The islands of Palau in western Micronesia have a rich artistic heritage of weaving, woodworking, performing arts, pottery production, oral narratives, stone statuary, and costume and body art. Extant iconography is found in the form of pictographs on limestone cliffs, tattoos, and in elaborate designs incised and painted on community structures. The significance of traditional designs and motifs to those who made them is notoriously difficult to reconstruct. The recent discovery of a petroglyph site in the interior of Babeldaob provides the opportunity to draw on oral history, archaeology and iconography to speculate on the meaning and age of the images.

The Palauan archipelago comprises some 350 islands spread along a 150km long, north to southwest trending arc in the western Caroline Islands of Micronesia (Fig. 1). The volcanic island of Babeldaob at roughly 45km long and from 0.5 to 13km wide accounts for nearly three-quarters (333km²) of Palau’s land mass. The archipelago’s remaining landforms are three primarily volcanic islands, two atolls, two platform-like reef islands, and a cluster of several hundred tectonically uplifted, coralline limestone islands often referred to as the Rock Islands. Some 500km southwest of the main group are the Southwest Islands—an isolated cluster of low limestone islands and atolls.

Palau was probably colonised by Austronesian horticulturists between 2500 and 1250 B.C. (Athens and Ward 2001, 2005; Clark 2005; Clark, Anderson and Wright 2006; Fitzpatrick 2003). Little is known about colonisation and early settlement, as tectonic subsidence, a fluctuating sea level and erosional deposits have destroyed or heavily altered most paleoshoreline archaeological sites (Dickinson and Athens 2007). The population soon expanded into Babeldaob’s interior for swidden cultivation and habitation (Masse et al. 2006). The ensuing Earthwork Era (c. 450 BC to AD 850) is archaeologically characterised by extensive clusters of inland earth architecture that supported the majority of community activities and defined sociopolitical districts (Liston 2007, 2009; Liston and Tuggle 1998, 2006). There was likely a reliance on mixed arboriculture and dryland crops though, where viable, wetland cultivation of the coastal margin continued from earlier centuries.
Figure 1. The Palau archipelago and its location in western Micronesia.
Monumental architecture in the form of massive earth structures and large expanses of modified terrain emerged between c. 50 BC and AD 250, several centuries before monumental architecture appeared in most other Pacific island societies. Limestone caves served as burial grounds, and the Rock Islands and the adjacent islands of Angaur and Peleliu functioned as bases for short-term resource procurement before being permanently occupied (Clark 2005, Fitzpatrick 2003, Masse 1989, Wright 2005).

After a period of little documented cultural activity during the Transitional Era (c. AD 850 to 1250), the population returned to coastal settlements identified by massive and elaborate stone architecture and a subsistence economy relying on pondfield cultivation (Masse et al. 2006). The shift back to a coastal settlement pattern that marks the Stonework Era (c. AD 1250 to 1800) is attributed to inland soil degradation and the expansion of the coastal flats, freshwater wetlands and mangrove forests because of coastal sedimentation precipitated by a millennium of earthwork construction (Athens and Ward 2005, Liston 2009). The coastal margin had become suitable for wetland cultivation and provided defensive barricades and ample space for settlement. Stonework villages were also established on the Rock Islands. Where earthworks once symbolically defined polity status, stone structures, including burial and foundation platforms, paths, religious shrines, boat docks and forts, now functioned as markers of clan and village prestige and rank (Liston and Tuggle 2006).

OBAKELDERAOL PETROGLYPHS

Palau’s first certain petroglyph site was identified during recent cultural resource management investigations in conjunction with Compact Road construction on Babeldaob (Rieth and Liston in prep.). Four petroglyphs are pecked into a c. 90cm in diameter panel on the north face of a 1.3m in diameter basalt boulder (Fig. 2). The stone is located at the base of the Obakelderaol (Olbakeldrau, Obakelderau) earthwork complex in the interior of Ngaraard state.

One figure is a solitary equilateral triangle while three figures are inverted triangles with a cupule in their base. Attached to the basal vertices of the latter triangles is a horizontal line with two sets of progressively shorter lines extending perpendicular from either end. The motifs measure from 15 to 25cm wide and 20 to 28cm long. The shapes appear anthropomorphic with triangular torsos resting on flexed legs and small feet; they lack heads and arms. The cupule could symbolise a navel, female genitals, a fetus or an unattached head, among other possibilities. The single triangle might be the torso of an unfinished figure.
A boulder marking the burial of the legendary Surech has long been in the corpus of local historical narratives, although its exact location on or around Obakelderaol in Ngaraard’s unoccupied interior had been forgotten. The stone was said to be “shaped like her genitals”. Andrew Shiro, a resident of Ngaraard and Acting Chairman of the Palau Historical and Cultural Advisory Board, identified the pecked boulder as one of Surech’s grave stones based on its association with the hill, relative location in Ngaraard and iconography.

The story of Surech and Tullei is one of Palau’s most famous oral histories (Miko, Holyoak and Gibbons 2000: 38-40). As told by Andrew Shiro:

Surech was the most beautiful woman in the area and she and Tullei were lovers. When the high chief of Ngebuked [also the high chief of Ngaraard] told Tullei he wanted to see Surech, Tullei became afraid that the high chief would take Surech for his wife after seeing her great beauty. To prevent this, he decided to only present Surech’s head to the chief. Tullei and Surech sat at the south end of Obakelderaol and Surech sang as she wove a basket to fit around her head. After it was finished, Tullei cut off her head, put it in the basket, and brought it to the high chief. The head was buried in the high chief’s [stone] platform in Ngebuked and the body at Obakelderaol.

A small pile of stones on Ngebuked’s central stone platform still marks the location of Surech’s buried head.
**Obakelderaol Earthworks**

Obakelderaol is a sculpted, narrow hill about 2km inland from either coastline in the centre of Ngaraard’s extensive earthwork district. The petroglyph stone rests at the hill’s north base. Obakelderaol roughly translates into “a place for mending fishnets”. It is said to have acquired this name because the west coast fishermen repaired their nets on the hilltop while watching below for the east coast tide to descend (Miko 2008: 87).

At 140m above sea level, the south end of the forested hill affords a view over Ngerkall Lake, the hills forming Babeldaob island’s neck, the east and west lagoons and Nguitel—one of Palau’s largest earthwork complexes. The 110m wide, artificially flattened hilltop narrows as it gently slopes to the north some 300m to end in a level area about 25m in diameter (Fig. 3). A low earth berm forms two walls of the level area while it is bounded on the north by a steeply descending hill-slope and on the west by a gently sloping step-terrace. The petroglyph boulder rests on the base of this step-terrace facing the flat terrain as if on a low podium overlooking a stage. The moderately steep east and west hillsides are intermittently modified into step-terraces.

The top of Obakelderaol is shaped into eight step-terraces, a bermed platform terrace and a “crown” or levelled, free-standing highest point. Seven partially infilled ditches, currently c. 3m wide and 1 to 4m deep, dissect the width of the hilltop creating major breaks in the topography and separating the gradually ascending terraces. Two ditches are crossed by earth

![Figure 3. Obakelderaol earthworks with petroglyphs at north base.](image-url)
causeways. Frequently found in earthwork complexes, these causeways are likely later additions to the structure since the ditch’s defensive and/or drainage function is lost once the bridge is in place. The surface of the platform terrace is outlined and truncated by a low berm to form two enclosures. A ditch that may have surrounded the base of the two-tiered, 50m in diameter “crown” may be buried by erosion. The morphology, size and configuration of Obakelderaol’s structural components are similar to a number of other Palauan earthwork complexes.

Winding the length of Obakelderaol’s base is an earth trail whose north end empties into the level area fronting the petroglyphs. The trail is recorded on Japanese era maps as extending from the east to west coast, across Obakelderaol. An Ulimang village elder remembers a Japanese communication wire strung along Obakelderaol when he was a young boy, and porcelain insulators were located in the forest adjacent to the trail. Thus, the path likely extends out from either side of the site complex.

Obakelderaol is surrounded by earthwork complexes. No stone paths, pavings or other stone architecture were located on the hill, and the closest known stonework is a resting platform (iliud) by Ngerkall Lake below. The nearest identified settlement is the Stonework Era coastal village of Ngerchebttang about a kilometre to the east.

**PALAUAN ICONOGRAPHY**

Style, defined theoretically, is chronologically sensitive (Cochrane 2001, Dunnell 1978); hence comparison of design elements has the potential to identify temporal frames of reference. Determination of a relative time frame for the rock art assists in speculations of about cultural significance. To interpret the motifs and correlated age of the Obakelderaol petroglyphs comparisons are made with Palau’s traditional iconography as found in pictographs, designs embellishing structures and tattoos.

Pictograph assemblages are found in difficult to access cliff faces on six Rock Islands (Gregory and Osborne 1979, Hijikata 1993, McKnight 1964, Schmidt 1974). Oral tradition attributes creation of the pictographs to the demi-god Orachl who, as the patron deity of carpentry, built the first men’s meeting house (bai). The term ursel Orachl (Orachl’s drawings) refers to both the pictographs and the drawings on the gables of the bai. The pictographs do not play a part in any other narratives, and although some of the motifs remind Palauans of various mythical figures they are not evident enough to have been adopted into local legend (McKnight 1964). The key components of the wide range of images are geometric shapes, such as nucleated circles and four-pointed stars, and curvilinear designs (Figure 4). Also present are hand
and fingerprints, a few watercraft and 14 highly stylised anthropomorphic figures. These latter figures display heads and appendages and have filled in rectangular or stick-figure torsos.

McKnight (1964: 28) and Gregory and Osborne (1979: 314-15) all suggest that Palau’s pictographs exhibit some artistic parallels with eastern Melanesian rock art. Based on individual components, organisation and overall design, Schmidt (1974) found Palau’s motifs most analogous to the style found in eastern Indonesia. The stylistic relationship is so strong she suggests that the pictographs were created soon after the immigrants’ arrival from Indonesia before they were assimilated into local society and abandoned the artistic style of their native culture. However, Schmidt (1974: 75) cautions that some of Palau’s pictographs are unlike others in Oceania and that the common Palauan four-pointed star motif is not found in the Indonesian assemblage.

Palauan legends, historical events, daily activities, and objects or symbols significant to a community are incised then painted on the wooden beams and gables of the chiefly meeting hall (bai er a rubak) found in the centre of Stonework Era villages (Kubary 1895, Telmetang, Adelbai and Rehuher 1993) (Fig. 5). The bai’s visual narratives (logukl) provide village identity and are a primary tool in reinforcing traditional values and ensuring continuity as history is passed from generation to generation (Jernigan 1973, Parmentier and Kopnina-Geyer 1996). Although bai are a fundamental component of modern society, oral histories and the Stonework Era’s archaeological record, how far back bai and its picture stories extend into Palau’s cultural sequence.
Human figures in active pursuits are the most frequently occurring element in *bai* iconography. Other logukl motifs include realistic but stylised structures, fish, boats, plants and other objects common to daily life, symbolic depictions of gods, wealth and honour, and geometrically patterned borders (Jernigan 1973, Krämer 1929, Morgan 1988). Black areas on the human form represent tattoos and, as not all figures are tattooed, Dark (1987:32) suggests their presence identifies high status individuals. Males are portrayed with a penis, a loin cloth and, possibly, the darkened sides of the legs. Females are identified by breasts, a skirt and, occasionally, a darkened inverted triangle over the pubic bone. On the front gable of the chief’s *bai*, the genitalia of a life-size figure of a naked woman (Dilukai), her legs spread, is also represented by an inverted triangle. Dilukai symbolises fertility and village welfare, reflecting the function of women serving as female companions (*mengol*) in the *bai* to raise money for their clan (Feldman 1986: 40).

Tattooing (*dngod, melngod*) was widely practiced in Palau until the first decades of the 20th century (Dark 1987, Krämer 1926, Kubary 1887). Dense designs were formed from repetitive patterns of lines, crosses, stars and circles, with the occasional addition of sea serpents, starfish and other creatures. Tattoos were generally applied to the wrists, shoulders and legs of men and to the limbs, lower stomach, *mons Veneris*, genital area and buttocks of women. Integral to Palauan aesthetic expression, tattoos held erotic significance, identified rank in the highly structured hierarchical system and expressed wealth (Dark 1987: 45). In theory, women could not be married or provide for the community by serving as a *mengol* until their *mons Veneris* was tattooed in a V-shape (Krämer 1926:34, Parmentier and Kopnina-Geyer 1996:80).
DISCUSSION

The petroglyphs’ location on an interior earthwork complex that is not spatially associated with a Stonework Era village suggests a temporal affiliation with the Earthwork Era. Obakelderaol’s terraces are not radiometrically dated. However, paleoenvironmental data (Athens and Stevenson, in prep.) and a corpus of archaeological radiocarbon assays attest to intensive occupation of the Ngaraard earthwork district from about 250 B.C. to A.D. 450, and then its power diminishing for the next several centuries (Liston 2009). Iconography potentially dating to the first half of Palau’s cultural chronology is found in Babeldaob’s carved stone faces (see Van Tilburg 1991) and the pictographs.

The lack of oral traditions relating to Palau’s pictographs and their compelling resemblance to eastern Indonesia’s artistic style suggests they were painted potentially very early in the culture sequence. However, there is no apparent iconographic correlation or stylistic affinity between the pecked and painted rock art. Among other differences, in the Rock Island iconography triangles are not a design element and human figures possess all of their appendages. Moreover, the Rock Island artwork bears little resemblance with the logukl (McKnight 1964), an art form which, although possibly extending far back into Palau’s past, is securely associated with the centuries before Western contact. Whereas the bai paintings are naturalistic with their key element dynamic human forms, the pictograph motifs are highly geometric and abstract with comparatively few, generally static, anthropomorphic shapes.

In contrast to their spatial context, the petroglyphs’ connection with the Surech and Tullei narrative intimates their creation during the Stonework Era. The story of Surech and Tullei is not depicted in the substantial sample of logukl drawn in the early 1900s (Krämer 1929). However, in common with the petroglyph’s images are the inverted triangles on the genitalia of the Dilukai sculpture and some of the bai’s human figures. The motif appears to be directly related to the V-shaped tattoo applied to the mons Veneris and genital area of Palauan women that indicated status, enhanced beauty and heightened male erotic desire. The similarities between the artistic depiction of a women’s pubic area with an inverted triangle in the logukl and the motif’s equation with high ranking, desirable females implies that the petroglyph’s iconography represents a highly regarded and desirable woman. As were many Palauan women, Surech was likely tattooed and her exceptional beauty, of such renown that Ngaraard’s high chief sought her, probably ensured that her genital region bore elaborate and extensive designs. Hence, Surech could be
symbolically represented by the same inverted triangle as that found on the logukl. This line of reasoning also accords with the oral history describing the stone marking Surech’s burial as “shaped like her genitals”.

In the Surech and Tullei narrative, Ngaraard’s capital village is Ngebuked, the state’s historically dominant settlement, and where the gravestone of Surech’s head is located. Oral history relates that Ngebuked ascended to power following an extended period of warfare with Ulimang, a village of the distant past that was established in the era of Chuab—the period before the current era of Milad. The Surech and Tullei story, and by extension the Obakelderaol petroglyphs, are therefore associated with the final centuries of the Stonework Era, after Ngebuked village had gained supremacy.

* * *

To infer the cultural significance of the newly documented Obakelderaol petroglyphs, the rock art was placed in its spatial and temporal context by examining associated site type, considering oral narratives and comparing the stylistic affinities of traditional Palauan iconography. The Obakelderaol motifs have no apparent relationship with the potentially early Rock Island pictographs but can be linked to the elaborate narratives painted on the chiefly meeting houses of the later Stonework Era. This link is found in the triangular design adopted from the likely long-standing tradition of tattoo. Identification of female status and wealth may have been transposed from body art to logukl and then petroglyphs via the inverted V-shaped tattoo design applied to the mons Veneris and female genitalia.

This reading of the petroglyph motifs as symbolising headless anthropomorphic figures and a highly regarded female, and the setting on an interior hill near the boundary of two traditional village areas is in agreement with the oral narratives and traditions accompanying the rock art.

Despite the petroglyphs’ iconic and symbolic or narrative relationship with the Stonework Era, there remains the possibility that the motifs were pecked into the rock long before the middle of the last millennium. As with other enduring artwork, the pictograph’s cultural significance or meaning could have evolved with society’s changing historical context. The decay of Palau’s ancient wooden carvings, weavings and paintings leaves few art forms to compare for stylistic affinities. As additional pictographs and petroglyphs are found the interpretations suggested here can be re-examined and refined.
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NOTES

1. A single faint figure was tentatively identified as a petroglyph in the li ra Ngebesek rockshelter on Babeldaob (Olsudong, Emesiochel and Kloulechad 1998).
2. Wooden bai are rarely constructed in contemporary Palau but from 1909 to 1910 Elisabeth Krämer drew about 300 of the extant logukl (see Krämer 1929). Visual representation of oral history as a form of aesthetic expression and a mnemonic device continues through the medium of carved mobile wooden planks (storyboards), and occasionally on the metal and concrete components of modern bai.
3. It is possible that Palau was dramatically depopulated before the scourge of disease that accompanied Western contact in the late 18th century.

REFERENCES


ABSTRACT

Obakelderaoal is the first certain petroglyph site recorded on Palau, Micronesia. This report provides a description of the rock art and its spatial context. A broad interpretation of its cultural significance and correlated age is provided through the examination of oral history, archaeology, and comparison with Palau’s extant traditional iconography. Oral narratives and iconic relationships link the rock art with the last centuries before Western contact. As oral history and artistic interpretation evolve with society, there remains the possibility that the petroglyphs were created long before and that they took on changing texts through the centuries.

Keywords: petroglyph, oral history, rock art, Palau, Micronesia