angle and distance. The anthropomorph is depicted in full frontal view, and it has a flat head with solid infill, a hollow body outline and both arms and legs represented with a simple line, except the right hand, which is depicted with three fingers/claws. The zoomorphic figure is depicted in profile view and is smaller than the anthropomorph. It is made up of simple outlines with only three legs. Unfortunately, this panel has been badly vandalised



Figure 7. Gua Toh Semelah rock art – P2.



Figure 8. Gua Toh Semelah rock art – P3.



Figure 9. (Top) view of the P4 created by stitching different photos together; (bottom) tracing the image of the P4, a. an 'oared boat', b. 'human' figure without adornments, c. a 'human' figure with adornments, d. 'human' figure holding a stick/weapon, e. goods/fishing nets (?), f. unidentified.

with graffiti. Other parts of the cave walls seem to have some traces of red pigments, but they faded considerably. A charcoal drawing of a 'human' stick figure superimposed on other red stains is present to the left of the zoomorph (Fig. 6). It has three fingers on each hand and two protruding lines from the chest, which probably hint at female breasts. Intriguingly, a protruding line between the legs can also be interpreted as a masculine feature such as the male genitals.

Panel 2 (P2)

Two human handprints were present on the ceiling, approximately 5 m away from P1 (Fig. 7). These handprints are depicted on top of each other, with the right handprint below the left one. The red paintings of P2 are of similar shades compared to P1, both executed in the shade of dark maroon or dark brown. Apart from a few red stains on the right of both handprints, no other rock paintings are found near them.

Panel 3 (P3)

Two additional anthropomorphs and a claw-like motif are

present in another chamber to the left of P2 (Fig. 8). This panel, labelled as P3, is about 1.46 m above the ground level. The motifs are smaller than those of P1 and are made with a range of different hues of red. The larger anthropomorph seems to be wearing a headdress. There are also some unidentified red stains around the motifs. The motifs are superimposed by a wasp nest and some mineral deposit. The presence of mineral accretion over the rock art motifs shows its potential for chronometric dating, and the permission to acquire the dating samples from Gua Toh Semelah is now underway. Unfortunately, graffiti are also present on this wall. No stone implements or pottery sherds were found near the panel (Fig. 2).

Panel 4 (P4)

In a narrow 1.3 m wide passage, a 5 m long charcoal drawing panel consists of 12 anthropomorphous figures, a 'boat' and some geometrical shapes (Fig. 9). This panel is located 0.9 m above the ground. The drawings on P4 appear to be discoloured but are very consistent in terms of style. This panel has the largest concentration of anthropomorphs in the cave. They vary in size but are generally larger than other objects in the panel, including the 'boat' motif. The anthropomorphs are depicted in frontal view; most have sharp square shoulders and a protruding line between the legs, possibly depicting male genitals. Headdresses or halos are presented in some of the 'human' figures, while some seem to be wearing necklace or elaborated costumes (Fig. 10). It is noteworthy that the 'human' figures in P4 are of similar characteristics to the charcoal anthropomorphs found near P1 (Fig. 6), in which they were all drawn in thin lines, depicted as stick figures with square shoulders, three to four fingers on each hand, and a protruding line between legs.

Panel 5 (P5)

Panel 5 is located between P1 and P2. This panel is approximately 1 m in length. We were unable to take a photo with a scale during the fieldwork as the cave roof where the motifs are depicted is too acute from the cave surface and thus, we can only record the rock arts with the assistance of zoom photography. The panel features multiple vertical lines, one curved line, one horizontal line and an outline of an amorphous shape (Fig. 11). The motifs are partially faded, and there is graffiti of an unidentified language written in black above the panel.

5.0 Interpretation of Gua Toh Semelah rock art

Rock art sites with red paintings are scarce in west Malaysia. Thus far, red paintings have only

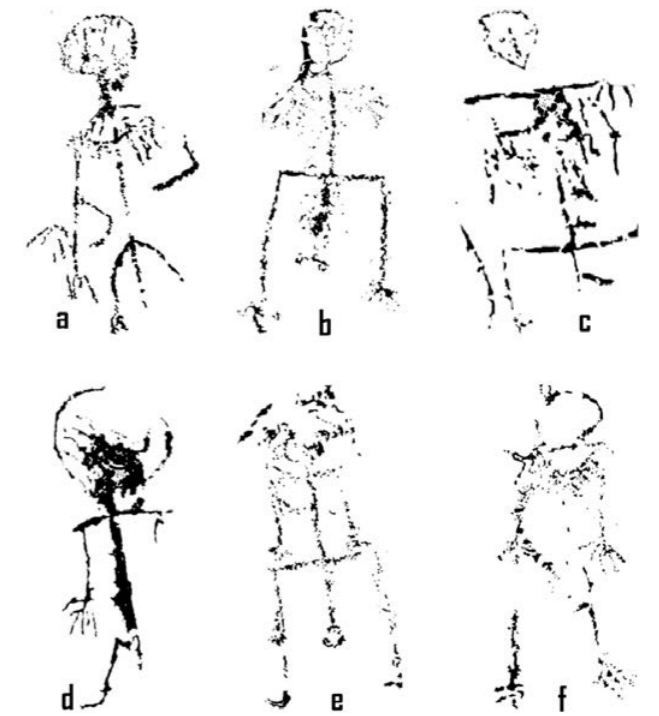


Figure 10. Anthropomorphs from P4 with adornments (images not to scale).

been reported in Gua Cerita (Ong 1994) and Gua Tambun (Tan 2014). However, the rock art at Gua Cerita was destroyed by vandalism before proper documentation could have been conducted. Gua Cerita is a coastal cave in Langkawi Island of northern west Malaysia, and Gua Tambun is a rockshelter located in the Kinta Valley (Fig. 1). These two red painting sites and Gua Toh Semelah vary significantly in their motifs, styles and location of the rock art. Gua Cerita rock art consists mainly of abstract shapes (Ong 1994: 69) which resemble 'seashells' and 'entangled lines'; Gua Tambun rock art is dominated by geometric shapes such as ovals, chevrons and wavy lines, and at Gua Toh Semelah, the red paintings are mainly anthropomorphous. Comparative study shows no similarities between

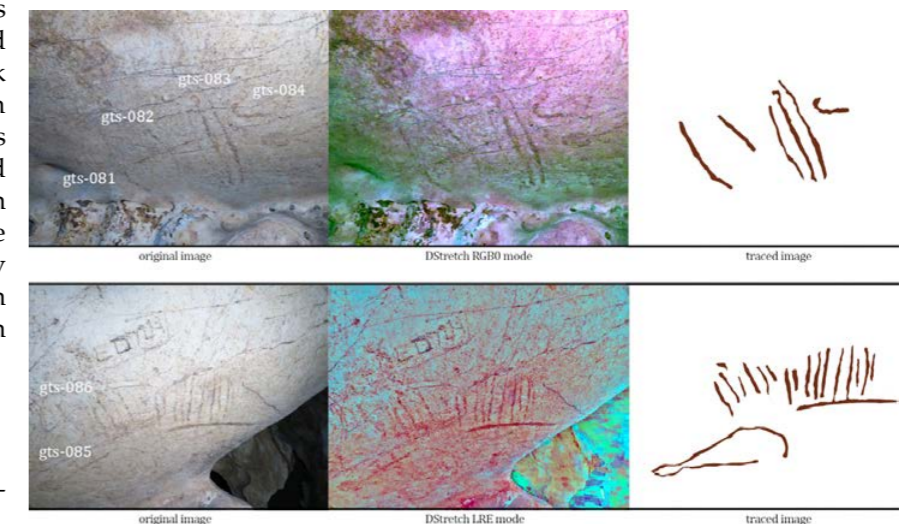


Figure 11. Gua Toh Semelah rock art – P5 (images not to scale).

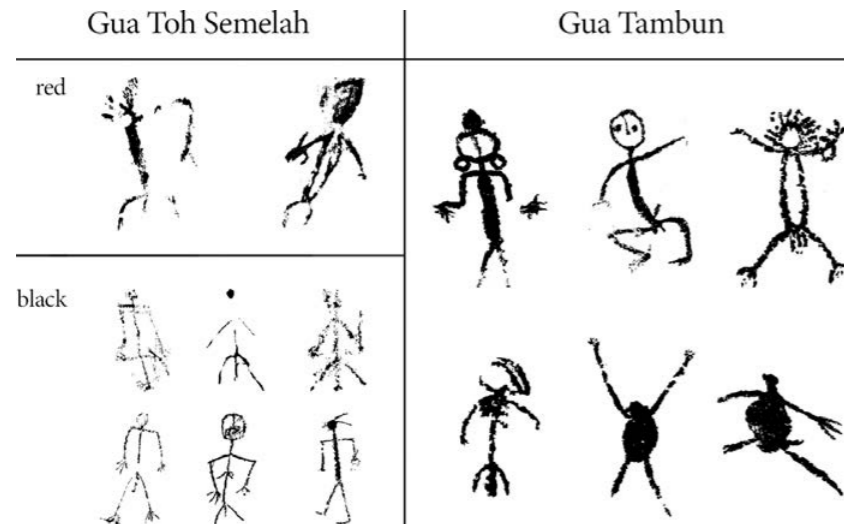


Figure 12. Anthropomorphs of Gua Toh Semelah and Gua Tambun (image not to scale).

the anthropomorphs from Gua Tambun and Gua Toh Semelah (Fig. 12). Tan and Chia (2010, 2012) pointed out that nearly all anthropomorphs at Gua Tambun are different in style, suggesting that they could be works of many artists or artists from different cultural groups.

Similarly, the anthropomorphs at Gua Toh Semelah also differ in size, colour, style and painting technique. Besides, the presence of red handprints is intriguing as handprints have never been reported in Malaysia before. Thus, it is possible that the rock art from Gua Cerita, Gua Tambun and Gua Toh Semelah were produced by different cultural groups. In Gua Toh Semelah, the red paintings are superimposed by charcoal drawings, indicating that the former predate the latter. In terms of raw materials, our survey did not find any red ochre within the cave or its immediate vicinity. The site has been heavily disturbed over the years, and no systematic archaeological excavation was

produced by the Orang Asli Lanoh during the early 20th century, based on the motifs represented and the ethnographic evidence (Evans 1927; Saidin and Taçon 2011). Although land transport is a common theme in Lenggong Valley rock art, no information has been published regarding the maritime transport motifs in that area. Within west Malaysia, rock art depicting watercraft was reported at Gua Batu Putih, Gua Tok Long, Gua Mat Surat and Gua Kelawar (Fig. 1). The Gua Batu Putih motifs were identified as ocean-going sailboats with masts (Taha 1993: 70), while the Gua Tok Long motif was identified as a schooner (Evans 1920: 43; Peacock and Dunn 1968: Pl. 3). The motif at Gua Mat Surat, on the other hand, is a three-masted sailboat or a ship with triangle-rigged topsails and a cabin deck. In contrast, the Gua Kelawar motif comprises 'a boat with three men on board, one holding a pole and the one at the back is holding a rudder' (Taha and Jaafar

conducted here, and thus the source of red ochre remains unknown.

Charcoal drawings, on the other hand, are more commonly found in West Malaysia. The majority of them were discovered in Lenggong Valley, approximately 70 km away from the Kinta Valley (Fig. 1). The Lenggong Valley rock art consists mainly of geometric designs resembling those on the ancestral mats of Orang Asli Lanoh and human stick figures. Although the human figures are not usually depicted with adornments, there are various designs such as holding a weapon, riding a horse or an elephant, carrying a bag or a pole and often depicted with hands on the hip. Previous studies concluded that the rock art in Lenggong Valley was

produced by the Orang Asli Lanoh during the early 20th century, based on the motifs represented and the ethnographic evidence (Evans 1927; Saidin and Taçon 2011). Although land transport is a common theme in Lenggong Valley rock art, no information has been published regarding the maritime transport motifs in that area. Within west Malaysia, rock art depicting watercraft was reported at Gua Batu Putih, Gua Tok Long, Gua Mat Surat and Gua Kelawar (Fig. 1). The Gua Batu Putih motifs were identified as ocean-going sailboats with masts (Taha 1993: 70), while the Gua Tok Long motif was identified as a schooner (Evans 1920: 43; Peacock and Dunn 1968: Pl. 3). The motif at Gua Mat Surat, on the other hand, is a three-masted sailboat or a ship with triangle-rigged topsails and a cabin deck. In contrast, the Gua Kelawar motif comprises 'a boat with three men on board, one holding a pole and the one at the back is holding a rudder' (Taha and Jaafar 1990: 122). The locations of the sites can explain the differences in depicted boat motifs. The first three sites are located near the coast (Gua Batu Putih) or close to the major rivers in west Malaysia — Gua Tok Long is 6 km away from the Pahang River, and Gua Mat Surat is 1 km away from the Kinta River. Similarly, Gua Toh Semelah is located along the Raia River, which would have been wide enough for sailboats to pass through. In contrast, Gua Kelawar is an inland cave and is only accessible through smaller rivers or streams; thus, a smaller oared boat that can only accommodate three people was depicted.

In general, the red and black rock art traditions in west Malay-

Rock art colour	Production technique	Motif			
		Anthropomorph	Zoomorph	Material culture	Geometric shape
Red	Painted	High degree of variability	Large, naturalistic, solid infilled Common depiction: wild boar, reptile	Not often depicted	Repetitive shape
Black	Drawn	Low degree of variability, usually stick figures	Small, simple design, solid infilled/outline Common depiction: 'horse, elephant, monkey'	'Weapon' 'Transport' 'House'	Resemble patterns on indigenous mat/ blow-pipe

Table 2. General overview of two rock art traditions in west Malaysia.

sia can be distinguished based on production techniques, motifs, and style (Table 2). Gua Toh Semelah is the first rock art site reported in west Malaysia which contains two distinct rock art traditions in one single locality.

A total of 17 'watercraft' motifs were discovered in Gua Toh Semelah, two of which are located near P3, one included in P4, while the remaining ones are scattered in the same chamber as P4. All of them are drawn with charcoal in monochrome outline in various forms and sizes. Very few 'boat' drawings are depicted with 'human' figures, and the number of people on board never exceeds two. In general, the 'watercraft' depicted in Gua Toh Semelah resemble riverboats commonly used for fishing and carrying goods in the 19th century. Anecdotal accounts by the former village chief of Kampung Kepayang stated that cargo boats called *tongkang* were used to travel up Raia River to trade near the village (Tok Haji pers. comm. Dec. 2019). Some of the boat motifs may represent *tongkang*.

The interpretation of boat typology has been useful in understanding maritime technology and the trading networks in ancient times (see Sukkham et al. 2017). Features that are widely used to identify the types of boats include masts, sails, oars, hull, stern, bow, bowsprits and cabins (Lape et al. 2007; Sukkham et al. 2017). Some of the motifs have more distinct features than others to help identify the depicted type of boat. For instance, two motifs with distinctive bows resemble the traditional Malay fishing boat known as *perahu payang* (Fig. 13: SF 1b). *Perahu payang* is a large boat with two masts, and this type of boat is widespread on the east coast of west Malaysia (Fig. 14). It usually carries a crew of 15–20 men during fishing (Gibson-Hill 1950: 169). Often, a small flag would be raised on the bow upon return if they made a good catch as a signal for the crowd waiting on the shore (Dalton 1926: 196).

Apart from the *perahu payang*, there are four other

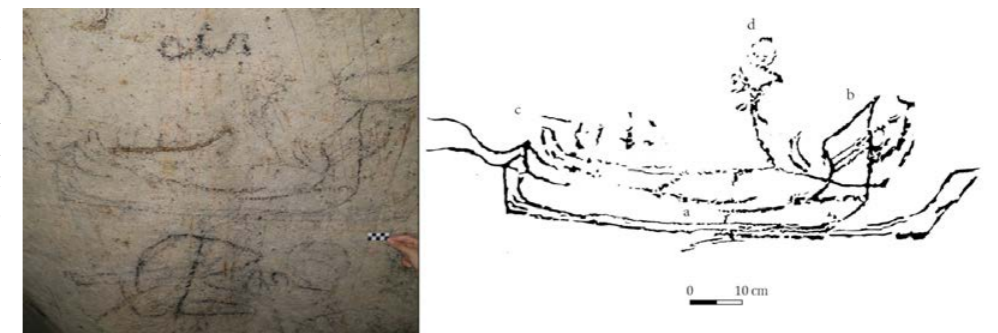


Figure 13. A possible depiction of a traditional Malay fishing boat *perahu payang*. a. hull, b. the distinctive bow of *perahu payang*, c. stern, d. flag/mast.



Figure 14. *Perahu payang* on the beaches of the east coast of west Malaysia in 1962. Photograph by Dr Ivan Polunin / © The Ivan Polunin Multimedia Lab.



Figure 15. A possible depiction of a river ferry boat; a. hull, b. bow, c. transom stern, d. cabin.



Figure 16. A depiction of a sailboat with a Bermuda rig. a. hull with a shallow draft, b. sharp bow, c. transom stern, d. mast, e. Bermuda-rigged sail, f. a person.

depictions of boats without mast and oars (SF 1b, SF 3c and f, SF 4e). We suggest that these are potentially representations of *sampan* and *jalor*. *Jalor* is a dug-out canoe, one of the most primitive forms of Malay fishing



Figure 17. A possible depiction of a perahu buatan barat. a. hull, b. bow, c. stern, d. mast, e. rudder(?).

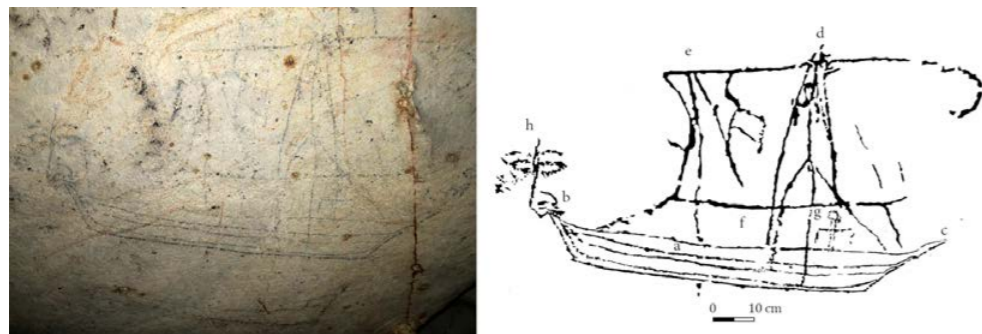


Figure 18. A depiction of a sailboat. a. hull, b. bow, c. stern, d. mainmast, e. foremast/ square-rigged sail, f. cabin, g. a person, h. unidentified, not sure if this is part of the boat or a separate motif.

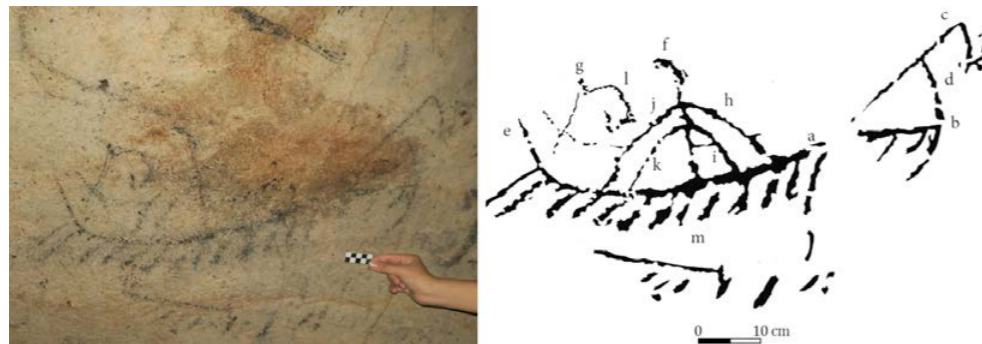


Figure 19. A depiction of an 'oared boat'. a. hull, b. bow, c. bowsprit, d. dolphin striker, e. round stern, f. main mast, g. mizzen mast, h. forestay, i. inner forestay, j. backstay, k. inner backstay, l. flag(?), m. oars.

boats or transport vessels used by the local communities. Two of the 'boat' motifs have a cabin near the stern, suggesting that they are ferry boats used to carry passengers (Fig. 15: SF 3f).

There are two depictions of single-masted sailboats with no oars. One has a tall bow, shallow draft, transom stern and a Bermuda rig (Fig. 16). A person seems to be pulling a rope tied to the mast. The other 'boat' motif also has one mast; however, no sails are depicted. It has a double-ended hull with its bow and stern projecting vertically upwards, resembling the body of a *perahu buatan barat* (Fig. 17). This type of boat is used as a fishing boat on deep waters, but it is also alternatively used as a cargo boat. It probably originated

from Patani, Thailand, which the people living on the east coast of west Malaysia often refer to as the 'western state'. Hence the name *perahu buatan barat* means 'the boat made in the west' (Gibson-Hill 1949: 118). Underneath the stern, a faded marking might be a rudder, but such a feature does not seem to be present in real *perahu buatan barat*. One of the boat motifs has more ambiguous features (Fig. 18), which potentially represent (i) a two-masted boat with a double-ended rectangular hull and a cabin; or (ii) a single-masted boat with a square-rigged sail and no cabin. A person is standing close to the stern. The human figure is similar to other human figures in P4.

There are only two depictions of a 'boat' with 'oars'. One of them has a round stern with a sharp bow, two masts, forestays and backstays, and a bowsprit supported by a dolphin striker (Fig. 19). It has 13 oars, with the two closest to the stern being the longest. Another 'oared boat' is one of the motifs from P4, and it is more elaborately designed, as it probably has a figure-

head attached to the bow forming an 'S' shape, and a large 'flag' attached to the stern (Fig. 20). The 'boat' is double-ended, has one mast, square and triangular-rigged sails, a rudder, and at least 15 oars (some faded) of the same length. It also appears to have a large cabin or cargo on its deck. Interestingly, the outline of this motif closely resembles a type of warship in the Indonesian archipelago known as 'galley', which features a raised fighting platform (see van Neck 1601: 46). If this boat motif is indeed depicting a galley, then P4 could be depicting a war scene.

Another interpretation worth considering is that the 'boat' motif in P4 depicts a 'disease boat' or locally known as *lanchang* — a magical object used in a ritual



Figure 20. An 'oared boat' motif from P4. a. hull, b. bow, c. figurehead(?), d. stern, e. flag, f. mast, g. forestay, h. square-rigged sail, i. triangle-rigged sail, j. triangle-rigged sail, k. oars, l. rudder, m. cabin/cargo.

to drive away sickness, epidemics or misfortune. This particular ritual was prevalent among the Malays and the Semai people of west Malaysia (Loewenstein 1958: 203). The shape and design of the *lanchang* range from a small, simple raft to a large one with an elaborate finish. In Perak, during a ceremony known as *pelas negri*, rafts were sent adrift from the Perak River to the sea to cleanse the country from evil, and some rafts were equipped with a big house-like cabin (Maxwell 1886: 80–81 cited in Loewenstein 1958: 204). This ritual was carried to exorcise the evil spirits (Skeat 1900: 433–434). Comparing the size of the boat motif in P4 to the 'human' figures in the same panel, the 'boat' may be a smaller-sized model used in the ritual (see Loewenstein 1958: Pl. 1a).

6.0 Discussion

The various forms of boats which resonate with the historical records suggest that the early maritime trading network across Kinta Valley has greatly influenced the rock art tradition of Gua Toh Semelah. The lack of European-derived depictions such as firearm weapons, wagons and horses, like those found in the Lenggong Valley (see Saidin and Taçon 2011: 472–473), also suggests that the rock art was probably produced during the initial contact with the maritime traders before the advent of British administration in the Kinta Valley (1875–1876). Given that Gua Toh Semelah is in close vicinity to the settlement areas of Semai and Temiar communities, it is, therefore, legitimate to assume the Semai or Temiar communities as the traditional owners of the art. There are fewer features in the red paintings that can help to understand their context. However, a general trend in Southeast Asia is that red paintings usually have greater time depth than charcoal drawings, based on their superimposition, the subject matter depicted and ethnographic accounts (Tan 2014).

Boats are recurring subjects in the rock art of Southeast Asia. In east Malaysia, for instance, rock art depicting 'watercraft' was discovered in Niah cave complex in Sarawak and several sites in eastern

Sabah (Harrison 1959; Saidin et al. 2008). On one of the cave walls within the Niah cave complex, there are numerous depictions of 'human' figures standing on 'boats'. In front of these paintings is a large number of 'boat coffins'. Therefore, these rock art motifs were often referred to as the 'ship-of-the-dead', which is crucial in the funerary practice of the local indigenous community (Harrison 1959). Harrison also hinted at a possible connection between the boat motif and the Dong Son culture based on their similarities in styles. On the other hand, Eastern Sabah contains charcoal drawings and one engraving of a 'boat' motif, some with 'human' figures (Saidin et al. 2008). One of the charcoal drawings was identified as a small ocean-travelling boat native to Kalimantan or Sulu in the mid-1840, whereas another is a larger double-decked boat with ten crew members armed with 'parang knives' (Nik Hassan Shuhaimi 1998).

Watercraft motifs are also reported in Thailand (Blake 1996; Sukkham et al. 2017), Indonesia (O'Connor 2003; Arifin and Delanghe 2004; Lape et al. 2007; Hakim et al. 2018; Oktaviana 2018), Laos (Tan and Walker-Vadillo 2015; Tan 2018), and Cambodia (Walker-Vadillo 2009). Most of this maritime-themed rock art was discovered in the coastal area. Several caves in Thailand contains some well-illustrated and very accurate representations of 'boats'. Among them, Tham Phrayanaga in southern Thailand holds the greatest variety of 'watercraft' motifs in Southeast Asia. Blake (1996) and Sukkham et al. (2017) concurred that some of the artists in the coastal caves of Thailand possessed adequate knowledge regarding the vessel structure, and the rock art was probably produced by the local traders or seafarers from foreign places. A large variety of seafaring 'watercraft' motifs are presented by Blake (1996), distinguishing the boat typology under European, Chinese or Southeast Asia influence. The 'watercraft' motifs from Gua Toh Semelah do not share similarities in boat structures such as the shape of the hull, prow and rigging, which further adds weight to the hypothesis that most of the Gua Toh Semelah

'watercraft' motifs are representations of local river-boats. The 'boat' motif in P4, on the other hand, could potentially represent a galley. This interpretation is drawn upon the historical records where Kinta Valley was historically engaged in many navy conflicts and pirating activities in the region since as early as the 16th century (Andaya 1979).

Rock art in Indonesia mainly concentrates in the eastern part of the country, and most of the rock art is associated with the Austronesian painting tradition (O'Connor 2003). Boats are very frequently depicted, and human figures often accompany them. In contrast to the Tham Phrayanaga rock art, the lack of details, especially in the depiction of sails in East Timor rock art, led the researchers to conclude that the rock art is unlikely to be painted by the seafarers themselves (Lape et al. 2007). This is similar to the case of Gua Toh Semelah, where the boat motifs are often not accurately depicted, hinting that the artist might not have been directly involved in seafaring activities.

In terms of chronology, most of the 'watercraft' motifs documented in Southeast Asia have been identified as contact rock art of a recent Historical period and attributed to the early 19th century. For example, in Laos, a watercraft motif painted in green pigment in Pak Ou Caves was identified as a French steamship attributed to the late 19th or early 20th century (Tan and Walker-Vadillo 2015). To the northeast of Pak Ou Caves, the contact art on the cliffs of Pha Team contains four depictions of 'watercraft' (Tan 2018). One of them is seen carrying a buffalo and two anthropomorphs on a 'double-hulled barge' (Tan 2018: Fig. 7). In Cambodia, red paintings of large 'watercraft' are recorded in Angkor Wat. They are potentially dated to at least the 1980s or earlier and are likely to have a religious purpose (Walker-Vadillo 2009). Most of the rock art of Gua Toh Semelah seems to correspond to this time-frame as well. During this period, trade that flourished along Raia River encouraged the use of various types of boats by the local villagers to meet different purposes, including transporting goods, ferrying passengers and fishing activities. As for the watercraft motifs, it is improbable that they are later than the 19th century for two main reasons. First, the shifting towards land transport and the pollution of Raia River had caused the river to cease its function as a river route by the early 20th century (Khoo and Lubis 2005). Second, since Gua Toh Semelah was a functioning Taoist cave temple in 1895 until the Japanese occupation between 1942 to 1945 (Khoo and Lubis 2005), it is thus implausible that the artists came to the cave at a later period to draw so many different boat types without real boats in the vicinity as reference.

7.0 Conclusion

Our study concluded that the rock art of Gua Toh Semelah might have been created by the Semai or Temiar people who traditionally inhabited the Kinta Valley since the early-mid 19th century. However, most of the

rock art present in Gua Toh Semelah does not carry a strong cultural identity of Semai or Temiar, but instead is inspired by the interaction with the new subject matters brought in by the early trading network in west Malaysia. To date, the traditional ownership of the rock art at Gua Toh Semelah remains an open question, but it is suggested that these rock arts recorded the interactions between the Indigenous community and the external maritime communities. As such, an oral history or a cultural mapping project would be fundamentally essential to extend our understanding of the cultural connection between the Semai and Temiar communities and Gua Toh Semelah. Although Gua Kelawar and Gua Mat Surat rock art were also subject to maritime influences, the 'boat' typology represented in these sites varies in character and design. This is likely due to the different geographical location of each site, where the artists were exposed to different types of boat or engaged in different maritime activities. This further suggests that the rock art of Kinta Valley is influenced mainly by external culture instead of representing the Indigenous identity of a particular Orang Asli group who produced it. Historically, the Temiar and Semai groups have never been identified as maritime communities; and the contemporary Temiar and Semai are still known for their involvement in swiddening agriculture and hunting-gathering activities.

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Chaw Yeh Saw^{1*} and Dr Hsiao Mei Goh^{1,2}

¹ Centre for Global Archaeological Research, Universiti Sains Malaysia, 11800 Penang, Malaysia

² School of Biological, Earth and Environmental Sciences, University of New South Wales, Sydney, NSW 2052, Australia

*Corresponding author: Chaw Yeh Saw, chawyeh92@gmail.com

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