COASTAL HERITAGE: EXPLORING CAVES AND INDIGENOUS KNOWLEDGE IN THE LANTA BAY (SOUTHERN THAILAND)

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ABSTRACT

Hills and caves in islands or along the coasts are part of the cultural seascape of the various people inhabiting or passing through the shores of southern Thailand. The social, economic or ritual relationships they have developed through time with these places have yet to be documented in maritime Southeast Asia. They also constitute archives related to maritime exchanges that archaeology has yet little exploited. This article presents the preliminary results of what is aimed to become a community-based archaeological and ethnographic research on the maritime heritage landscape in the Krabi Province along the Lanta Bay with a focus on caves and rock art. It documents several newly-discovered rock art sites and explores the potential for research on the relationships that local groups, in particular maritime groups like the Urak Lawoi sea nomads, entertain or not, with these caves.

INTRODUCTION

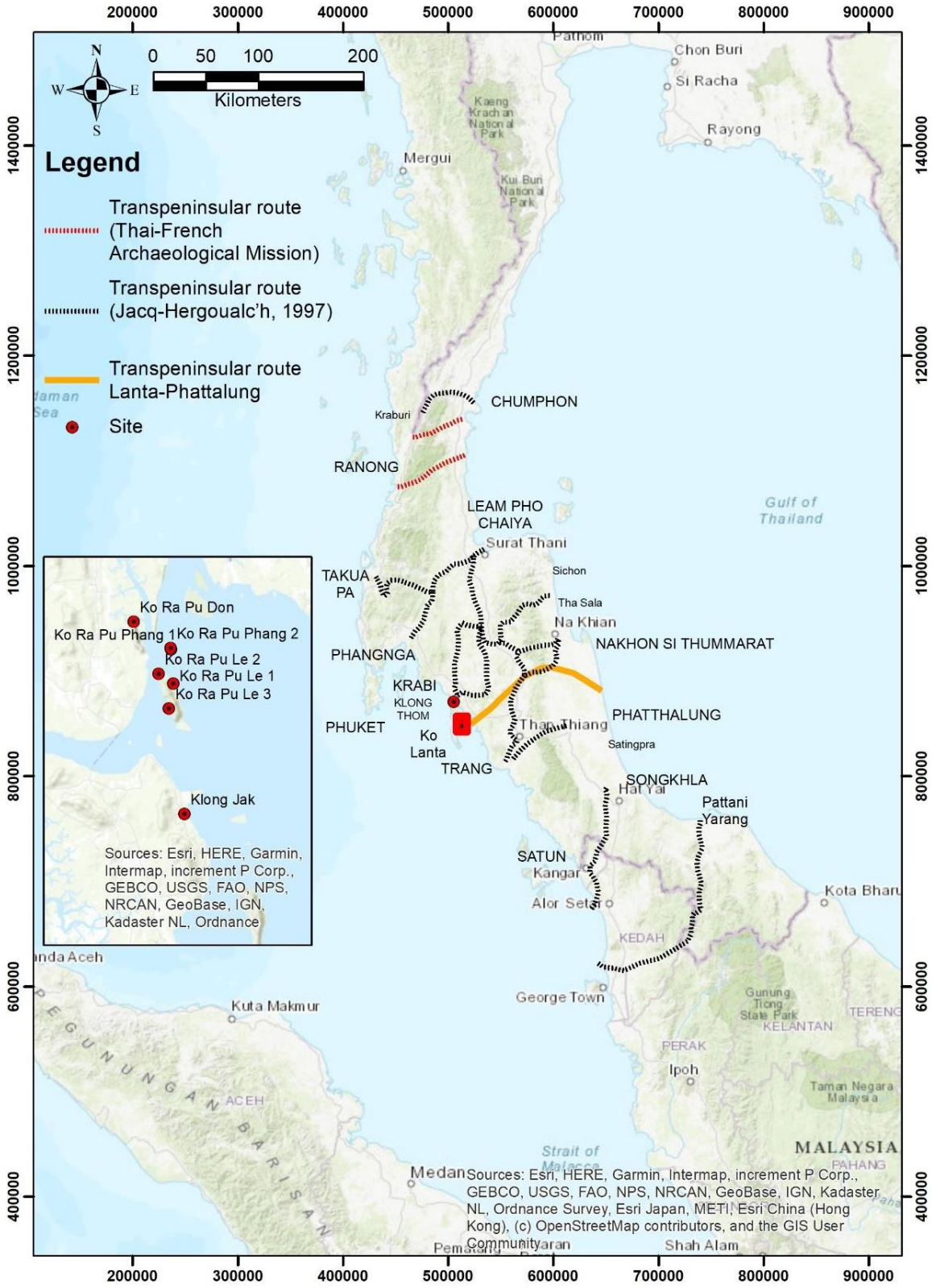
The maritime social landscape is made up of a multiplicity of groups including merchants, sea nomads and estuarine groups, fisherfolk, etc. These different maritime groups developed a highly specialized knowledge of their niche that they exploited for economic purposes (fishing, horticultural activities, birds' nests collection, marketplace exchanges, pirate hideouts), and developed their social and ritual activities (burials, ceremonies). Their activities, representations and stories are reflected in the physical world as in the case of oral traditions, cemeteries and cave paintings such as those found in Viking Cave in Phang Nga Bay (Blake 1996; Sukkham *et al*. 2017).

Many of these maritime groups became directly or indirectly involved in exchange networks forming the basis of regional trading polities (Bellina *et al*. 2019). Until now, archaeological research has predominantly focused on lowland riverine ports, foreign merchants and long-distance connections. In comparison, much less attention was paid to this local network and to the many other local groups for whom offshore or coastal caves, islands and mangrove forest in estuaries constituted places for resource procurement, homes, landmarks, shelters or ritual places. Similarly, cave study was long disconnected from that of exchange networks. Cliffs, islands and their caves form part of the long-established local communications/navigation networks (as stopovers, navigational markers, resource procurement spots) used by local and foreign people for domestic activities, exchange and rituals. They can be strong symbolic territorial elements for local communities and their identity (Bonnemaison 1981) and in particular for mobile groups (Chou 2021) commonly called sea

nomads but that we shall call sea people. Several are still distributed all along the Malacca Straits, and in Thailand such as the Moken, Moklen and the Urak Lawoi (Bellina *et al*. 2021). They have developed their own mapping system, which is very different from ours (Chou 2021). While several ethnographic studies have attempted to describe the circulation patterns of some of these groups (Chou 2010), as well as their patterns of sedentism, few have focused on their relationship with the mountains on the coastal fringe or on the islands, and even fewer on their relationship with the caves. Some of these nomads associate these mountains with their ancestors, historical events that are specific to them or that affect passing merchants or even the populations of the continent. Some sea people have used the caves in the open sea to house burials (White 1922), a practice that may have been used by some of those groups who established themselves as commercial intermediaries as early as the last centuries BC (Bellina *et al*. 2019). In addition, we questioned whether some caves may have been used until recently by mobile marine people for rituals of various kinds (Figure 1) as hypothesized by Sorathach Rotchanarat (2019; see also Sarikabutara 1987) on the basis of the paintings that decorate the walls of certain caves off the coast of Krabi.

The special relationship that these mobile sea peoples may have developed with the world of hills and caves has not been much documented yet. Rock art (pictograms and petroglyphs) can form part of ritual landscapes with successive sequences of use lasting over millennia, for various local and foreign groups (Tan and Taçon 2014). Thus, the diachronic study of the occupation, use and representations of mountains and island or coastal caves provides a different angle on these exchange networks and the development of the maritime landscape.

Figure 1. Urak Lawoi villages and the floating ceremony in Ko Lanta. Top left: The bay in front of Sang Kha Ou village. Top right: the floating ceremony at Hua Leam. Bottom left: The floating ceremony parade from Klong Dao to To Ba Liu village. Bottom right: To Ba Liu village. (Photos: S. Rotchanarat)



Map 1. Locating Lanta Bay and some transpeninsular routes. (Credit: S. Rotchanarat)

This article presents the preliminary results of what is aimed to become community-based archaeological and ethnographic research on the maritime heritage landscape along the Lanta Bay (Map 1) with a focus on caves and rock art. It documents several newly-discovered rock art sites and explores the potential for research on the relationships that local groups entertain, or not, with these caves.

RESEARCH METHODOLOGY

This project uses traditional methods of field archaeology to locate and study potential sites of interest as well as ethnography to document local stories, representations and territorial use for resource procurements and rituals among the different people of Lanta Bay.

The combination of archaeology and ethnography/social anthropology has already been tested by its members on several case-studies, notably in Mainland Southeast Asian (MSEA) contexts (Évrard and Chiemsisouraj 2011; Évrard *et al.* 2016) but also, in similar coastal contexts by the French-Thai Archaeological Mission in the Upper-Thai-Malay Peninsula in Sawi.

In this methodology, contemporaneous communities' knowledge of the landscape they live in and what forms part of their heritage, are considered not only as a source of information for archaeologists but, more importantly, as a heuristic tool to take into account locals' perceptions/interpretations/valuations of the past. It allows archaeologists, who have sometimes been criticized for the little attention they pay to the links contemporary people have with the archaeological sites or the way they see and experience them daily (Byrne 2014), to both enrich and "decolonize" their own knowledge.

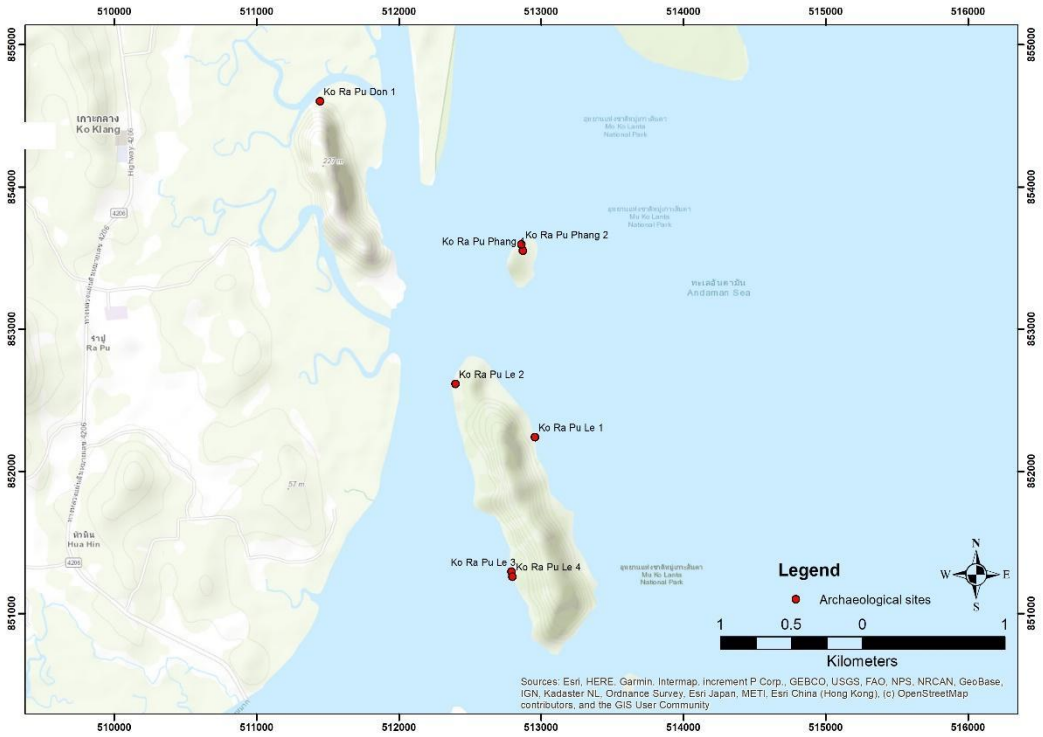
Apart from the project members' own experience, community-based participatory work involving archaeology has already been successfully applied in Thailand at Pang Mapha by Professor Rasmi Shoocongdej (Silpakorn University) (Shoocongdej 2020). In the Philippines, archaeological investigations are required now, by law, to involve local communities. Community-based archaeology always includes a participatory mapping component, which will be conducted at the next stage of this project. Participatory mapping in archaeology is still a recent field but developing rapidly in Southeast Asia. For local communities, this approach helps them to be incorporated as active subjects in the registration and interpretation of their cultural heritage, as well as in the defense and management of it. This can be an efficient way to protect sites from contemporary disturbances such as looting activities. On the other side of the ledger, archaeological studies are also enriched by incorporating contemporary perspectives and local people's knowledge into interpretations of past landscapes (Álvarez Larrain and McCall 2019).

In this framework, we undertook a one-week exploratory mission in the Lanta Bay to begin locating potential sites of interest (Figure 2) as well as local communities willing to participate in the project. The aim was to look at the potential links between Urak Lawoi rituals and some caves paintings, following Sorathach Rotchanarat's previous work in Phang Nga Bay (Sorathach Rotchanarat 2019). Given the short time available, we focused on i) interviews with a series of key informants, from various backgrounds including Urak Lawoi fishermen (UL) in order to proceed to a rapid assessment of coastal communities' knowledge about caves, and ii) boat survey of some of the many small rocky islands in the Lanta Bay.

Interviews were conducted with the curator of the Lanta Old Town Community Museum (Mr. Phan Saen), with various UL fishermen (Mr. Somjit Talayluek and Mr. Surin Talayluek) in the Sang Kha Ou and Hua Laem "villages", two of the six UL settlements in Lanta Island, as well as with Thai-Muslim fishermen of Ko Por, an island located just across Lanta Old Town. Our selection of informants proceeded by random discussion at first and by appointments with local administrative or religious leaders as well as with knowledgeable persons considered as such by their community members (the UL language teacher in Ban Sang Kha Ou, for instance). Though this methodology introduced

several biases (notably the absence of women informants and reliance on older members of the communities), which will have to be tackled during subsequent surveys, it was the only one possible in a such short span of time given the objectives of the mission.

Figure 2. Cliff faces associated with rock art sites in Krabi province. Top: sites surveyed in the Lanta Bay; left: Ko Ra Pu Le 1; right: Ko Ra Pu Phang. Bottom: rock art sites in Phang Nga Bay. Bottom left: Tham Chao Lae. Bottom right: Viking Cave. (Photos: N. H. Tan



Map 2. Location of sites in Ko Ra Pu le, Ko Ra Pu Phang and Ko Ra Pu Don (credit : S. Rotchanarat)

Boat surveys were conducted over two days with boatmen from Lanta Old Town and thereafter with two boatmen from Ko Por, who proved more knowledgeable and interested in our research. Given the few archaeological surveys that have been conducted so far in this area, our investigations took into account the following criteria in site selection. First, we stayed within current Lanta administrative borders though in future stages of the project we hope to include islands located across the bay in Trang Province. Second, we focused on the eastern shores, given the general pattern of settlements in this area, in response to the heavy weather coming from the west during the summer monsoon. We also took into consideration locals' cartography and toponyms of the islands when they suggested possible sites of ritual importance or geographical landmarks that could have facilitated navigation in olden times. Thirdly, we especially focused on small islands located near the mouth of the mangrove canals linking Lanta Bay with Krabi Bay. Given the presence of numerous rock art sites already identified in Krabi Bay, we hypothesized that old inhabitants in this region, traveling on boats, could have navigated along these canals which are well-sheltered from monsoon winds, and that they could have used them as a route for exchange with the southern shores of Trang and Satun and with Malaysia. With these factors in mind, we surveyed (Map 2) Ko Talabeng, Ko Ra P u L e (discovering one rock art site on the east side and two caves on the west side with pottery and bones), Ko Ra P u Don and Ko Ra P u Phang (discovering one site with pottery and a rock art design). We also navigated through the Yang canal as far as Ko Lak Yai (a recently-discovered rock art site already surveyed by FAD) and Ko Sriboya.

RESULTS: CAVE SITES

Ko Ra Pu Le 1

Ko Ra Pu Le is an island located at Moo 1, Ko Klang Subdistrict, Ko Lanta District, Krabi Province. Ko Ra Pu Le 1 (Figure 3) is a cave found in the east side of a limestone mountain, about 20 meters inland protected by a dense coastal forest. From afar it is noticeable because of its location at the base of an exposed cliff. The shelter is 5 meters deep and about 15 meters long and relatively protected from the sun and the rain. On the north side is a hollow cave, with traces of water flowing down and washing the limestone. This has created an open chamber and limestone pillars inside with a small basin filled by rainwater. The cave floor was dense with cobbles. Collapsed rocks found around the lip of the cave indicate that the shelter was previously larger, or even connected to other shelters to the south in the past. At the time of our visit, there was evidence for local people's visiting the cave to collect birds' nests from chambers in the cave ceiling.

Figure 3. The rock shelter forming the southern part of Ko Ra Pu Le 1. The "turtle" (1) and "shaman" (2) are labeled. (Photo: N. H. Tan)

The red paintings are grouped together as a single panel on the southern curve of the shelter. They include anthropomorphs, zoomorphs, boats, and abstract or undecipherable designs. We posit that they date to the prehistoric period contemporaneous with the color paintings found around the Phang Nga Bay. Prehistoric paintings in Thailand have never been directly dated and are often estimated to about 5000–3000 years ago, based on associated finds from other prehistoric caves in the region (Srisuchat 1987). The characterization of these newly-discovered rock art as "prehistoric" is based on the observation that red paintings are typically older, if not the oldest form of rock art in Southeast Asia, as well as the finds of Neolithic material reported in this survey, and their similarity to the Phang Nga rock art vis-à-vis their landscape characteristics discussed later in this paper (Tan 2014, 2019). Besides ceramics, a few human bones were found stuck into concretions on a wall of this cave.

The paintings occur around 2–3 meters above the floor, and the largest ones are approximately 40–50 cm at their maximum. Around ten paintings can be discerned easily, but the best-preserved image is that of a "turtle" (Figure 4), located in a depression in the wall which has provided it additional protection from the elements. Notably, this is the only turtle image known in the southern Thailand corpus of rock art. Another image of interest is an anthropomorphic figure located on the upper reaches of the panel bearing a resemblance to the "shaman" figure found at Tham Phi Hua To in Phang Nga Bay (Figure 5) (Chaimongkhon and Chuthientham 1990). The "shaman" of Tham Phi Hua To is a unique motif and has now become a tourism mascot for Krabi province, but there has been little, if any, other evidence to support this interpretation. This new discovery lends credibility to the idea that the "shaman" at the very least represents an anthropomorph. In both instances they appear to be human forms depicted with two double-lined protrusions emanating from the head, which may be some sort of headdress. The striped designs from the Tham Phi Hua To shaman are not observed on Ko Ra Pu Le 1, and conversely the Ko Ra Pu Le 1 figure is depicted with "hair" while the Tham Phi Hua To shaman is not. Another observation is that the Tham Phi Hua To shaman is depicted in profile, while this new image appears to be a frontal view.

The other images are fragmentary, obscured by mineral accretion or deterioration to the rock surface. A few simple anthropomorphs and boat shapes can be discerned, and upon digital enhancement, some of the abstract figures appear to be stylized depictions of fish (Figure 6). In our initial conversations with local informants we showed them images of fish paintings from the rock art in the Phang Nga Bay area, but none were familiar with the paintings nor could they identify the fish depicted.

Ko Ra Pu Le 2

This small cave (Figure 7) is on the northwest side of Ko Ra Pu Le. It was formed by erosion, with waves digging into the rock wall and producing a hole. This cave was most likely formed during a time when the sea level was above the present one. The cave opening is located about 5 meters above sea level, and is northeast–southwest oriented. It is easiest to reach the cave during high tide from a boat. The ceiling of the cave is about 2–3 meters high. It has good ventilation and is a good location to be protected from the sun, wind, and rain and its floor is also quite smooth. Inside the cave, materials indicate its use as a journey break over an extended period of time. Evidence consists of shards of prehistoric (Neolithic) paddle-impressed pottery, white porcelain with red paintings, shells scattered all over the cave floor, and some animal bone fragments. The cave location and configuration make it a favorable place for a stopover, especially during strong winds and rain.

Figure 4. The "turtle" painting is one of the best-preserved, due to its protected location. (Photo: N. H. Tan)

Figure 5. The "shaman" figures of Tham Phi Hua To in Phang Nga Bay (left) and Ko Ra Pu Le 1 (enhanced version on the right). Not to scale. (Photos: N.H. Tan)

Figure 6. Cluster of paintings to the right of the turtle image. The linear geometric patterns appear to be schematic depictions of fish. (Photo: N.H. Tan)

Figure 7. Ko Ra Pu Le 2. Top left: the small shelter with good ventilation suitable for a short stay in case of strong winds and rain. Top right: shells on deposit possibly brought in by birds and human. Bottom left: artifacts found at Ko Pa Pu Le 2: basket-impressed shard, Chinese ceramic. Bottom right: white porcelain with red paintings. (Photo: S. Rotchanarat)

Ko Ra Pu Le 3

This cave, located on the west side of Ko Ra Pu Le, was also produced by waves hitting the walls and eroding deep into the rockface. The collapsed hole is divided into two adjacent cavities; the one on the north is a chamber with a large entrance. The floor of the cave is quite smooth. There is a sinkhole inside the cave (Figure 8).

Inside the cave on the north side, there are holes dug into the cave floor where pottery and fragments of human bone (such as skull fragments) were found.

Figure 8. Ko Ra Pu Le 3. Top left: the big collapse in front of the cave. Top right: the large entrance whose floor is quite smooth. Bottom left: the entrance to the sink hole with low ceiling leading to the narrow chamber. Bottom right: bone fragments in the narrow chamber. (Photos: S. Rotchanarat)

Ko Ra Pu Le 4

This cave is located on the west side of Ko Ra Pu le, next to Ko Ra Pu Le 3. It has a smaller entrance than the northern cave. It is narrow, fully dark and poorly ventilated. Above the entrance, in front the upper part of the wall was found the red-painted picture of a fish (Figure 9). Based on the evidence found in this area, such as rock art, earthenware shards, and human bone fragments, this cave also seems to have been used as a burial place.

Ko Ra Pu Phang 1

Ko Ra Pu Phang is an island located at Moo 1, Ko Klang Subdistrict, Ko Lanta District, Krabi Province. It is about half a kilometer north of Ko Ra Pu Le. The shelter is located on the northern side of the island, 20 meters above sea level and 30 meters inland. The cliff shelter faces east, with a depth of 5 meters and width of 7 meters. The shelter is accessible from both the southern and northern bays of the island.

Surface survey of the cave (Figure 10) yielded potshard fragments such as earthenware with red slip, cordmarked potshards, and pieces of tripod leg with cordmarking also traditionally

associated with the Neolithic, along with shell and animal bones. The cliff sides provide good shelter from the wind and rain during the monsoon season and produce a reasonably sized flat floor for four to five people to use as a shelter and for sundry purposes.

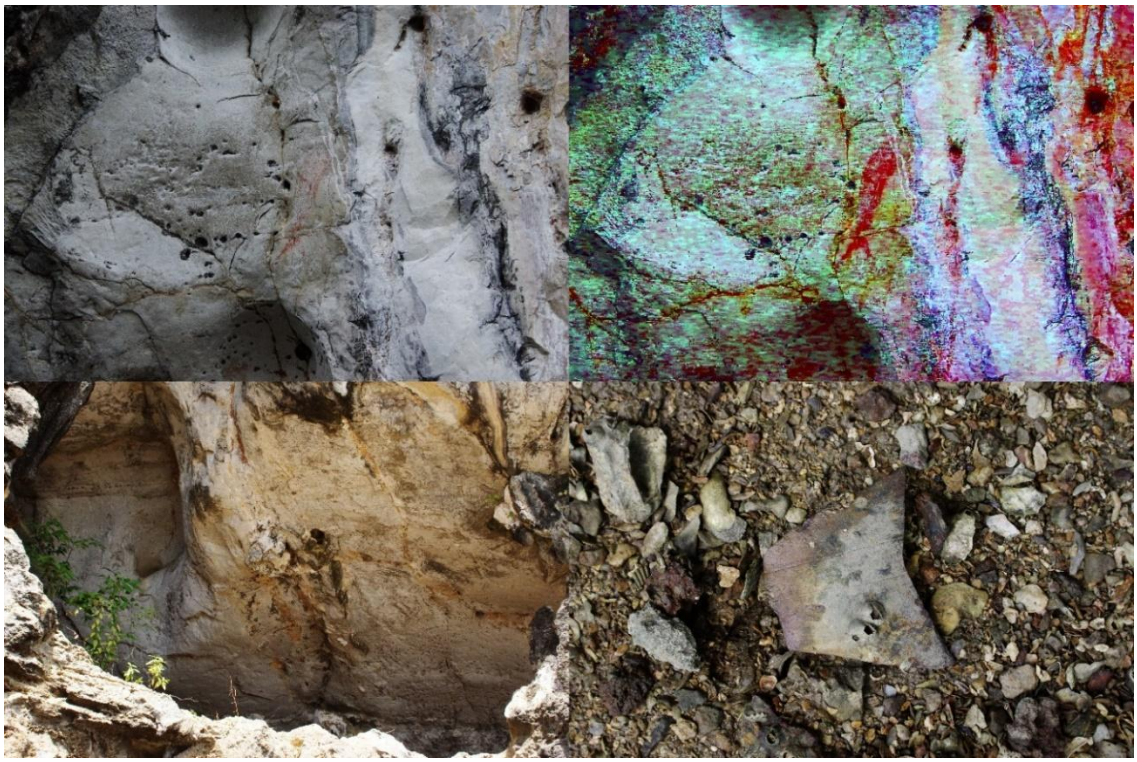


Figure 9. Top left: Ko Ra Pu Le 4. Top right: the faded image of fish on the upper rock wall with enhanced version. Bottom left: the entrance into the cave. Bottom left: potshard found in front of the cave. (Photos: S. Rotchanarat)

Figure 10. Top left: rock shelter at Ko Ra Pu Phang. Top right: cordmarked potshards. Bottom: pieces of tripod pottery. (Photos: S. Rotchanarat)

Ko Ra Pu Phang 2

At the rocky outcrop that forms the north entrance to Ra Pu Phang 1, a faded partial rock painting was found, likely to be a depiction of a fish or a sailboat (Figure 11). From this position one has a panoramic view of the inner Lanta Bay area; directly north is the mouth of the Yang canal (Khlong Yang). The position of the picture is about 5 meters above sea level at the time of our visit.

Ko Ra Pu Don 1

Ko Ra Pu Don is located at Moo 1, Ko Klang Subdistrict, Ko Lanta District, Krabi Province at the mouth of the Klong Ya Nut (Ya Nut canal) which flows out into the sea. The cave is on the northeastern side of Ko Ra Pu Don, with a small ascending path caused by erosion into a limestone mountain. The cave's position is about 8 meters above the sea level, with a width of about 3–5 meters, height of 3–4 meters, and depth of 10 meters. We found some evidence in the cave such as potshard fragments, animal bones and shells. The ventilation is good at the entrance of the cave. The chamber is well protected, as it can block the wind and rain. The evidence found there suggests that it was used as a stopover.

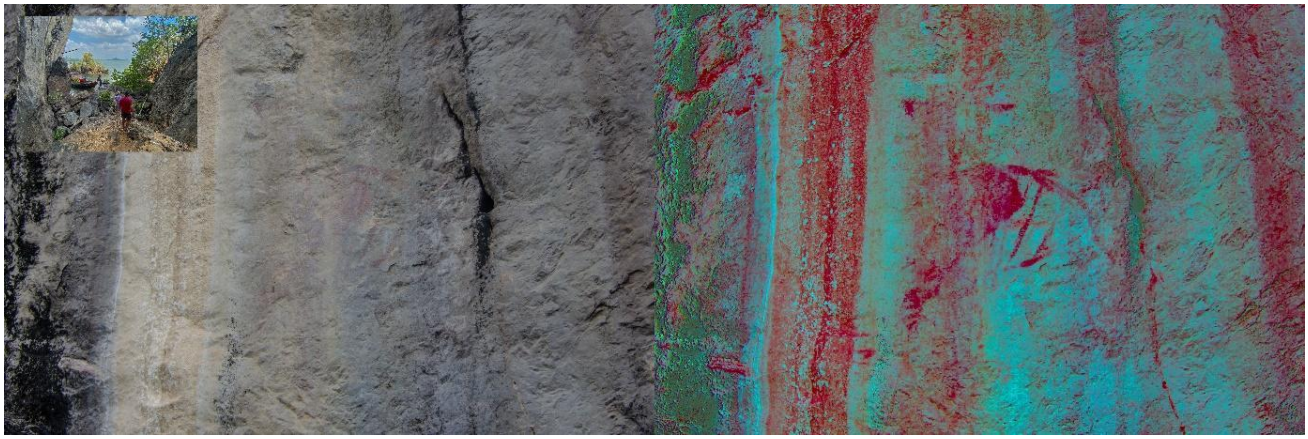


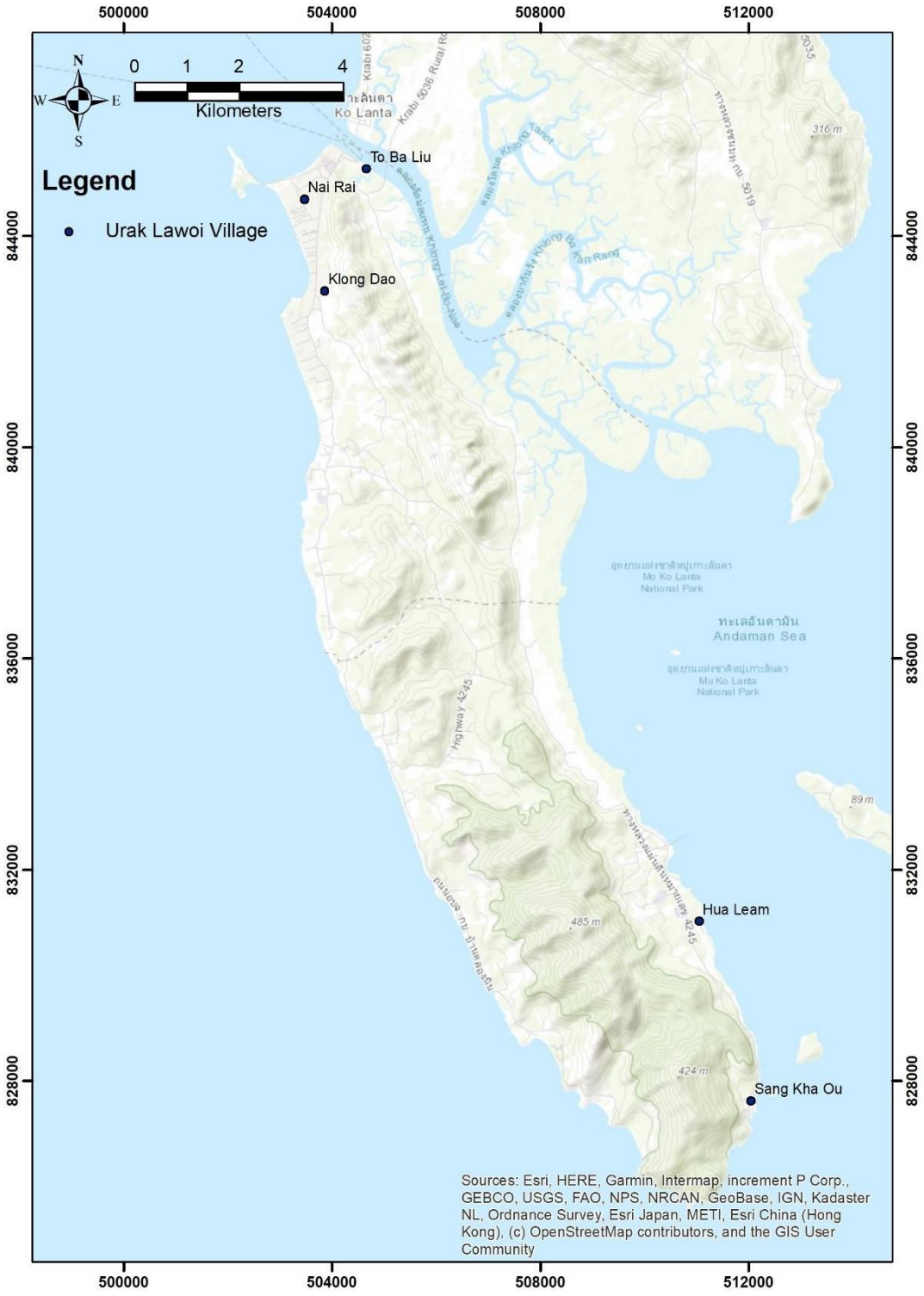
Figure 11. Single faded image from Ko Ra Pu Phang 2, possibly a fish or a sailboat. (Photo: N.H. Tan)

ETHNOGRAPHIC INTERVIEWS: URAK LAWOI AND CAVES

People referring to themselves as Urak Lawoi (UL) number around 6000 to 7000 in southern Thailand. They live on the shores of the main islands from the Adang Archipelago at the Malaysian border in the south to the eastern part of Phuket in the north (Map 2). Those living currently in Ko Lanta claim to be indigenous to this island and say their ancestors were already using the area prior to the arrival of Chinese and Malay communities. They are people from the strands, with houses on the beach, rather than "sea nomads" living part of the year on their boats, a pattern which they claim distinguishes them from the Moken. Their subsistence relies on various kinds of fishing, depending on the lunar calendar and on the tides, and until a few decades ago, maritime resources were used to obtain salt, iron and pottery (and sometimes rice, but the UL practice some swidden agriculture too) with seasonal commercial trips reaching sometimes as far as Kantang, the old city of Trang (Map 1). They have extensive knowledge of islands and canal mangroves, tides and currents, weather and shelters. The UL were therefore our logical first-choice informants for the identification of old sites of human occupation with potential archaeological interest in the many caves in the tens of rocky islands scattered across Lanta Bay.

Among the 5 UL "villages" in Ko Lanta (Sang Kha Ou, Hua Laem, To Ba Liu, Klong Dao, Nai Rai, see Map 3) we focused our discussions with informants from Sang Kha Ou and Hua Laem. The former, located at the southernmost point of the island, is the only UL village of Lanta to have kept an ethnic homogeneity and preserved the daily use of UL language among its inhabitants. The UL language is not mutually understandable

with the Moken language and may have a closer linguistic affiliation with Malay/Jawi. UL speakers have a writing system inspired by the Thai alphabet from 11 years ago due to the work of a Christian missionary. All the children learn the UL language at school on Friday mornings at the Cultural Centre established by the Christian mission.



Map 3. Urak Lawoi villages in Ko Lanta (credit: S. Rotchanarat)

Sang Kha Ou, as well as Hua Laem, used to constitute the same settlement, at the site where the Old Lanta Town (formerly called Busan) is now located. The inhabitants had to move to their current locations after the arrival of the Chinese community (no date is given but the director of the local museum said it was "before Ayutthaya"). One informant said that an old UL graveyard is located in front of what is now the hospital of Old Lanta town. Similarly, Klong Dao and Nai Rai were previously together on a site called Dalak Bu Nen. To our first question about these inhabitants' knowledge concerning the caves located in the many islands of the bay and the possibility of rock art inside them, they answered in the negative. They reckoned that such sites existed in Krabi Bay and in Ko Phi Phi, and some of them were already familiar with the painting of Viking Cave, but they did not mention any similar places in Lanta Bay and they tended to emphasize their livelihood issues and lack of time to inquire into such things. They had the same negative answer when asked if they had a knowledge of a population who had preceded them and used the caves.

A reluctance to share knowledge about these issues is easily understandable, especially with complete strangers. The Urak Lawoi say they do not inquire about such places because they are focused only on finding fish and they do not wander into the caves. However, they also mentioned their fear of the birds' nest hunters, for whom some of them work sometimes, who are said to be heavily armed and to "cut heads of trespassers". Actually, signs forbidding entrance are to be found at many of the caves, including the famous Viking Cave in Ko Phi Phi, which are now off limits to foreigners. While our on-site presence has been limited so far, it seems quite certain that the UL do not practice rituals in caves *per se* or have a major ritual center located in any of the caves of the islands of the Krabi Bay. There do however have stories of "magic places", notably in Ko Talabeng and Ko Ra Pu Le. On our last day, one informant from Hua Laem said to us, after he heard that we had found a rock art site on Ko Ra Pu Le (which is called Ra Pu Lawoi by the Urak Lawoi, Lawoi meaning "sea" or "outside"), that people passing by this island at night could hear noises, voices and drums, and were afraid of the area. However, our survey was way too short to conduct an in-depth study of the UL vocabulary related to their cultural geography. During a more recent survey in December 2021, we also learnt that Thai-Malay or so-called Thai Malayu or Thai Muslim villagers living in Ban Ra Pu, Ban Phak Lad and Ban Hua Hin, opposite the western coast of Ko Ra Pu Le, were sometimes anchoring their boats near the island caves and praying there to obtain luck or answers to their questions.

It is necessary now to implement a participatory mapping with local communities, both Urak Lawoi and the Thai-Malay in order to get a clearer view of the UL's intimate knowledge of the Lanta Bay, with their own vocabulary and stories associated with specific toponyms. It would also be necessary to conduct a detailed analysis of their oral literature, including the names and characteristics of the supernatural beings which they believe in. A recent study conducted in Krabi Bay shows that the patterns of some of the rock art found in the caves echo some of the Urak Lawoi oral traditions and ritual structures (Sorathach Rotchanarat 2019). Major Urak Lawoi rituals occur especially during the 5th lunar month, with the boat ceremony and the cleaning of the graveyards.

Beyond a possible form of reluctance, the negative answers given by our hosts could also be understood as reflecting a tendency to avoid the caves, for various reasons (religious or more pragmatic—the birds' nest economy is under the control of armed groups). It also certainly emphasizes the absence of direct cultural and historical link between the occupants of the caves where rock art has been found (with estimates varying between 5000 and 2200 years BP) and the current Urak Lawoi population. Previous works published on their culture and language (Supin Wongbusarakum 2007) agree on a 500 years' time span since their arrival in the region, possibly from Gurung Jerai (Kedah) in Malaysia, where their oral tradition locates their origin. UL pieces of oral tradition collected during our mission indeed indicate that they came from Indonesia and passed by Gurung Jerai where they

stayed some time but we heard two versions of these migrations. One mentions a movement from Klong Yang to Ko Klang to Klong Mak and finally to Lanta Noi. Another one indicates a movement up north to Ranong, where they met the Moken, and then a southward movement to Phuket, Phi Phi, Ko Jam, Ko Lanta and Ko Lipe, this last move being encouraged by the Siamese state to secure its southern maritime border during the first decades of the 20th century (Supin Wongbusarakum 2007). Our informants from Ban Sang Kha Ou, added that since their ancestors first arrived in Lanta, they had a maximum of ten generations of spiritual leaders (*To Moh*). For older periods, we are left with mainly speculations. We know that the first settlements were located slightly upstream from the mouth of the main rivers that served as waterways for transport and exchange with the eastern coast of the peninsula. Various remains, best exemplified by the famous site of Khuan Lukpad (Veraprasert 1987, 1992; Jacq-Hergoualc'h and Hobson 2002; Revire 2021) but also by Buddhist tablet remains found in Krabi and Trang caves associated with the early trading city-state that Chinese sources called Pan Pan (Jacq-Hergoualc'h and Hobson 2002), have been found in the area and support the idea of coastal populations actively engaged in trade, foraging and possibly tin mining in the Krabi and Phang Nga area. There are also signs of a shift of population, sometime after the 10th century AD, possibly to escape epidemics and warfare and to seek better living conditions on the eastern coast of the peninsula (Ruohomäki 1997). Therefore, the Urak Lawoi may have arrived from the south into a relatively empty region and had few contacts, if any, with the previous inhabitants. Our interviews showed that before the arrival of engine boats, around 50 years ago, the Urak Lawoi were trading mostly with the eastern part of the bay, in Trang province, rather than within the Krabi area, which was much less prosperous and peopled. Further studies on their ancient trading networks may help us to reveal possible continuity between known archaeological sites and the current use of the marine environment by Urak Lawoi communities.

CONCLUSIONS

Like many places in Southeast Asia, the caves in the Lanta Bay have been used for multiple purposes over a long period of time (Anderson 2005; Munier 1998; O'Connor *et al*. 2011; Tan and Taçon 2014). This behavior is well-illustrated by rock art but also religious remains such as votive tablets associated with one of the earliest regional city-states found there. However, what this initial archaeological and ethnographic survey revealed are the particular and distinct ties the different local people entertained with waterways, trading routes, hills and caves in the past and the present. This investigation also stresses that these islands are not just beautiful elements of the maritime landscape but instead encapsulate underexploited rich historical and ethnographical sources. Caves in islands were used as stopovers, as places to hide (pirates), for burial deposits and also possibly for rituals as some of the depictions may suggest.

The rock art discovered at Lanta Bay extends the known distribution of coastal rock art in Thailand further south; previously, only the sites in the Phang Nga-Krabi Bay were identified. The discovery of at least two new rock art sites in the Lanta Bay area suggests that there may be more sites that are yet to be identified, either on Ko Lanta to the west, or in Trang Province to the east. These new sites have some general similarities with those from the Phang Nga Bay: they are generally red paintings found in coastal rock shelters and cliff faces. With the exception of the "shaman" figure, stylistic connections cannot yet be made between the two regions although it is interesting to note that the Phang Nga Bay does not contain depictions of turtles. In both areas, these sites are associated with large cliff faces which may have served as navigation markers, and as predictors for human activity in future surveys.

From the perspective of methodological development, this research should contribute to community-based archaeological research given that indigenous archaeology is now spreading in Southeast Asia. A community-based program can lead to a better protection of archaeological sites against uncontrolled excavations thanks to

increased local communities' awareness. These are methodological developments in the field of community heritage management.

We hope that this project helps better understand local Krabi-Trang communities' role in fashioning their maritime cultural landscape. It may also contribute to a better preservation of local heritage thanks to local communities' involvement and awareness. At a regional scale, it will contribute to a better understanding of the incorporation of local groups into large historical trajectories and in particular the so-called Maritime Silk Road and along the transpeninsular routes (Jacq-Hergoualc'h and Hobson 2002).

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