

Fiji Revisited: A Field Report of the Rock Art Survey Project, 2009

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THE FOLLOWING REPORT DESCRIBES our archaeological rock art field survey that took place in Fiji between September 10 and October 24, 2009. This was our third field season to the Fijian Islands; the results of our 2007 and 2008 fieldwork have been published previously (Millerstrom & Cruz Berrocal 2009).

While in the Pacific we spent five days in Tonga where we had the opportunity to visit the recently discovered Houmale'eia rock art site on Foa Island in the Ha'apai Group. This site is a unique discovery because it is the only one of its kind in central Polynesia (Egan and Burley 2009). The turtles, dogs, triangular anthropomorphs, footprints (both single and in pairs) are clustered on two main panels on beach rock (ibid: Figures 4, 5, 6, and 7). During high tide the petroglyph site is completely submerged under water indicating a sea level change (ibid: 3). It appears that the panels had been covered over with coral sand and they were only recently exposed (ibid: 4). It is interesting to note that triangular anthropomorphs, thought to be unique to the Hawaiian petroglyph assemblage, also occur at Houmale'eia. Anthropomorphic figures are rare in the limited petroglyph repertoire in the Tongan, Samoan and Fijian Islands. This led Egan and Burley to postulate that the figures were carved either by Hawaiian(s) visiting or living in Tonga, or Tongans that had visited Hawai'i and had become familiar with the rock art of Hawaiian Islands. However, the authors seem to lean towards an indirect "...Hawaiian/Tongan interaction prior to European contact..." sometime around the 15th or 16th century AD. But, as the authors point out, triangular anthropomorph figures also occur on some historic Tongan wooden clubs (ibid: 22-23).

Petroglyphs are present in small numbers on Tonga although there are reports of other sites on isolated islands to the west (Egan pers. comm. October 2009). While on Foa we explored the nearby island of Nukunamo, situated across Houmale'eia Bay. While there were numerous flat beach rocks along the shoreline, we found no petroglyphs. Undoubtedly, there are other Tongan petroglyphs sites covered by sand, yet to be discovered¹.

METHODOLOGY

During our fieldwork in Fiji all the petroglyph images were documented by tracing with indelible markers on clear polyethylene plastic sheeting. These plastic tracings are later reduced to scale on a copying machine. Ink drawings are then made from the tracings, and those are subsequently scanned. An archaeology survey data form is filled out for each site noting any archeological remains and the environmental setting. Painted figures are too fragile for such methodology and were photographed only.

FIJIAN PETROGLYPHS AND PICTOGRAPHS

Several petroglyph and pictograph sites are mentioned in scattered published material (e.g., Paine 1929; Vogan 1937; Snow 1950; Phillipps 1951; O'Reilly 1954; Hill 1956; Palmer & Clunie 1970; Parry & Watling 1988; and Ewins 1995). Many are only mentioned in a single sentence without any specific description or location noted. It appears that priests, missionaries or colonial administrators reported some of the sites in private correspondence with various staff members at the Fiji Museum. and that the sites were not all visited, nor assessed by archaeologists. It is questionable if some of these sites exist today or if they are even rock images. They could be natural formations, or marks from wasp nests²; some evidence indicates that a few were destroyed during construction, or buried during hurricanes and floods. Furthermore, there is confusion as to the location of some of the figures and what they may depict.

We attempted to investigate the sites mentioned in the various publications. In some cases we were successful; in other cases we were not. Lack of time prevented us from visiting the well-known and often visited dome-like cave with images on Sawa-i-lau in the Yasawa Group. Although a picture of the figures can be seen in Palmer and Clunie (1970:9; Plate 3) the site has not been scientifically recorded.

Figure 1 shows the location of the sites we recorded in 2007, 2008, and 2009. What follows are descriptions and

¹ Unfortunately the rock art site was again buried in sand after the tropical cyclone Rene ravaged the island on February 15, 2010 (Burley pers. comm. April 2010).

² Stains from wasp-nest can easily be mistaken for painted figures as they often form uniform rings; at times they are interconnected. In this regards it should be noted that during the 2009 International Congress of Rock Art (IFRAO), National Park Serra da Capivara, Piaui, Brazil, many of the participants visited rock art sites in the region. On the cave walls at one site numerous stains from wasp-nests were mistaken for rock paintings by most of the participants including rock art specialists (Personal observation by MCB, July 2009).

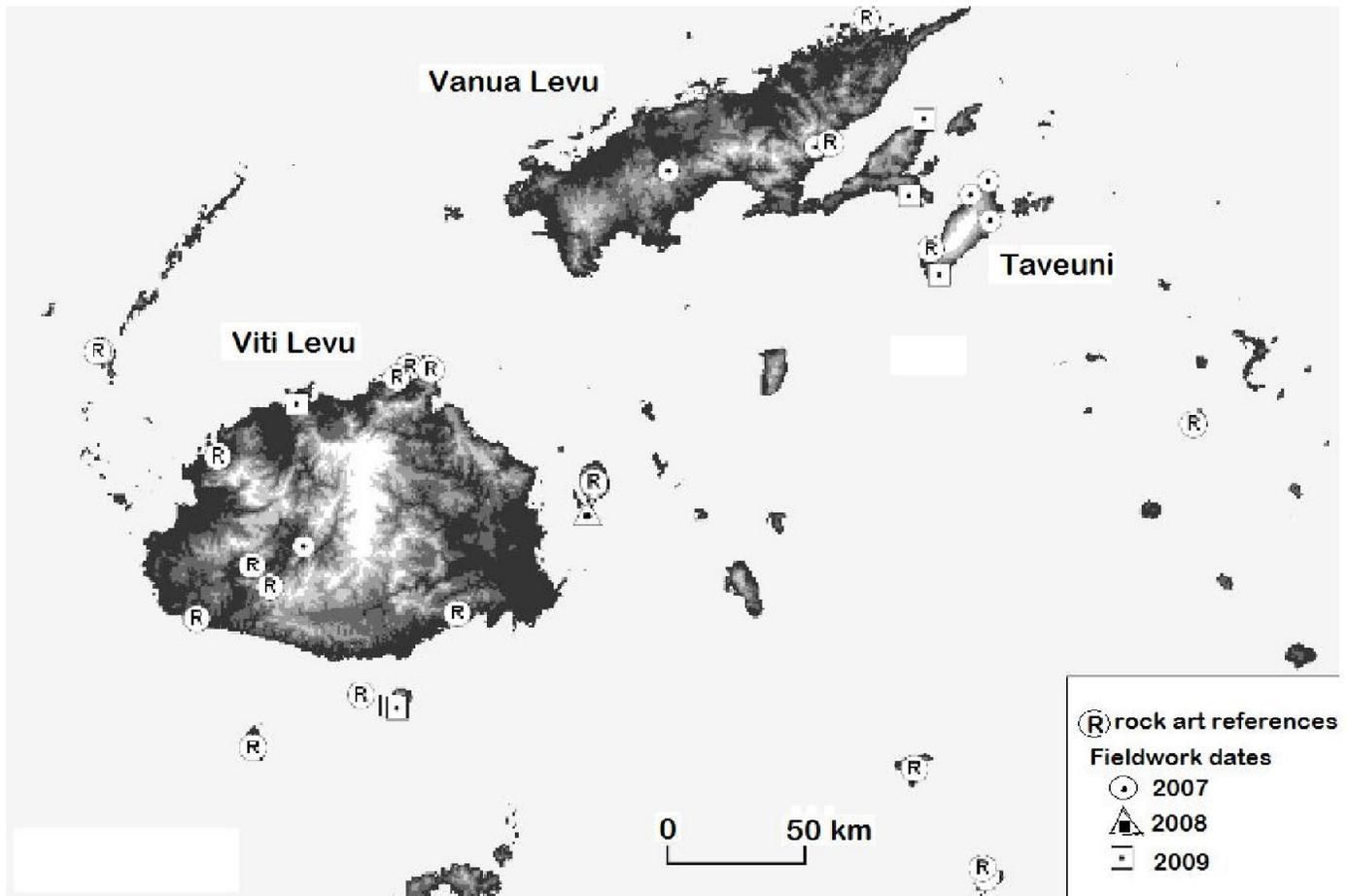


Figure 1. Map of Fiji Islands showing sites recorded in 2007, 2008 and 2009. .

evaluations of the eleven archaeological rock art sites we visited or attempted to examine during the 2009 field project.

VITI LEVU

Koroiemalu Cave, Sigatoka Valley

Koroiemalu Cave, said to have charcoal drawings, is located on a mountain ridge in the area of Koronisagana and Toga villages. In trying to locate the cave, we visited both villages. Because of a known “large footprint” they took us to the nearby cave called Naihehe. The “footprint” turned out to be a natural rock formation. When we talked with some people in Toga Village we were told that Koroiemalu cave was located on the crest of a ridge some distance away, and a visit to the site involved an overnight camping trip. The village people were engaged with preparations for an organized group of tourists and so we had to abandon the project for this trip.

Bukusia Caves, Sigatoka Valley

The caves are located two hours walk from Raiwaqa Village. After a meeting with the elders, we were guided by Mosese Vatukinikini, the *turaga ni koro* (the elected official headperson of a village), of Raiwaqa, and Sailosi Nacewa of Navuna

Village, a person whom we had met in Sigatoka Valley two years ago. The chief of Raiwaqa later joined us on horseback. The green forest of Bukusia is in stark contrast to the denuded surrounding hills. Two additional uninhabited old villages are located on the ridges to the east and the west some distance from Bukusia. They stand out because of the green forested areas. The Bukusia caves are numerous, dramatic, and often deep. The Bukusia River runs some 50m below the caves and originates from a spring in the largest cave. Evidence of human occupation is seen in raised platforms with stacked facing walls, pottery shards, and seashells scattered on the ground. *Ti* plants or *Qi* in Fijian (*Cordyline fruticosa*), candlenut trees (*Aleurites moluccana*), and a local banyan species are growing in the area. We examined the caves on the south side of the mountain ridge but we failed to locate the paintings. Sepeti Matararaba, a field archaeologist at the Fiji Museum, visited the cave in June 1997. He recorded some 16 figures painted in charcoal. It is possible, but it has yet to be verified, that the cave in question is located on the top of the ridge near the old village. While our guides had heard about the cave with the charcoal figures, they had not actually seen it.

Maqere, Kings Road

The Maqere petroglyphs are located on a prominent north-south ridge on the seaside of the Kings Road between Ba and Tavua. On the north end of the ridge is an approximately 3m high house-mound with stacked stone-faced walls on the north and south sides (7-8 courses high). The structure measured, from north to south, 14m in length; the width is 9m. Parry & Watling (1988:106-110) who provide an excellent description of the petroglyph site, failed to recognize the “mound or tumulus” as a *yavu* or a house-mound. The generally treeless ridge provides a 360-degree view. No pottery was noticed either on nor around the mound. The area is covered with grass and ground visibility is poor. The rock art site is located on the same ridge slope approximately 100m to the south. While there are scattered boulders in the area, only the largest boulder in a cluster of several smaller boulders, is pecked.

Overall measurements of the boulder are 2.2m high, and it is 1.8m wide. The petroglyphs are placed on two panels: Panel A, facing west, measures 2.2m x 1.7m. The figures depict a small turtle, an anthropomorph, and a geometric shape (Figure 2). The south-facing panel measures 1.65m x 1.8m. Two turtles are depicted on the south panel B (Figure 3). The pecked grooves are 5-6mm deep. Large peck marks are still visible in and around the grooves.

According to Parry & Watling (1988:107) the petroglyphs were “known to the elders at Vatutavui Village” situated some 3km to the west. Unfortunately there is no information available about the site. However, its prominent location on a ridge with a commanding view of the sea as well as inland, and the associated figures and house-mound, indicate that this was a special place. It may have been a lookout point to detect approaching enemies. The figures might have been clan or boundary symbols. It is more likely, however, that the area was a place where inspirational priest(s) officiated and communicated with the otherworld because turtles were considered sacred in prehistoric Oceania. Only archaeological site excavation will yield a possible function or a time period when it was used.

VANUA LEVU

Dakuniba

Dakuniba Village is unique. As it has no regular transportation the road to the village is overgrown and difficult to drive. When gasoline is available, most people take a boat across Somosomo Strait to Taveuni.

Dakuniba means “behind the fence” (Snow 1950:710). Snow writes that the name “is thought by some to have some significance in relation to the stones and a fortification behind palisades.” But it is uncertain what fortification he was referring to.

The petroglyph site is located about 15 minutes walk to the north of the village. To the west of the site, a river spills over wide flat rocks, creating small waterfalls and basins. Thirteen boulders with geometric figures are distributed over

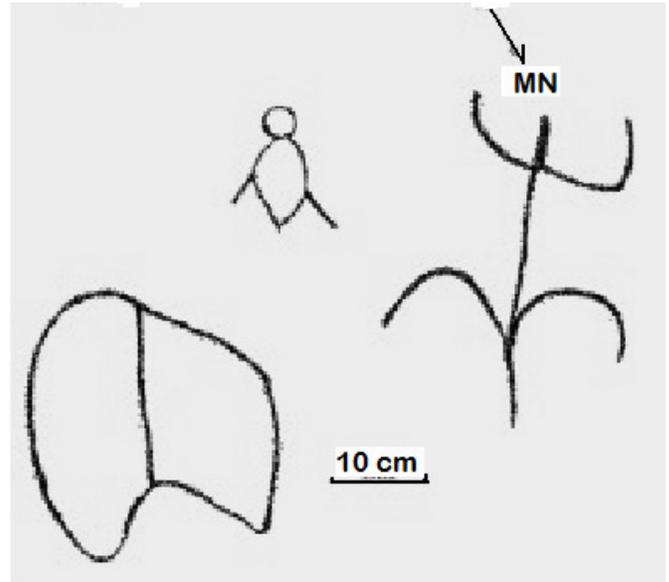


Figure 2. Maqere. Panel A. Viti Levu. An anthropomorph, turtle and a geometric figure.

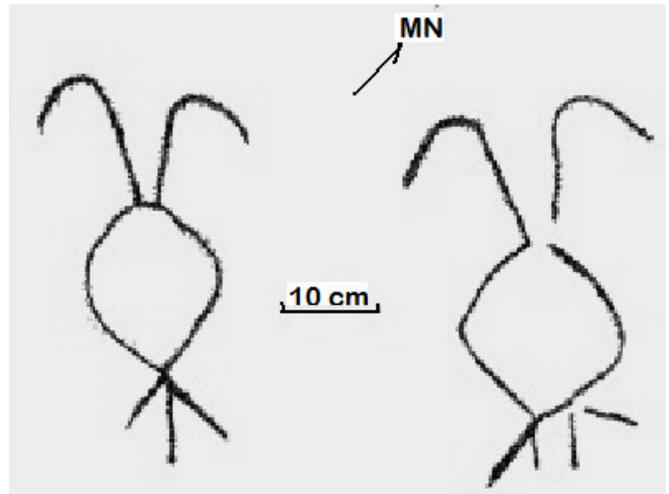


Figure 3. Maqere. Panel B. Viti Levu. Two turtles.

more than 30m down a slope. The estimated height of the site that we recorded is approximately 75 masl (meters above sea level).

The boulders are centered in two areas ten meters apart, and all situated on a sloping hillside. The geometric figures face up (or to the south) with the village below. The largest flat stones (A, B, C, D) are located in the northern part of the site. They measure as follows: A) 1.60m x 1.20m; B) 1.90m x 1.55m; C) 1.21m x 0.91m; and D) 3.3m x 0.6m x 0.3m. Only the depth of the outer edge of boulder D could be measured. The rest of the boulders were embedded in the ground. The grooves measure from 9 to 10cm in width; and the depth of the grooves ranges from 1 to 8cm. The remaining ten (E, F, G, H, I, J, K, L, M, N) boulders ranged in size from 1.50 to 0.90m (Figures 4 and 5).

All the images depict both circular and linear geometric designs. Only one figure depicts a possible anthropomorph (see figure lower left on panel B). Snow (1950:71-76) discussed the site and the petroglyphs in detail but was unable to provide any further information about the use of the site. Without archaeological excavation the site and its function remain unclear. Another boulder, situated in the river, is located further uphill to the north. As it was raining and slippery, our guide discouraged us from visiting the site.

Qaravonu, Nailou

O'Reilly, apparently a French Catholic missionary, published a short report on a rock shelter he had visited in Nailou, Cakaudrove District (1954:178-79). No one we talked to at the Catholic Mission, located on the east coast of the peninsula, knew about the rock shelter with the carvings. However, we made contact with the chief, Simone R. Nakasamai, who picked us up by boat to take us to Nailou Village. We arrived in the village in the dark but were well taken care of by the chief and his wife Margarita. The following morning both the chief and the *turaga ni koro*, Maikeli Uludole, guided us to the site. Qaravonu is located some 40 minutes walk to the southeast of the village. The cave is strategically located to the north of an old and well-worn trail. According to our guides, part of the trail leads from the sea past the shelter to the old village on top of the ridge. The path will also reach Karoko, a village on the east side of the peninsula. A spring, the origin of Natavo River, is located just below the trail to the south. The rock shelter is situated on a slope uphill from the river and the footpath. There is a flat area, approximately 5m, between the shelter and the path. The exterior length of the cave measures 10.5m. At the drip-line, the maximum height measures 5.90m while maximum depth measures 4.5m. The panel with the figures measures 8.10m long and it is 2.45m in height. The general orientation of the shelter is 40° north-west. A total of 17 pecked, incised, and charcoal drawn turtles are placed on the slanting wall of the shelter; most of the turtles are pecked, plus two incised turtles are superimposed on pecked turtles. Placed on a 1.3m tall boulder at the western end of the shelter are two pecked turtles; interestingly, one of the turtles is pecked on both sides of the boulder, facing both north and south (Figure 6). Two smaller boulders to the east have a total of three pecked turtles. On the smallest boulder, a female turtle faces the wall of the rock shelter. In the center of the rock shelter there is an anthropomorphic figure drawn in charcoal which is not mentioned by O'Reilly. The width of the pecked lines measures from 2-3cm while the depth is 0.3-0.5cm.

According to our guides, the *mataqali* (clan) of Nailou Village were fishermen who worked for the chief of Karoko. Apparently this was the cave for the turtle fishermen. Because of the various styles and different techniques it is clear that different people made the figures over time. The guides pointed out the gender of the turtles to us. O'Reilly also mentioned the gender of the turtles (1954:178). Of the 17



Figure 4. Dakuniba. Panel B. Vanua Levu. Deeply pecked geometric figures.

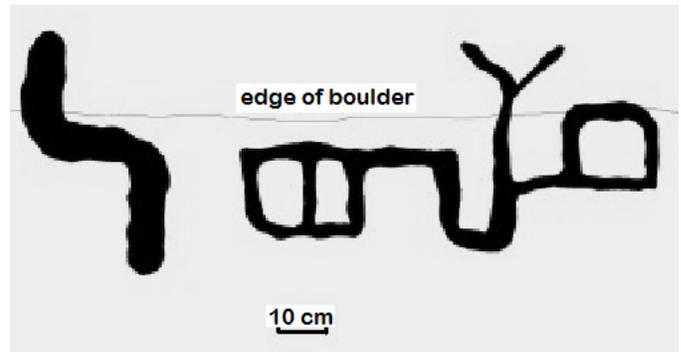


Figure 5. Dakuniba. Panel B. Vanua Levu. Geometric figures.

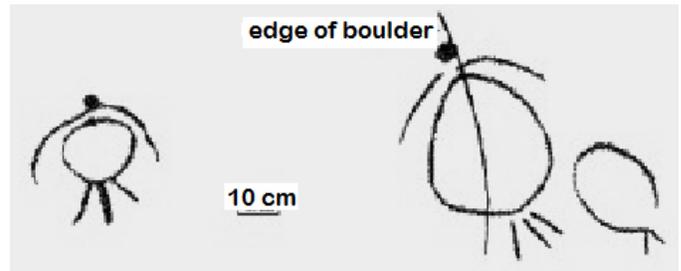


Figure 6. Nailou. Qaravonu, Nailou, Vanua Levu. Three male turtles.

turtles recorded by us, nine depict males while two depict females. Six figures are incomplete and gender undetermined.

TAVEUNI

Lalavata

Taveuni, known as the Garden Island, is located to the east of Vanua Levu. Two rock art sites have already been recorded on the island and two other sites were visited, but the

petroglyphs were not found (Millerstrom & Cruz Berrocal 2009:40-47). This time we had the opportunity to investigate a site in the southern part of the island that was brought to our attention last year.

Lalavata site is located some 30 minutes walk from Navakawau Village. In a cove on the beach, nine handprints are in red pigment, and arranged in a circle on a vertical and unprotected cliff wall (Figure 7). Some appear to be superimposed, as the underlying hands are lighter in color. They are some 3.5 m above the sandy beach. The cove is about 5-6m deep and up to 10 m wide at the opening. Although it was challenging to even see the handprints, we estimate that the smooth panel measures approximately 0.8 m x 0.8 m. The handprint in the lower left side has an extra finger in a lighter color. It seems as if the person making the prints changed his/her hands position or the position of one of the fingers before making the final print. The handprints are associated with a well-known local legend. We heard a simplified version of the story in Dakuniba Village.

The flat area above the beach is called Devil's Place. In the past, battles between the local people and the people of Vuna (to the northwest) took place, according to various sources, some 80 years ago. Silio Colaudolu, the *turaga ni koro* told us that the chief-warrior Lalavata made the handprints. As Silio Colaudolu (pers. comm. September 2009), recounted the story:

One day when Lalavata was sitting with his big black dog in the cove cleaning his war club he saw blood seeping out of the stone. The blood was from all his people slain in the war with Vuna. Lalavata placed his hand in the blood and it left the prints. Lalavata then decided to revenge his people. He went to battle and killed all the Vuna people except the chief. The Vuna chief gave the southern part to Lavata and his people. This is where the village of Navakawau now is located. Lalavata requested to be buried alive in a sitting position on the top of a hill overlooking the village. Thus Lalavata was entombed in a stone heaped grave on top of the hill to the west of the village.

OVALAU

Lovoni Valley

A priest apparently reported the rock art site in Lovoni Valley to the Fiji Museum in an unpublished correspondence (Parke 1960:31). Part of the stone was removed and taken to the museum where it was observed by Parke. However, today the Fiji Museum has no knowledge of it. There is little information about the site and it appears that Palmer and Clunie (1970:10) summarized Parke's report. Following

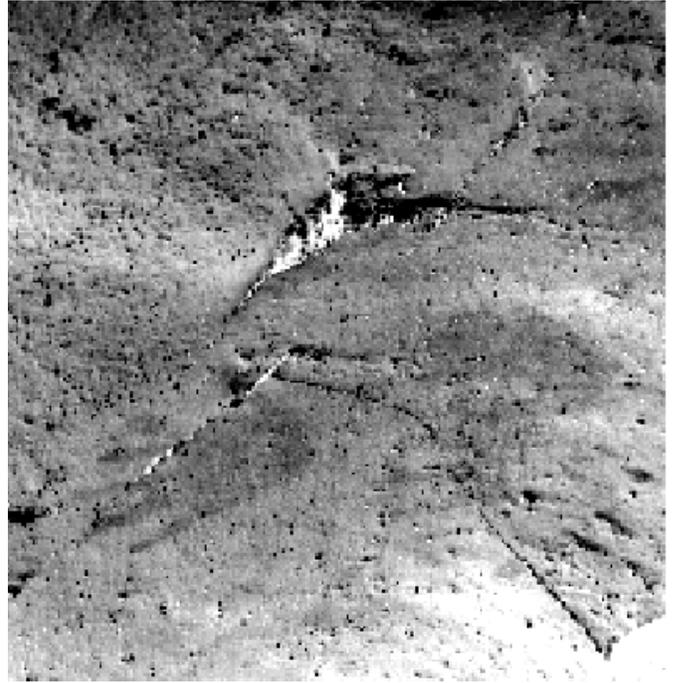


Figure 7. Lalavata site, Taveuni. Two of the nine red hand prints are visible in the photograph.

Parke's description, the site is named Dedevelevu and it is located in the Lovoniwai area near Wainubanika River.

After partaking in the *sevusevu*³ ritual performed by Eparama Druguta Turaganilotu, the chief of the Tukuta settlement, we were given permission to visit the site. The site is still considered sacred to the people in the area and in the past no outsiders have been allowed. Mereoni, his daughter-in-law, guided us to the site. She had been there before but somehow this time she became confused and did not locate the rock shelter. She repeatedly searched along the base of the mountain. The local story tells that Adinukula, a princess from the Solomon Islands, who lived in the ancient village on the top of ridge, died and was buried in the shelter. Eparama Druguta Turaganilotu is one of the descendants from this princess. He was surprised that we did not find the place. But in typical pragmatic Fijian fashion the lively and charming chief said that it was because "the princess did not wish to appear before us." (pers. comm. October 2009).

Lovoni Village consists of 3 villages, Lovoni, Nasuamatua, and Vuniivisavu, separated by two streams. According to Iowane Boro, the *turaga ni koro* of Vuniivisavu Village, there is another boulder with petroglyphs located on a mountain ridge to the northwest of Lovoni Valley. We have no other information about this rock art site. To reach the site will involve at least one overnight camping trip.

³ *Sevusevu* is a presentation of a gift, usually a bundle of *yaqona* or *kava*, to a village chief and, consequently the ancestral gods and spirits. Acceptance of this gift means that the giver will be granted certain privileges or favors. Visiting a Fijian village always involves a *sevusevu* and certain other observances of cultural rules.

BEQA

Beqa is a high island with a surface area of 36 square km. It is located some 7.5km south of Pacific Harbour on Viti Levu and is clearly visible from Queens Road. While the island has several old fort villages on the ridges, only two boulders with markings were known, one at Rukunawai and one at Vadramata; both sites are located on the south side of the island.

Rukunawai

Rukunawai (under the water) is a beach area south of Korovatu ridge (292 masl). Located on top of the narrow north-south ridge is the old village fort Uluinakorovatu (translated to us as “the stone village on the top”) with impressively large stacked walled spaces and platforms. Numerous *baqa* (banyan trees) were growing on the ridge and *ti* plants were seen both on the ridge and on the steep flanks of the mountain. We climbed up the west side of the mountain and entered the village between two large boulders. From the top we could see several fish traps located on the south side of the island. By the time we arrived on the beach on the south side of the island we had circumvented Korovatu Mountain. A boulder measuring 0.9m in length and 0.38m in width is located on the beach is (Figure 8). It measures 0.13 m in depth. On the flat upper surface and on some of the sides, there are 166 randomly placed pecked cupules. On average, they measure 2 cm in diameter and they are up to 1 cm deep. During high tide, the stone is some 0.5 m under water. No one had any information about the boulder. This area also has numerous fish traps.

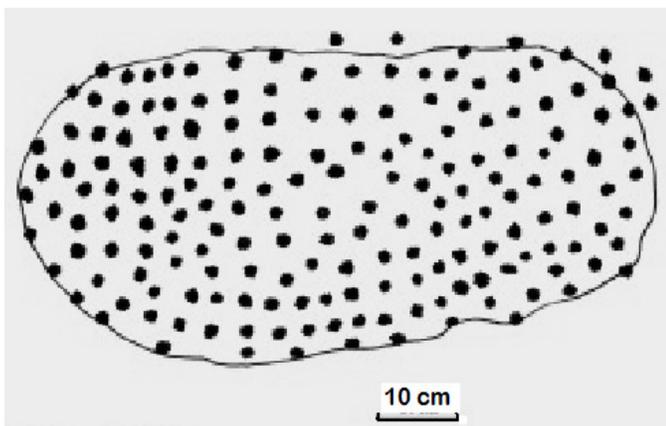


Figure 8. Rukunawai. Beqa Island. Boulder with 166 pecked impressions.

Vadramata

Kula Bay is located on the southwest coast of Beqa Island. Naceva Bay and the village by the same name (formerly known as Kutu) are located to the east. Kula Resort, now a deserted place, is situated on the beachfront. Several old house-mounds are located directly behind the resort build-

ings. They are arranged on both side of a “track” or a 4-5m wide space. To the west are numerous historic graves. A river runs to the east of the resort. At a spot where two rivers meet, approximately 150-200m inland, is a boulder with a pecked turtle (Figure 9). The place is referred to as Vadramata, translated to us as a “fruit-bearing pandanus tree”. No pandanus (screwpine) grow in the area today. The boulder measures 1.1m high, 1.4m wide and 0.7m deep. The turtle was placed towards the top of the boulder some 29cm above the surface. The figure is 46cm in width and 33cm in height. The grooves measure from 0.5cm to 1cm in depth while the circular head measures 3cm in depth.

Phillipps (1951:51) and Palmer & Clunie (1970:3, 10) described the figure as one or more incised spiral designs or a concentric circle that is badly weathered. Apparently it was recorded by G. T. Barker (Palmer & Clunie 1970:10) or G. T. Baker (Phillipps 1951:51) of Fiji Museum in 1938. However, there is not doubt that the figure is a deeply pecked turtle. It did not appear weathered to us. The circular indentation between the back flippers may depict an egg or even a female turtle.

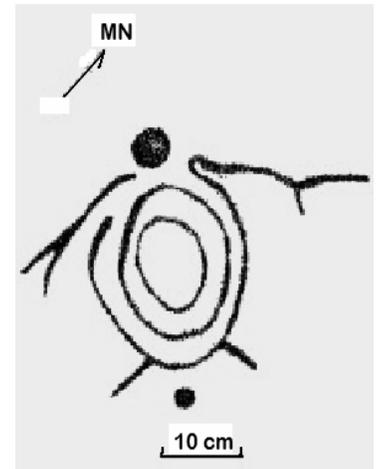


Figure 9. Vadramata. Beqa Island. Turtle petroglyph.

Yanuca Island and Yanuca Lailai

The Yanuca Island and the island of Yanuca Lailai petroglyph sites present an interesting problem. Phillipps (1951:51) writes:

Mr. Baker states that in 1896 he was taken to a cave on the small island of Yanutha lailai where as far as he could judge there were a large number (about 50) of designs similar to those seen in Beqa. These were joined together.

Palmer & Clunie (1970:3, 4, 10) in their summary of the Fijian rock art write under the heading: *The Beqa and Yanuca Petroglyphs:*

The late G. T. Barker who recorded the above details, said that he was taken to a cave on Yanuca Island, which contained about fifty similar designs, which were linked together.

On Palmer & Clunie’s map with the distribution of Fijian rock art sites (1970:4), Yanuca Island is marked with a black dot indicating that there is a rock art site there.

Baker or Barker, with the Fiji Museum in the 1890s, appears to be the only one that saw these markings. However, do these pecking occur on Yanuca Island, Yanuca lailai, or some other island also called Yanuca?

While on Beqa Island we visited Yanuca Island, visible to the west across Beqa Lagoon. In good weather it can be reached by boat in some 20-30 minutes. The island has only one village named Yanuca. Sireli Kago, the *turaga ni koro*, of Yanuca Village, brought us to the Qarakuvui burial cave by motorboat. Is it the only known cave on the island. Located to the south of the village, at low tide it can be reached by a 20 minute walk along the beach, although the local inhabitants avoid the place. It was high tide and storming when we visited the island and with great difficulty we reached the cave. A coffin of *vesi* wood in the form of a canoe was placed at the back of the cave. The canoe, perhaps 2 m long, had two protrusions at each end. Numerous bones were scattered at the end of the cave. According to Sireli Kago, these were the bones from a chief who was interred in the cave during warfare. The cave measures some 3-4m wide at the opening and perhaps up to 40m long. Halfway in the cave are remains of a stacked (7 to 8 courses) stone wall that was placed across the cave. The interior walls are rough and there are no visible petroglyphs. We also visited two rock shelters to the north of the village but no circular nor spiral petroglyphs were seen.

While we were on Ovalau Island we investigated the nearby island of Yanuca *lailai*. Only one family lives on the island where they run a small resort. According to the owner, who has lived there all his life, there was only one rock shelter on the island. We investigated it but found no petroglyphs. However, near the shallow shelter were numerous imprints of wasp nests. Could it be that G. T. Barker/Baker mistook these rings, sometimes appearing to be connected, for petroglyphs or painted figures?

There are several Yanuca islands in Fiji so it is possible, though not likely in our view, that the figures are located on another island. While various forms of circles, e.g., concentric circles with 2, 3, and 4 rings are common in the Fijian repertoire, a cave with some 50 interlocking circles would indeed be unique.

NANAU-I-RA

Little is known about the rock art site on Nanau-i-Ra, if indeed it even exists. The only information we have is a sentence "At Nanau-i-Ra, there is a single zoomorph – a turtle" (Hiener, undated, Fiji Museum Archaeological Survey records). We visited the island and found several archaeological sites including a stacked stone circular structure, stone terrace, and numerous fish-traps. No one we spoke to knew of a turtle petroglyph on the island. However, a Fijian diver told us that there is a stone turtle out in the sea (Papoo pers. comm. October 2009). Until we have further information we believe that the "petroglyph" may be part of a natural reef formation that looks like a turtle. The survey record has not been located in the Fiji Museum.

PETROGLYPH AND PICTOGRAPH PRODUCTION

Three different methods are used to produce the Fijian figures: 1) pecking; 2) painting; and 3) charcoal drawn.

Pecked Figures

This group consists of pecked single and concentric circles, turtles, a face, a hand, and geometric figures. These figures, though they vary in numbers and distribution, are closely related to the rock art found throughout Polynesia. For instance, face motifs and eyes are especially prevalent on Easter Island (Lee 1992:57-61) and in the Marquesas archipelago (Millerstrom 2003:40-42). Eyes, though rare, also occur on Hawai'i (Lee & Stasack 1999). They appear to be largely absent from New Zealand (Trotter & McCulloch 1971).

Painted Figures

At Dainaba, on the northwest coast of Vatulele Island, approximately 95 painted images are placed on 240m long limestone cliffs (Erwin 1995:23-74). The figures depict mostly face motifs, anthropomorphs, birds, watercraft, geometrics, and some 60 mostly stenciled hands (both left and right hands). The Vatulele paintings and the handprints found at the Lalavata site near Navakawau Village, Taveuni, are placed on cliff faces on the coast. Superimposed figures are seen at both sites. The two locations are, to date, the only known pictograph sites in Fiji. Painted figures are rare in the Marquesas but they occur in New Zealand, Hawai'i, and Easter Island. While handprints are found in New Zealand, they are more common in Near Oceania. We are specifically referring to the 170 black and red negative hand-stencils located in caves at the Wanaham site, Loyalties, New Caledonia. They are situated some 4.5km from the coastal Lapita beach site at Keny. They date to circa 800-200 years cal BC (Sand et al. 2006).

Charcoal Drawn Figures

The only known charcoal drawn figures, recorded by us, are turtle figures at Nailou cave on Vanua Levu. However, Sepeti Matararaba of the Fiji Museum, recorded several charcoal drawings in a cave in Bukusia and at Koroimalu Cave, Viti Levu in 1997. Charcoal drawings are absent in the Marquesas Islands, and as far as we know, no charcoal drawings have been recorded in Hawai'i. On Easter Island they occur at Orongo (Lee 1992:188-196). However, charcoal figures frequently occur in New Zealand (Trotter & McCulloch 1981), and in New Caledonia (Sand et al. 2006).

WHERE AND HOW ARE THE SITES SITUATED?

From the twelve sites we recorded, plus the Vatulele paintings recorded by Ewins (1995), we can infer that the images are situated in four distinct manners (Table 1). Nine sites consist of images placed on a total of 24 individual boulders. One petroglyph site is an outcrop. The Vatulele and the Lalavata paintings are placed on cliff faces near the sea, while

the Tatuba figures are situated near the opening of a cave in Sigatoka Valley. At the Qaravonu rock shelter, the pecked, incised and charcoal drawn turtles are placed on the ceiling while four turtles are placed on three boulders inside the shelter.

Most of the sites are associated with water; the sea, a spring, rivers, and a taro swamp. Other environmental associations are ridge crests, a cave and a rock shelter

It is noteworthy that at Qaravonu rock shelter a pecked turtle is wrapped around the edge of a boulder. In the Marquesas, numerous face figures and some turtle figures are depicted on both sides of a boulder. This unique placement of figures also can be seen in great numbers on Easter Island.

DISCUSSION

Petroglyphs and pictographs occur in Fiji but they are not numerous. Although to date limited survey has taken place in the islands, it is doubtful that a large number of images on rock, such as for example, the great number found on the Hawaiian Islands, Easter Island, New Zealand, the Marquesas, and New Caledonia, will turn up in the future. Our 2008 survey on Moturiki Island was an attempt to do an archaeological survey of a manageable island to see if indeed an entire survey would reveal additional rock art sites (Millerstrom & Cruz Berrocal 2009). This case study demonstrates, that in Fiji, even if one site occurs in a particular region or island it is not predictable that additional sites occur on the same island. It is likely, however, that in the future, other sites will be found accidentally, as in the case on Moturiki.

The study of Fijian rock art is interesting in two ways: first, its location in the Pacific as an ‘in between’ archipelago between Melanesia and Western Polynesia. Kirch (2002:155) places it in a special position in cultural terms. The study of traits that may or may not be shared between both regions is especially significant in this context. One of these relevant traits is rock art. In this sense, the lack of information regarding rock art in Fiji is a problem; as it has been shown by our work, Fiji is an exception in the context of the Pacific that needs clarification. Indeed some of the images are closely related

to those found in Polynesia both in terms of site situation and image types. The reddish handprints show an affinity with those of, for instance, New Caledonia. The close relation to Near Oceania has been suggested, based on stylistic evidence, “that the earliest paintings may have been made during the early Lapita period of settlement in Fiji” (Ewins 1995:67). Indeed iconographic connections exist, as have been highlighted above, between both Fiji and Near and Remote Oceania. The problem we face now is to try and determine the origin and development of these cultural traditions and their genetic (or lack of) relationship.

Unfortunately, because of transportation logistics, we were unable to reach all the sites compiled in Table 1. On Totoya Island there is one boulder with some pecked figures (P. Nunn pers. comm. September 2009). On Moala, pecked circles and geometric designs are depicted on two large boulders (S. Matararababa, pers. comm. September 2009). Several sites have been mentioned in published materials but, as discussed above, some sites appear to be destroyed or some were natural features, mistakenly confused with rock art. Others have been noted, but lack environmental and cultural context.

ISLAND	VILLAGE	SITE NAME	IMAGE TYPES	SITUATION	SURFACE TYPE
VITI LEVU	Sawene	Tatuba Cave	Anthropomorphic handprint and cup shaped impressions	Ridge crest	Cave wall
VITI LEVU	Maqere		Turtles, anthropomorph	Ridge crest	Boulder (1)
VANUA LEVU	Vatukuca	Na Vatu Vola Na Vu	Anthropomorphic face, concentric circles, circular geometric shapes	Ridge crest	Boulder (1)
VANUA LEVU	Dakuniba		Geometric figures	Hillside near river	Boulders (13)
VANUA LEVU	Nailou	Qaravonu	Turtles, anthropomorph	Rock shelter, hill side, trail, spring	Rock wall and boulders (3)
VANUA LEVU	Dawara	Vola Creek	Concentric circles and circles, lines	In a river	Boulder (1)
TAVEUNI	Matei area	Taveuni Palms Resort	Concentric circles and circles	Near a river and the sea	Boulder (1)
TAVEUNI	Welagi	Loaloa Point	Two concentric circles	In the sea	Outcrop (1)
TAVEUNI		Lalavata	Hand prints in red pigment	Cliffs face by the sea	Cliff walls
MOTURIKI	Ulimbau	Naisogorourou	Concentric circles	Taro swamp	Boulder (1)
BEQA	Rukunawai		Circular indentations	By the sea	Boulder (1)
BEQA	Vadramata		Turtle	River	Boulder (1)
VATULELE	Dainaba Cliffs			Cliff face by the sea	Cliff walls

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Travel in Fiji is both time consuming and challenging. Transportation depends on the weather and the availability of gasoline. Many villages are isolated and difficult to reach and have no regular public transportation. In populated valleys like Sigatoka, this is usually no problem except when we had to cross a flooded river. Cell phone communication often relies on the opportunity to charge a battery. If there is no public electricity, people rely on gasoline to run a generator. Numerous Fijians live in villages where the only electricity is from a generator that only runs when gasoline is available. The Fijians we have lived with and worked with are exceptionally well adapted to their cultural and natural environment and are courageous, friendly, gracious, and hospitable.

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