

POHNPEI PETROGLYPHS, COMMUNICATION AND MISCOMMUNICATION

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ABSTRACT

Fieldwork on the island of Pohnpei, Federated States of Micronesia, has resulted in the recording of the largest 'rock art' site in the northwest tropical Pacific islands. The site consists of over 700 motifs pecked on a large rock outcrop and nearby boulders. Interviews during fieldwork and a review of the literature dating to the so-called 'ethnographic present' have revealed inconsistencies in the local understanding of the history of the site. The preliminary analysis of the site reveals features which fix the site as having meaning in a larger landscape and seascape context, while some of the motifs may be interpreted by analogy as having broader western Pacific links. Much of this contradicts the ethnography and early writings regarding this place. If a rupture in the community history exists, as I suggest, then this rupture may have preceded the first recordings of Pohnpei culture commonly regarded as the ethnographic present. This scenario is proposed through a broader understanding of the role that Pohnpei played in inter-island interaction prior to prolonged encounters with exotic, but literate, aliens. Ethnography provides multiple understandings of the place in the present and this multiplicity, as a theme, serves to inform interpretations of the social context of the place in the past.

Rock-art is found throughout Oceania with the motifs applied to the rock by both engraving and painting. Some places in Polynesia such as Rapa Nui (Easter Island), Hawaii, and Aotearoa (New Zealand) are particularly rich in images, as are parts of Melanesia (Specht 1979; Ballard 1992; Wilson 1998). The third geopolitical unit of the Pacific, Micronesia, has not been regarded as a rich area for rock-art, as was confirmed in a recent review (Rainbird 1994:297). However,

in 1997, with Meredith Wilson, a group of over 700 petroglyphs at a single place was recorded, in the southeast quarter of the Micronesian island of Pohnpei (Rainbird and Wilson 1999; see also Rainbird 2001, 2002).

In this paper I will discuss how the varied local meanings attributing the petroglyphs to a variety of origins is understandable in relation to the theme of foreign influence highlighted by anthropologist Glenn Petersen. This theme, recognised in Pohnpei oral history, is supported by the burgeoning evidence for inter-island contacts prior to European arrival. These contacts may be interpreted from a variety of archaeological sources including the petroglyphs themselves. However, the contacts, although proving vital to Pohnpei cultural reproduction, have also in recent centuries caused ruptures in the oral history that have produced diversity in accounts, but maintained common themes.

The main component of the site is a large rock outcrop, volcanic in origin, that slopes down in four natural terraces towards the Lehdau River in the area of Sapwalap village. The motifs recorded include, fish, 'swaddles' (swords, weaving pegs or paddles), feet, anthropomorphs, enveloped crosses, and at least one boat. The latter two are particularly pertinent to my discussion here.

LOCAL SITE INTERPRETATIONS

In 1983 Ueki and Nena (1983) visited the site and reported that there were over 40 images. In regard to origins they state that, "legend ascribes them to the brothers Olsipha and Olsopha, also said to be the founders of Nan Madol. These two stole a blanket in Kiti Municipality and carried it to the petroglyph location where it turned to stone, decorations and all" (1983:537).

Two other earlier descriptions have been published. In 1896 F.W. Christian visited Pohnpei and was told of the petroglyph site but did not visit. He was informed of

a curious large flat stone on the Chapalap river called Takainin-Talang. It stands near Katam where the Spanish met with such a warm reception in 1892 [cf Hanlon (1988:192), who states the date to be 1890]. It has prints of a man's feet in the stone, and on its face weapons carved in outline, which from [Joe Kehoe's] description mightily resemble the Japanese Katana or curved swords (Christian 1899:99).

In 1910 Paul Hambruch (1936:57), a member of the German *Sudsee* scientific expedition, visited the site and reports that it was known locally as *Takai en Intolen* (stone with drawings) and consisted of four boulders and a larger clearing. He noted the 'halo' on some of the human figures and suggested "they represent the 'raffia' head band, which used to be worn by the men; consistent are also the 'tassels' at the side". The site was described to Hambruch by locals as a house that had belonged to two men named Muantik and Muanlap (small man and big man). These men decided to venture into foreign lands and closed the door on the rock (the house) and were not seen again.

Of the sword-like shapes (that we labelled 'swaddles'), Hambruch noticed a resemblance with weaving loom pegs which were found at inland sites. But he also posited that Philippine soldiers fighting for the Spanish may have been responsible for the engravings, although rejecting this in favour of an ancient origin.

During fieldwork, four local people were interviewed and provided an opinion in regard to the origin or meaning of the site; many others were asked but said they could not offer an opinion as they did not know. A local schoolteacher, considered by the landowner to be knowledgeable in regard to the history of the site, repeated the story that it had been a blanket stolen from the other side of the island by two boys, although he did not say their names. A late middle-aged man said his father told him that they had been made by 'oriental' people. The current Oral History Coordinator of the Pohnpei State Historic Preservation Office said that the 'old people' had told him that 'Indians' were responsible. The fourth person, who was a neighbouring landowner, explained that his father had told him that the site was a place of 'ghosts' and that boulders in the vicinity were the remains of people who had turned to stone.

Taking together the historical and contemporary sources we may choose from ghosts, indigenous ancestors from mythical times, Spaniards, Filipinos, Orientals, or Indians as responsible for the markings. I am not intending to label any of these explanations right or wrong, but rather acknowledge that this site incorporates multiple meanings in the present and ask what are the reasons for these varied local understandings?

In asking this question, one should first consider the warning given by anthropologist Glenn Petersen (1982:7) who states "secrecy plays an elemental role in the organ-

ization of [Pohnpeian] social life ... Much of what seems at first to be communication is in fact miscommunication, or more precisely, discommunication." This is due to the use of knowledge of the past as a political tool in the present. Petersen (1990:12) also finds that "[k]nowledge of the names of hills and rivers and channels remains esoteric and closely shielded today ... These names connect the people of modern Pohnpei to the creation." This may explain why we know of four names for the site. Although I accept that there is much difficulty in using the oral history as a simple method of constructing Pohnpeian history, I suggest here that its political use is not the only reason for such difficulties.

One theme that is consistent in Pohnpeian oral history is the acceptance of foreign influence in the construction of Pohnpeian society: six or seven separate colonising events are typical in local historical accounts, with each person or group bringing a component of Pohnpei life (Petersen 1990:10). Other places, such as the monumental site of Nan Madol, have been associated by local historians with people from Asia, from neighbouring islands, from Egypt or simply abroad. It is this important aspect of Pohnpeian history which has been overlooked by archaeologists and anthropologists, that is, the easy acceptance that people and things come to the island and are assimilated into Pohnpeian culture. Nan Madol is particularly central to this, what I believe to be, regular occurrence of visits to Pohnpei by outsiders. Other material culture indicators support the notion that Pohnpei was part of a sea of islands with communities in regular contact over the last 1000 years or more.

INDICATORS OF INTER-ISLAND COMMUNICATION

Nan Madol is a settlement constructed in monumental proportions on 92 artificial islands upon the fringing reef. Construction of the islets started about 1500 BP and reached its architectural zenith about 800 BP (Ayres 1993). I suggest that one of the conscious consequences of building the structures at Nan Madol was to attract visitors from other islands. This would have brought Pohnpeians notoriety across the western Pacific sea world and the satisfaction that they would be the recipients of such things as knowledge, gifts, trade, and people without having to venture far beyond their own barrier reef.

At Nan Madol a break in the sea wall at the point where the fringing reef meets deep water may be regarded as the visitors' entrance. Other entrances into the complex were over the reef and probably only navigable by the local lagoon-orientated craft. This is the most likely form of Pohnpeian sea transport as there is no requirement to go beyond the lagoon to be able to circumnavigate most of the island. Thus, the entrance through the breakwater was

constructed purely for ocean-going craft and, indeed, constructed with visitors from other islands in mind. Immediately upon entering visitors would encounter some of the finest architecture Nan Madol had to offer, in the form of the mortuary islet of Nan Douwas, perhaps significantly a symbol of the ancestors. It is the case then, that on visiting Nan Madol non-Pohnpeians had no choice but to paddle through the gap in the breakwater, that is, they were directed to this dock, amongst the ancestors and the monumental architecture, on the very edge of the reef. At this time the Pacific voyager was unlikely to have encountered anything resembling the magnitude and style of architecture which confronted them at Nan Madol. The overawing impression can only be imagined. The visitors would leave with a great story to recount when they eventually arrived home.

It is around the period of the continued architectural embellishment of Nan Madol, from about 1000 BP onwards, that there is evidence from other material culture to suggest that inter-island contact was being conducted over large areas of the western Pacific. One example is the 'beaked adze', which has recently been discussed by John Craib (n.d.). The beaked adze is a common form in island Southeast Asia and Palau; it is less common elsewhere in Oceania, but has a wide distribution which Craib equates with inter-island contact and argues convincingly is a prestige object given the contexts of its archaeological and ethnographic recovery.

The distribution of this adze type from Indonesia, Near Oceania and across the Carolines to the Marshalls, Kiribati and further a-sea indicate widespread contacts. Beaked adzes are reported from Pohnpei, but they are in poor association with dated contexts. However, from contexts of beaked adzes elsewhere, Craib suggests a date of between 550 and 750 BP for their currency. Whether the adzes themselves were actually imported into each island or only the style was introduced cannot be known, as shell is not currently amenable to sourcing.

Another portable artefact may be interpreted similarly. The adze manufactured from *Terebra* shell appears to be temporally distinct and is only found in Carolinian sites after about 1000 BP (Ayres 1993:13). Craib (1977) notes that the *Terebra* adze has a wide distribution across Oceania, including Vanuatu and the Marquesas.

That particular styles of adzes can be observed to be distinct, and their temporal and spatial distribution traced over wide areas, does suggest that this item (or specific types of it) may have been an important symbol (probably amongst others that have not survived) of inter-island communication. The importance of symbolising the practice of inter-island communication through material culture may have been to draw upon the aspects of power which are likely to have been gained from knowledge of, and contact

with, members of other island societies. Although perception of the seascape may have meant that the sea held few fears for those who sailed, there can be no doubt that lives were lost in expeditions on the water. The ability to survive and return from voyages with their associated stories can only have acted to enhance an individual's or community's cultural capital. That they should reinforce this through a physical manifestation, such as a type of adze, is then not surprising, and there is evidence of other forms of conspicuous display at this time.

On Kosrae, a high island 550 km to the east of Pohnpei, an enclosure located next to the Sipi River is bordered on three sides by wall and the fourth by the river. The height of the wall varies between 0.45 and 1.3 m and the width is on average 70 cm. Interestingly, the north corner is constructed in header and stretcher style using columnar basalt so common on Pohnpei. Archaeological investigation led to the excavation of three test pits at this site, and the excavators argue that the stratigraphic relationship observed allows the single date of 980 ± 80 BP [980-740 BP] from charcoal in an earth oven, to date all the enclosure features (Cordy *et al.* 1985). The style of architecture used in the enclosure construction is the only example in the region, outside of Pohnpei, at this time. That it was recognised as such can perhaps be gleaned from its position. The enclosure is located on a river terrace backed by a steep hill and the only path up the valley has to pass next to the enclosure. Any person making their way to the enclosure or further up the valley would by necessity encounter this unusual architectural phenomenon first. What they are faced with is tantamount to a 'ship's log' in that it records at least one instance of a direct encounter involving a Pohnpeian and Kosraean at this time.

There are further indications that the seascape was a highway of communication during the second millennium AD. Linguistics has a useful role to play in understanding aspects of this communication in the most recent period. Geoff Irwin (1992:130) reminds us that "the patterns of language reflect late prehistoric contact spheres more than anything else." Jeff Marck (1986) took as a starting point the notion developed from recent studies of Carolinian navigation that traditional seacraft can, on average, travel 100 miles (160km) overnight. He found by drawing circles with a radius of this distance around inhabited islands in the region that the resulting pattern correlated extremely well with groups of people sharing mutually intelligible languages. This, I suggest, reveals the spheres of regular interaction for island communities in the last 1,000 years or so. However, that people could and did travel beyond these zones is shown by the *sawei* system which, until the late nineteenth century, saw people regularly making round trips

from the atolls immediately west of Chuuk Lagoon to Yap, an atoll-hopping return distance of over 2150 km (e.g., Alkire 1977:5; Ushijima 1982). The antiquity of this system is unknown, but possible archaeological correlates in the form of Yapese pottery have been identified from excavations at Ulithi (Craib 1980, 1981), Fais (Intoh 1996) and Lamotrek (Fujimura and Alkire 1984). Further evidence of these contacts beyond the local spheres of interaction is seen in the western Carolines by the transport of *rai* ('stone money') from Palau to Yap, and historical evidence, interpreted by Glynn Barratt (1988) as alluding to infrequent trips by the Carolinians to the Marianas where they would have gained direct experience, after 1565, of the Spanish.

But evidence of contact is not only to the north. Meredith Wilson, who works mostly in Vanuatu, immediately noticed that the enveloped crosses we recorded at the Pohnpei petroglyph site have strong correlates throughout island Melanesia where dates for these motifs of between 2000 and 1100 BP have been proposed (Spriggs 1997:183). Links with the south then are also suggested and further supported by an obsidian blade from Nan Madol which is sourced to Manus (Ayres and Mauricio 1987) and the introduction of kava in Pohnpei and Kosrae (Spriggs 1997:191).

It is clear that at the time the Spaniards arrived in the region, there were areas of intense inter-island communication and trips further a-sea. This contact and communication would ensure the dissemination of at least fragments of knowledge or myth amongst the Carolinians regarding the Spanish and their activities in the Marianas. However, the impact of the seaways criss-crossing the Pacific seascape, as they had for hundreds of years, goes beyond communicating knowledge. I suggest that Carolinian contact with the Marianas also allowed for the spread of infections and disease across a wide area of the western Pacific from the sixteenth century onwards. That is, Pohnpeian people and society, and other island societies, were being seriously affected by the European presence in the Pacific without, in the majority of cases, ever actually having any direct contact with a European.

IMPACT OF THE EUROPEANS ON POHNPEI

The first impact of European presence was a remote one, in that it did not involve direct contact, but may have been as devastating as the later recorded incidences of direct contact. This created an early pre-European contact rupture in community history. It is interesting to note here, that although direct contact between Pohnpei and Euro-Americans did not start until the 1830s, the trader Andrew Cheyne noted in the 1840s "that Pohnpeians had developed

an effective herbal cure for venereal disease" (Hanlon 1988:85). The development of such a cure may have been in process since the sixteenth century. Although, if this indicates that the island population had stabilised from the earlier introduction of foreign disease, it was still not prepared for the consequences of direct contact.

In the Pacific region, osteological research (e.g., Owsley *et al.* 1994; Pietruszewsky and Douglas 1994) and demographic studies (e.g., Gorenflo and Levin 1994) have shown the devastating effects on indigenous populations following direct encounters with Europeans. Studies of demography in the eastern Carolines provide a clue to these changes. Gorenflo (1993) provides an overview of demographic change on Kosrae since the first recorded European visitors to the island. He finds that a best estimate of population at the initial encounter with Europeans in the early nineteenth century is somewhere between 2000 and 6000 persons. By the late nineteenth century, only some 50 years after the first recorded encounters between Europeans and the local inhabitants, the indigenous population had dropped to a low of 200 to 300 people. There were even concerns about the possibility of Kosraean extinction. Based on historical sources Gorenflo (1993:71, references removed) reports that "[t]he culprits were several: influenza and respiratory diseases ... were the major causes of death during these years; gonorrhoea, in turn, probably caused much sterility in women."

Although resistance to ailments such as influenza may have built up in the Pohnpei community, nothing could stop the smallpox epidemic, which is thought to account for a 60% drop in the island's population in the middle of the nineteenth century (Fischer and Fischer 1957:20; Hanlon 1981:23).

It must be assumed that this pestilence, on top of the first less direct one, created an immense rupture in the historical consciousness of the community. On each of the islands it is likely that the most vulnerable, the young and the elderly, would be the first to die. The loss of this age group represents the disappearance in each community of the holders of traditional knowledge and the ability to communicate it across generations. By the time the communities had strengthened to levels where the normal distribution of generations existed, the entire world had changed; they were now being taught a new language and a knowledge dictated by a colonial power.

The simple chronology of events on Pohnpei reflected here may be illustrated like this:

c. 1,000 BP	Long distance sailing recognised throughout region
1521	Magellan arrives in Guam
1528	First recorded sighting of Pohnpei
1565	Regular Spanish galleon visits to Guam begin
- rupture -	
1787	Second recorded sighting of Pohnpei
1830s	Euro-American visits and beachcombers
- rupture -	
1870s	"Ethnographic present" begins (?), 'scientific' attempts to record Pohnpeian culture start

CONCLUDING REMARKS

The late nineteenth century and early twentieth century ethnographies, which rely on local information, are recorded after two major ruptures in the community. Their use in providing a detailed picture of the pre-colonial past is at best ambiguous and at worst simply wrong. Although the contemporary understanding of multiple knowledges on Pohnpei is likely to be political as Petersen (1982) found, the multiple explanations of a site such as the petroglyph site may indeed result from two major ruptures in community historical consciousness; this as a result of the Pohnpeians traditional willingness, a theme maintained in oral histories, to accept visitors from overseas, whether they be islander, Spaniard, or Indian.

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REFERENCES

Alkire, W.H. 1977. *An Introduction to the Peoples and Cultures of Micronesia*. 2nd ed. Menlo Park, California: Cummings.
 Ayres, W.S. 1993. Nan Madol archaeological fieldwork: final report. MS on file, Historic Preservation Office, Pohnpei State, Federated States of Micronesia.

Ayres, W.S. and R. Mauricio. 1987. Stone adzes from Pohnpei, Micronesia. *Archaeology in Oceania* 22:27-31.
 Ballard, C. 1992. Painted rock art sites in western Melanesia: locational evidence for an 'Austronesian' tradition. In J. MacDonald and I. Haskovec (eds.), *State of the Art*, pp. 94-106. *Occasional AURA Publications* 6.
 Barratt, G. 1988. Carolinean contacts with the Marianas: the European record. Saipan: Historic Preservation Office, *Micronesian Archaeological Survey Report* 25.
 Christian, F.W. 1899. *The Caroline Islands*. London: Methuen.
 Cordy, R., J. Bath, K. Shun and J.S. Athens. 1985. Archaeological data recovery in central Utwa, Kosrae Circumferential Road. MS on file, Library of Congress, Palikir, Pohnpei, Federated States of Micronesia.
 Craib, J.L. 1977. A Typological Investigation of Western Micronesian Adzes. MA dissertation, California State University, Long Beach.
 Craib, J.L. 1980. Archaeological Survey of Ulithi Atoll, Western Caroline Islands. Guam: *Pacific Studies Institute Monograph Series* 1.
 Craib, J.L. 1981. Settlement on Ulithi Atoll, Western Caroline Islands. *Asian Perspectives* 24:47-55.
 Craib, J.L. n.d. The beaked adze in Oceania: implications for late prehistoric contacts within the western Pacific. MS in possession of author.
 Fischer, J.L. and A.M. Fischer. 1957. *The Eastern Carolines*. New Haven: HRAF.
 Fujimura, K. and W.R. Alkire. 1984. Archaeological excavations on Faraulep, Woleai, and Lamotrek. In Y. Sinoto (ed.), *Caroline Islands Archaeology: Investigations on Fefan, Faraulep, Woleai and Lamotrek*, pp.65-149. Honolulu: Bernice P. Bishop Museum, *Pacific Anthropological Records* 35.
 Gorenflo, L.J. 1993. Demographic changes in Kosrae State, Federated States of Micronesia. *Pacific Studies* 16:67-118.
 Gorenflo, L.J. and M.J. Levin. 1994. The evolution of regional demography in the Marshall Islands. *Pacific Studies* 17:93-158.
 Hambruch, P. 1936. *Ponape (Vol. III): The Ruins. Visit to Ponape by the Sudsee Expedition 1908-1910*. Hamburg: Friederichsen.
 Hanlon, D. 1981. From Mesenieng to Kolonia. Saipan: Historic Preservation Office, *Micronesian Archaeological Survey Report* 5.
 Hanlon, D. 1988. *Upon a Stone Altar: a History of the Island of Pohnpei to 1890*. Honolulu: University of Hawaii Press.
 Intoh, M. 1996. Multi-regional contacts of prehistoric Fais islanders in Micronesia. *BIPPA* 15:111-7.
 Irwin, G. 1992. *The Prehistoric Exploration and Colonisation of the Pacific*. Cambridge: Cambridge University Press.
 Marck, J.C. 1986. Micronesian dialects and the overnight voyage. *Journal of the Polynesian Society* 95:253-8.
 Owsley, D.W., G.W. Gill and S.D. Owsley. 1994. Biological effects of European contact on Easter Island. In C.S. Larsen and G.R.

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- Milner (eds), *In the Wake of Contact: Biological Responses to Conquest*, pp. 161-77. New York: Wiley-Lis.
- Petersen, G. 1982. *One Man Cannot Rule a Thousand: Fission in a Ponapean chiefdom*. Michigan: University of Michigan Press.
- Petersen, G. 1990. Lost in the Weeds: Theme and Variation in Pohnpei Political Mythology. Honolulu: University of Hawaii Press, *Center for Pacific Studies Occasional Paper 35*.
- Pietrusewsky, M. and M.T. Douglas 1994. An osteological assessment of health and disease in precontact and historic (1778) Hawai'i. In C.S. Larsen and G.R. Milner (eds), *In the Wake of Contact: biological responses to conquest*, pp. 179-96. New York: Wiley-Liss.
- Rainbird, P. 1994. Prehistory in the northwest tropical Pacific: the Caroline, Mariana, and Marshall Islands. *Journal of World Prehistory* 8:293-349.
- Rainbird, P. 2001. Marking the body, marking the land - body as history, land as history: tattooing and engraving in Oceania. In Y. Hamilakis, M. Pluciennik and S. Tarlow (eds), *Thinking Through the Body: Archaeologies of Corporeality*, pp.233-47. New York: Plenum/Kluwer Academic.
- Rainbird, P. 2002. Making sense of petroglyphs: the sound of rock-art. In B. David and M. Wilson (eds), *Inscribed Landscapes: Marking and making place*, pp. 93-103. Honolulu: University of Hawaii Press.
- Rainbird, P. and M. Wilson 1999. *Pohnpaid Petroglyphs, Pohnpei*. Unpublished report prepared for the Federated States of Micronesia Office of Historic Preservation and Archives and the Pohnpei State Historic Preservation Office.
- Specht, J. R. 1979. Rock art in the Western Pacific. In S.M. Mead (ed.), *Exploring the Visual Art of Oceania*, pp. 58-82. Honolulu: University of Hawaii Press.
- Spriggs, M. 1997. *The Island Melanesians*. Oxford: Blackwell.
- Ueki, T. and M.T. Nena. 1983. Rediscovering Ponapean petroglyphs. *Journal of the Polynesian Society* 92:537-9.
- Ushijima, I. 1982. The control of reefs and lagoons: some aspects of the political structure on Ulithi Atoll. In M. Aoyagi (ed.), *Islanders and their Outside World*, pp. 35-77. Tokyo: St. Paul's (Rikkyo) University.
- Wilson, M. 1998. Pacific rock-art and cultural genesis: a multivariate exploration. In C. Chippindale and P.S.C. Taçon (eds), *The Archaeology of Rock Art*, pp. 163-84. Cambridge: Cambridge University Press.