Oral tradition and archaeology

Palau's earth architecture

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Introduction

The islands of Palau in the Western Carolines of Micronesia have a rich body of myths, stories and legends that are woven into every aspect of daily life. These oral traditions educate, mediate, amuse, guide and resolve issues of protocol and proprietorship to define, bond and embody Palauan heritage. They promote a continuation of norms, ideas and values from past to present, enabling members of modern communities to identify with their ancestors. Integration of these traditional narratives into archaeological history has the potential to reveal the complexities inherent to Palau's cultural landscape to form a more comprehensive depiction of the past.

Oral traditions are an alternative data set for interpreting archaeological expressions of social organisation, distinguishing temporal relationships and associating a location, feature or artefact with historical or legendary figures (see Vansina 1985). They can provide a social context for material remains that is unobtainable in archaeological investigations by identifying symbolic, social and ideological values. As an independent source of evidence, traditional narratives can correct or challenge archaeological interpretations and provide an interpretive framework for developing models to be tested against the material-culture record.

As oral traditions are used to process and comprehend cultural practices and traditional history and construct identity and social order, they can orient archaeological studies to focus on issues relevant to local communities (David et al. 2004). The act of collecting oral traditions associated with material remains engages the public in building archaeological knowledge and brings local values into cultural heritage interpretation and site assessment (Tellei et al. 1998a:93; Cachola-Abad 2000).

Despite the contributions traditional narratives can make to a broader understanding of archaeological data, there are limitations to their use. Their poetic aspects and abbreviation of long-term processes into single explanatory events require judicious interpretation. As in other societies, Palau's oral traditions can be largely shaped by or a reflection of those segments and aspects of society that are considered significant and beneficial to the dominant group (Hobsbawm and Ranger 1983; Parmentier 1987; Olsudong 1995). Only a selected piece of the

whole may be relayed down through the generations and even this may be subject to vagaries in memory (see Rubin 1995). Considering the potential for subjectivity and issues about accuracy of memory, traditional narratives must be critically evaluated when used as a data source in archaeological investigations. Oral sources cannot be discounted as evidence in reconstructing the past as it is exactly the phenomena that is recalled when compared with the physical remains that can illuminate cultural transformations and significance.

Despite its encompassing realm, Palau's oral sources are conspicuously devoid of direct reference to the extensive clusters of earth architecture that dominate the topography of Babeldaob, the largest island in the archipelago (Figure 1). Although an association with intangible heritage does not ensure the protection of a cultural property, those sites that are not within the purview of the narratives or not considered to be anthropogenic remain largely external to Palauan cultural identity. Without ties to the living population, terrace sites are unlikely to be preserved for their informational value or preserved for future generations.

This paper explores the place of Palau's monumental earthworks in traditional narratives through an examination of the archaeological record in conjunction with ethnohistorical documents and oral-history collections. The aim is to ascertain the actual extent of their presence in the narratives and examine why such massive architectural complexes are largely excluded from Palau's traditional body of knowledge. We are not attempting to reconcile the oral historical and archaeological evidence to establish a single historical 'truth'.

Oral traditions and archaeology in Palau

In Palau's highly structured hierarchical society, access to information, particularly pertaining to social relations and their associated contexts, is culturally sanctioned. Even though an individual may know a story, if he or she is not from a specific location, clan or rank, he or she cannot claim aspects or segments of cultural knowledge. Furthermore, many histories are only transmitted to the legitimate heir to the information (Kesolei 1977; Nero 1987). As Tellei et al. (2005:14) explain:

Knowledge, especially of history or the social sciences, is both a source of power and a commodity. It is a bargaining chip in cultural negotiations, with rules that limit access.

Accurate information can only be collected from legitimate knowledgeable informants and is generally divulged only to specific individuals. In some cases, others may know the story but they are not entitled to transfer the information. Hence, the authenticity of the information has to be verified. Interviews must be carefully planned since the specific question asked asserts a strong influence on the answer and the character of the information provided. Despite this restriction of information, oral historians can still generate valid histories by following proper protocol through appropriate channels (Tellei et al. 2005:11–15). Regardless, much information is not disclosed and is eventually lost when no one with the authority to retain that history survives.

In Palau, archaeological use of narratives requires not only careful evaluation but also an awareness of the process of acquiring information so that it can be filtered appropriately. Before integrating oral historical data into archaeological interpretations, Tellei et al. (2005:15) state that the information 'must be interpreted in terms of who the informant is, the source of his or her knowledge, and the context of the interview itself (what was the specific question that was asked)'. In the complex layering of Palau's social structure, foreign archaeologists often do not have the tools needed to ascertain the legitimacy of a story.

Palau's traditional narratives have been used to augment the interpretation of material

Figure 1. Map of Palau in the Western Caroline Islands of Micronesia.

remains (Beardsley and Basilius 2002; Liston and Rieth 2010), to locate cultural properties and identify temporal sequences (Lucking and Parmentier 1990), to identify cultural beliefs and ideology in the archaeological record (Olsudong 2002), and to correlate idealised traditional social, organisational and developmental models with archaeological evidence (Butler 1986; Olsudong 1995; Wickler 2002). These somewhat successful collaborations emphasised the need for considerable caution when combining the separate lines of inquiry. Olsudong (2002:158), finding discordance in the two data sets, concluded that although traditional history is a significant source of information for archaeological research, multiple factors must be considered in merging the two methodologies.

In the past 15 years, Palau has made considerable progress in its approach to and method for melding the documentation and interpretation of its intangible and tangible resources. Palau adopted a slightly modified version of Section 106 of the US National Historic Preservation Act of 1966, as amended, as its regulatory framework for cultural resources. One alteration to Section 106 is the recognition of a fundamental connection between tangible and intangible cultural properties. In archaeological site evaluations, either cultural or natural properties, the latter displaying no anthropogenic constructions or modifications, can be assessed as significant if they are 'associated with lyrics, folklore and traditions in Palauan culture'. This addition of a fifth significance criteria compels merging oral historical and archaeological interpretations to assign site designations.

This comprehensive Historical and Cultural Preservation Act (Title 19 PNC 103) is administered within the Bureau of Arts and Culture (BAC), a part of the Ministry of Community and Cultural Affairs. BAC receives funding from the US National Park Service and operates much like a US state historic preservation office. Three of BAC's five sections are pertinent to material-cultural resources: Oral History and Ethnography, Survey and Inventory/Archaeology, and the Register of Historic Places. These sections work closely with the Society of Historians (*Klobak er a lbetel a Cherechar*) – representatives from each state who are recognised as being particularly knowledgeable about the traditions and narratives of their region. As a body, these groups are tasked with documenting, protecting and fostering Palau's intangible and tangible cultural properties including, but not limited to, oral histories, customary practices, music, skills in applied arts and archaeological sites. The BAC's Oral History and the Archaeology sections collaborate by conducting annual joint surveys of cultural properties and determining historic clearances needed to obtain earthmoving permits.

To augment the archaeological evaluation of traditional sites, Palau's cultural resource management (CRM) projects are required to gather oral history related to the proposed construction parcel.¹ Collected and written by a Palauan oral historian, the oral history records are an appendix to the CRM report. This documentation is not an afterthought to the main body of 'scientific' data, but is intentionally retained as a separate work so that traditional history is presented from a Palauan perspective. The information is then incorporated into the body of the report by the generally non-Palauan archaeologist. It is the responsibility of the oral historian to provide legitimate, pertinent and comprehensive narratives and traditional histories concerning the property. The archaeologist must critically evaluate the data from a scientific perspective, provide coherence and integrate culture and the site, feature or artefact (Smith 1997:37). In conjunction with large-scale development projects, such as construction of the US funded Compact Road circling Babeldaob, a substantial amount of oral history has been collected in the past 15 years.

Palauan cosmology and time

Palau's origin myths pivot around political, demographic, economic and cultural transformations (Umetaro 1974; Aoyagi 1982; Nero 1987; Parmentier 1987). In Palauan cosmology, Latmikaik, a giant clam, arises from the sea to give birth to half-fish and half-human creatures that populate the islands. The first political institution is created on Angaur to control community affairs that were becoming too 'ferce and wicked' (Umetaro 1974:13). The chiefly councils (*klobak*) and appointed titleholders spread to eight villages on Peleliu, Oreor and Babeldaob.² These villages of the demi-god Chuab, one of Latmikaik's children, form a peaceful political federation. But the federation dissolves over an affront to the dignity and respect of Chuab's ranked hierarchy resulting from the removal of the gatekeeper to heaven's eye (Umetaro 1974:38–40). Other

versions of the story refer to this defiance of the proper code of conduct by the violation of a food distribution convention (Parmentier 1981:245).

The lawlessness and improper behaviour dismays and angers the high god, Uchelianged. He sends messenger gods (Ruchel) to impose new laws, although they also fail to establish a stable political structure. The goddess Dirrauchulabkau befriends the Ruchel by preparing a dish of taro stuffed with fish. In frustration at the chaos that reigns throughout Palau, Uchelianged destroys the inhabitants of the lower world with a great flood to begin a new era of political stability. Dirrauchulabkau is reborn as the goddess Milad and gives birth to four children (Ngaremlengui, Melekeok, Aimeliik and Oreor) who represent four ranked political districts. This institutes a new political, social and ideological order that is still in effect today.

The cosmology above is conveyed with a Western sense of history, as a sequence of events with a logical progression. This use of a Western-style text to present Palau's oral histories freezes their structures without recognising that they are constructs in a constant state of flux (Tellei 1998a). Palauan society conceptualises time as a dynamic process, with the past, present and future being interrelated perspectives that feed off one another (Nero 1987:32–44). Nero (1987:36) describes Palauan history as:

... sets of relationships among corporate groups which form the basis of the present order. Their time is past and future at the same time, and actions of the individual titleholder are understood as representations of the collective title in which is embodied all past, present, and future titleholders.

As elements in a dynamic process establishing and legitimising relationships, the flexibility intrinsic to Palau's historical narratives prohibits their insertion into a Western linear chronology (Nero 1987; Tellei et al. 2005). Nero (1987:38) notes that when recounting histories, 'eras' are used as linguistic markers to frame the story; but these must be understood as 'duration, continued existence, and the nature of this existence', not as forming a chronological sequence. For example, *Er a Ititiumd* refers to 'the Mossy Past' or 'Time of the Gods' – an era outside of the foundation of time, and hence not clearly seen or understood. *Er a Rechuodel* is 'the Olden Times' and embodies the traditional ways of the ancestors before the changes brought about by Western contact or World War II. In a general sense, as Palau's cosmology is in 'the Mossy Past', specific events related to the demi-gods and associated archaeological remains cannot be assigned to fixed points in time. As Nero (1987:73) states, in Palau the critical dimension is not time but sedimentation – 'those markers left by the gods and the relationships they established which have remained from the past to form the basis of the present'.

Earthworks in archaeological and traditional history

Morphologically diverse and visually impressive earth architecture covers at least 20% of Babeldaob's volcanic landscape (Liston 2007a, 2009, 2010a) (Figure 2).³ Earth structures are generally found in up to 27 km² clusters of modified terrain extending from the coastal lowlands to the central ridgeline. Earthworks are often massive in scale, with step-terraces and ditches descending up to 6 m and steep-sided and flat-topped hills called 'crowns' rising as much as 10 m (Figure 3).

Evolving in form, size and power, extensive clusters of earth architecture supported the majority of community activities and defined sociopolitical districts for more than 1200 years of Palau's history (Liston and Tuggle 1998, 2006; Liston 2007a, 2009). Archaeological evidence shows individual earthwork components supported burial grounds, habitation sites and, probably, cultivated fields; were used for water management, paths and other community infrastructure; had defensive elements; and played ceremonial and ritual roles. However, the distributional

Figure 2. Aerial photo of Ngermelkii crown complex in the Ngatpang Earthwork District (V1-VAP-61-USN-28-111—2 June 1969).

patterning, size and morphology of the complexes indicate that, although serving these practical uses, the earthworks as a whole were symbolic in nature. They primarily functioned as symbols to display individual chiefly or polity power, to legitimise corporate claims of land and other resources, and to create defensible terrain (Liston and Tuggle 1998, 2006; Liston 2007a). By functioning as land and resource markers, they delineated space to define polities.

Earth structures were built throughout most of Palau's cultural sequence (Liston 2009, 2010a). Construction probably began soon after colonisation because of the limited coastal margin bounded by a steeply sloped bench. The majority of earthworks were formed during the development, zenith and fall of the earthwork polities during the Earthwork Era (ca. 2400–1200 cal. BP).⁴ At this time, there was probably a reliance on agroforestry and dryland crops and a largely interior-based settlement pattern, although where viable, the shoreline and Rock Islands remained integral to resource procurement and habitation. Individual earth structures and the extent of modified terrain reached monumental proportions between ca. 2000 and 1700 cal. BP, several centuries before monumental architecture appeared in other Pacific Island societies.

There was a dramatic decline in earthwork district use and a period of little cultural activity throughout the archipelago during the Transitional Era (ca. 1200–700 cal. BP). In the Stonework Era (ca. 700–150 cal. BP), the population relocated to coastal and Rock Island settlements identified by large and elaborate stone architecture and a subsistence economy based on pondfield cultivation (Wickler 2005; Masse et al. 2006). Earthwork construction may have been mostly confined to near-coastal, low step-terraces that functioned as structural foundations

Figure 3. Roisingang crown complex in the Ngaraard Earthwork District.

for stonework village features and associated dryland cultivation. Where earthworks once symbolically defined polity status, stone structures, including burial and foundation platforms, paths, docks and forts, now functioned as markers of clan and village prestige and rank (Liston and Tuggle 2006).

Despite their size and scale, earthworks are reported to be largely absent from Palau's traditional narratives. A few stories recount a mystical time where terraces are depicted as steps linking the gods to heaven and earth. Ethnohistoric accounts describe an unoccupied interior whose desolate terraced hills were said to have been either formed by receding floodwaters or built by an earlier population, unrelated to the island's current inhabitants.

A review of the relationship between Palau's terraced landscape and traditional history was called for due to the recent realisation of the actual extent of modified terrain. Additional interviews were conducted that asked specifically about earthworks. The ethnohistorical records and recent oral history collections were reviewed to identify places now known to be sculpted hills. The purpose of the inquiry was not to validate either traditional or archaeological history. Rather, the aims were to 1) verify past claims that earthworks are not in Palau's traditional narratives by taking into account newly acquired data, and 2) attempt to understand why such huge and extensive anthropogenic constructs do not play a role in such a rich corpus of oral traditions.

Oral history interviews

Miko conducted interviews that focused on Babeldaob's interior earthwork landscape with 10 elders from Ngaremlengui state.⁵ Imiungs (Ngaremlengui's ancient name) is the eldest of Milad's four children and the state contains what is probably Palau's largest earthwork district. It was expected that the current interviews would mimic the ethnohistoric sources and previously collected oral histories by producing limited information on terraces. Surprisingly, seven of the 10 informants recalled that in their youth they were taught by their elders that terraces were built by humans for ritual, ceremonial and sacred purposes. The remaining three elders said the terraces were natural – not built by anyone, and had no additional information.

The Ngaremlengui elders relate that stories of the interior terraces were passed on through elders from generation to generation. They were told terraces were sacred and *mekull* (places not to go) because of their association with the ancient world. Hence, they possess power and must be revered. In the archaic world, before the flood of Milad, gods and goddesses travelled freely

between the upper and the lower worlds. Within this context, the elders said that terraces are the remnants of ancient villages, altars and sentry posts.

Villages were built on stair-shaped hills to allow the gods and goddesses to easily travel between the upper and lower worlds. The access was needed for the deities to be able to stay in contact with one another. The elders said there are many oral histories of stairways to the upper world and remnants of these stairs are seen in the terraces and the piles of large stones on high peaks and savannas. Oral histories also tell of gods, such as Orachel, coming down to the lower world by descending from high peaks.

Altars were built on top of modified hills as humans attempted to be closer to the gods of the upper world. The story of Chuab describes how the inhabitants of the lower world elevated the ground with soil from the chief god to make a ladder to the upper world. Without this soil, the humans would not have been able to reach and hence feed the giant Chuab. The inhabitants of the lower world were always looking for ways to gap the two worlds.

It was also believed that great things would come to those who built their villages in elevated areas, closer to the upper world, the world of gods and goddesses. This upper world was rich in knowledge, skills and money. This, as the elders related, was one of the many reasons that villages were built on terraces.

It is said that when the flood of Milad came, the lower world was destroyed. After the water receded, debris and sedimentation covered the villages on the interior earthworks, suffocating and killing all life forms. This is why the archaic villages on the terraces are deeply buried in soil. Soon no one remembered how to build the old settlements and eventually their existence was forgotten.

After the flood, the demi-gods were saddened about the destruction of the lower world and therefore came down to give new life. This was the beginning of the Era of Milad. Again, people felt the need to be close to the gods who gave them new life, and the new settlements were built on the high places. Gods and goddesses continued to live among men, teaching and instructing them about the skills and knowledge lost during the flood. Among the many important aspects of life that were taught by the gods were the roles and responsibilities of the chiefs, how to tend taro patches, arts and crafts, the skills for building the *bai* (chiefly and community meeting house), and natural childbirth.

As time passed, people began to depend on the gods less and less. The gods who lived among them realised they were no longer needed and started to return to the upper world. As their spirits rose, the earthly bodies they left behind turned into stone. The many stone faces (*klidm*) scattered throughout Palau are the bodies of these gods. They are reminders that gods and goddesses continue to watch and monitor the people below.

After the flood, plants began to sprout on the rich soil in the coastal areas, birds were abundant and water from the high peaks trickled down to the coastal area, settling in the swamplands that are good for taro patches. Because people rely on the fertile soil to provide food, settlements began to abandon the higher land and relocate to the more fertile coastal areas.

The inhabitants of the lower world continued to try to please and show their gratitude to the gods by making offerings and sending praises to them. It is because of this reverence to the gods and goddesses that terraces and high peaks, remnants of the ancient world, are sacred and *mekull*.

Ethnohistorical records

Palau's earliest ethnographic accounts do not mention the earthworks in the largely deserted interior (Keate 1788; Hockin 1803). Cheyne, an English trader in Palau in the mid 1800s, is the

first to document terraces, noting that Palauans did not recognise them as their own constructs (in Parmentier 1987:30):

All the hills of the Pelew Islands that are clear of timber are terraced and crowned with a square fort, having a deep and wide ditch round it, evidently done by the hands of another race – probably Chinese – long ago exterminated by the savage invaders who now occupy the soil. The Pelew Islanders when questioned about the terraced hills and forts say it was either done by the gods or by the sea at the flood.

When the German ethnographer Krämer (1919:238–239) asked about terraces, the local population he spoke with denied that ‘the shape of the mountain is the result of artificial construction’, instead saying that the terraces were ‘what remained after the great flood’. Many elders still consider the flood, referring to Palau’s creation myth, to have formed the terraced hills. Tellei et al. (1998b:106) write that:

Uodelchad, the female counterpart of Esbangel, the chief of Ngerkebesang, recounted the story of the terraces which she heard long ago from her elders. There was a great flood during which time everything was overwhelmed by water. When the flood receded, the water and the pressure to flow down shaped the terraces such as they are today, like large steps down the slopes of the hills.

Other contemporary elders claim the earthworks are the remains of ‘those who came before’ (*tirkel di mla chad*), the first wave of migrants who have no relationship to them and either left the islands before their own ancestors arrived or were annihilated in the great flood (Tellei et al. 1998a:240). Many contemporary Palauans are incredulous that their ancestors were capable of building such monumental structures (see Parmentier 1987:33). This scepticism about their ancestors’ ability is the almost universal response Liston receives when asking Palauans whether they built the terraces.

Earthworks are not among the legends, historic events and significant symbols decorating the beams of each village’s *bai era rubak* (chiefly meeting hall) that were meticulously copied by Elizabeth Krämer (1929) in 1909 and Hijikata (1996) in the late 1920s. Although wooden *bai* are rarely constructed today, visual representation of oral history continues through the medium of carved, mobile wooden planks (storyboards). A single known storyboard, carved before 1983, contains a representation of an earthwork (Figure 4). The crown and step-terrace complex is in the background behind the story’s actors.

The Palauan term for earthwork, *oubllallang el bukl* (stepped hills), is a recent and little used addition to the language (Olsudong pers. com.), while names for ditches, both transverse (*klaidebangel* ‘hole dug as a trap’) and lateral (*chomedoilmach*, *omdok uach* ‘to catch a foot’) appear to have long been used (Osborne 1966:232; Basilius 2002:143). During Krämer’s (1917:261) visit, Palauans referred to the shaped mountains as *deleuechel* (steps cut into a coconut tree) and the hilltops as *telongklel* (the heights). The words commonly used in describing Babeldaob’s topography – *rois* (mountain), *bukl* (hill) and *ked* (savanna) – are not references to artificial constructs.

Place names

Traditional place names given to hills, savannas, bedrock outcrops and other prominent features on the Palauan landscape capture the significance of a location at a moment in time or identify a piece of its history. Some of the stories associated with place name refer to earthwork components.

A ring-ditch encircling a Melekeok crown is known as Meldobechbuuch ‘felled betel nut tree’ due to the impression left when a huge betel nut tree (*Areca catechu*) toppled over (Tellei 1998b:124). The ‘hill in Aimeliik that overlooks Ngerchemai’ is said to have been shaped when Ngesisech’s giant betel nut tree landed on it (Holyoak et al. 1998:13). It is not clear which

Figure 4. Storyboard carved before 1983 with earthwork complex in background ('Elbebai' carved by B. Rdulaol, Belau National Museum collection).

hill this is, although it is most certainly one of the impressive crowns in Aimeliik's earthwork district. The depression in Ngchesar's Util Oeang ('footprints') crown was formed by warriors dancing atop the hill to celebrate their victory over a rival village (Hijikata 1996:144; Miko et al. 2001:85).

Aimeliik's Ngeruudes stonework village is on an earthwork complex named after the Uudes clan which migrated there from Ngaremlengui's Uluang village after being defeated in battle (Tellei et al. 1998a:182).⁶ The defeat of Uluang village, also built on a pre-existing crown earthwork complex, is calculated to have been in the mid 1600s (Lucking and Parmentier 1990:126).

The place names of a few crowns (e.g. Meklechel a Beab 'taro swamp of the rats') suggest horticulture, which, in such a restricted space, probably had a ceremonial intent. A depression in a Ngardmau crown is said to hold a continuously producing taro patch. Its name, Ngkisikikl era ReDioll, derives from the story of a pregnant woman who climbed to the top, fell and scraped (*mle kisokl*) herself (Tellei et al. 2005:37). The surface of the former crown is about 50 cm lower than its bermed edges, hence it holds water during wetter periods. The top of the latter crown displays no signs of a depression. However, recent archaeological excavations revealed that in the ancient past some crown depressions were intentionally infilled to level the surface.

Origin and construction

There are no known oral traditions providing a generic explanation of how or by whom earthworks were constructed. Instead, specific locations or individual features on an earth structure are associated with creation stories. Krämer (1929:Legend 3) found some hills (e.g. Ngerunguikl, Ngeanges and Tukur, all in Oreor) to have been created by the spirits, while a Ngaremlengui chief is said to have pulled all the terraces in the north to the south below Melekeok (Lucking 1984:29–30).⁷ A set of footprints on a rock slab atop Ngerekebesang's Roisngermesianged crown was made by Uchelkebesadel, one of the Ruchel (messenger gods), and his son when they left for the heavens (Basilus 2010:83).

Some Ngarchelong step-terraces were constructed as ladders for the gods travelling to and from heaven (Tellei et al. 1998a:228). A grooved stone on the Bischerad crown complex is identified as ‘a ladder to heaven’, *bischerad*, and the area is a holy place’ (Osborne 1966:22). The ladder was used by the gods when journeying to heaven and back while they constructed Palau’s only megalithic complex – Badrulchau (Tellei et al. 2005:210; Tuggle 2007:101). The boulders on the Ouballang earthworks in Aimeliik are the ruins of a ladder built by inhabitants of the lower world so they could reach the sky (Olsudong et al. 1998:170). A stone on Ngaraard’s Obichang crown complex is identified as a stepping stone for spirits passing between heaven and earth and, until this generation, was a taboo place that could cause illness or injury if touched (Liston and Rieth 2009:454).

Graveyards

Since the 1920s, when the Japanese government mandated burial of the dead in cemeteries rather than clan burial platforms (*odesongel*), many village graveyards have been located on ancient modified ridges or crowns.⁸ Long before their use as historic cemeteries, archaeological investigations indicate earthworks were used for gravesites. Some upland step-terraces, modified ridges, crowns and their capping knobs contain small burial sets radiometrically dated to between 2000 and at least 1200 cal. BP (Tuggle 2007:352–356, 2010; Liston and Rieth 2009:381). These Earthwork Era interments, often structured and associated with burial furniture, were possibly restricted to high-status individuals.

Parmentier (1981:115, 240, 250) was told that terraced or hillside graves are named *debull*, a word that also refers to individual stone or concrete grave markers. Contemporary Palauans almost unanimously state all burials were in *odesongel* before the Japanese period. *Debull*, as a Palauan word rather than a Japanese adaptation, might suggest that hillside graves extend far back in time.

Oral history relates that an ancient high chief of Ngerkeai village is buried standing up in the knoll of the Oltangelmad crown, the same crown currently used as a public cemetery (Olsudong et al. 1998:118). In one version of the Milad cycle of stories, the mother of Dilmalk (one of Milad’s reincarnations) is buried on Omsangel, a crown earthwork in Airai (Parmentier 1987:156; Liston 2007b). Chelebuul (poverty), a descendant of the giant clam Latmikaik, is buried on Toker crown in Oreor (Krämer 1926:3).

The giant Ngalekdmeuang was laid to rest in Ngchesar’s Ngerngesang terraces after Melekeok villagers poisoned him so that he would stop consuming their food supplies (Hijikata 1996:140; Tellei 1998b:243). Parmentier (1981:228–230) documents a version of this story in which Chuab’s children, after burning the giant to death, wander Babeldaob eating all the fruits and leaves off the trees and leaving the villagers to starve. They are poisoned and buried in terraced hills in Ngaremlengui and Ngchesar named Debellelangalekdmeoang (Debellir ar Ngalektmeuang ‘grave of the cursed children’).⁹

The crown on Medong, a terrace system in Ollei, supports a coral platform in which Palau’s only stone sarcophagus was partly buried (Osborne 1979:203–212; Hijikata 1995:130–137). The coffin contained the incomplete skeletal remains of an adult (possibly female) and the single bone of a child. Hijikata (1995:136) recounts an unconfirmed story that the tomb belongs to a Ngeruangel chief (Delengeli Ruangel) who led the survivors to Babeldaob when the island sank.

Sacred Areas

Some interior areas, such as the non-terraced lowland savanna of Malk in Ngaraard and the crowns of Roisang in Chelab and Rois Beketei in Ngardmau, are commonly considered sacred

areas (*chedaol*) because they are the home of deities and/or are places of worship or ceremonies (*tungl*) (Hijikata 1995:42, 135).

Village elders would conduct ceremonial events to petition the gods from these interior sacred areas. Tellei (1998b:122) lists the situations in which these rituals were called for:

- decreasing wealth or resources
- deteriorating social conditions
- epidemics caused by plant diseases
- to get rid of animal and plant-eating birds such as *uek* (*Porphyrio porphyrio*, purple swamp hen)
- deteriorating health conditions or an unusual frequency of deaths
- other extraordinary conditions which would require appeasing the gods and asking for reconciliation

One such place for communicating with the ancestral gods and deities was Ngerulmud in Melekeok. At 180 m², the surface of Ngerulmud, now home of the country's capital building, was Palau's largest known crown (Liston et al. 1998). As Tellei explains (1998b:122):

It is believed that there was once a time when Ngerulmud was used as a place where women came forth with their offerings of fermented *mud* (keyhole angelfish, *Pomacentrus* spp.), supposedly eating them as a group, keeping each other company while trying to appease the gods. This practice was a communal activity. Thus the name of the place Ngerulmud.

Access to Ollei's Medong crown was restricted to elders in times of famine to offer sacrifices for better harvests (Hijikata 1995:135). There are no stories relating this taboo to the sarcophagus buried in the crown's coral platform.

Habitation

Traditional history relates that during the time of Milad, individuals, clans and whole villages migrated from the smaller islands of the archipelago to, and then within, Babeldaob, due to warfare, political intrigues, mythical calamities and natural disasters. The new settlers moved into land already populated by people descended from mythical figures. To protect themselves from attack, the narratives say these new settlements were located in strategic locations behind a protective barrier of mangrove forest, on the low ridges beyond the coastal plains, or above major waterways, providing rapid access to the lagoon. The population progressively relocated downslope and closer to the coast until, by the late historic period when warfare was abolished, villages directly fronted the shore. Even then, with Babeldaob's limited sandy coastline, many of these villages remained hidden behind protective barriers, whether or not defensive in intent.

Through oral history and material remains, Krämer (1919) identified 253 villages, most (n=169) of which were abandoned. The majority of these villages in the migration stories are constructed on low step-terraces close to the shore or a river, granting access to the coast, and exhibit typical Stonework Era features. The few villages archaeologically dated to very early in Palau's cultural sequence are not part of the migration histories, are located on interior hillslopes and ridges, have no known names or associated oral traditions and display simpler stonework architecture to the Stonework Era villages (Liston 2008, 2010b; Tuggle 2010). Temporal markers have yet to be identified distinguishing those villages listed in the narrative as established in the Era of Chuab from the later traditional settlements. Rather than being far inland, as might be expected, three of the early archaic world's six villages (Imul, Ngersuul and Mengellang) are

located on step-terraced ridgelines between 0.5 km and 1.0 km from the lagoon, while the remainder are closer to sea level and the coastline. There is thus little archaeological evidence to corroborate the status or temporal sequence of the villages of Chuab as depicted in the origin myths.

The feature types and architectural style of some stonework on interior earthwork complexes suggest they are a later addition to, or a reoccupation of, previously abandoned earth structures. Employing oral history and genealogy, Lucking and Parmentier (1990:126) calculate that the stonework village on Ngaremlengui's Uluang crown complex was conquered and destroyed in the mid 1600s, long after large-scale earthwork construction. Likewise, the high-status stone features on the massive Roisingang earthwork complex are probably associated with Chief Ngirairung who, in traditional narrative, crossed the hill while relocating stonework villages from Ngaraard's west to its east coast (Figure 3; Tuggle 2010). Regardless, some of the migration stories may reveal the initial occupation of the inland earthwork complexes.

Early ethnographic sources tell of crowns supporting high-status residences. An Uluang and the Desekel crowns served as foundations for the homes of the villages' high chiefs (Krämer 1919:153, 248). Magicians, priests or mediums (*kerong*) lived on the terraced mountains of Eleos in Ollei, Ngeraod in Airai, and Ngulitel in Ngaraard (Krämer 1917:46; Hijikata 1995:114). The latter crown supported the priest's home until 1907 (Krämer 1917:238).

Traditional history more commonly identifies crowns as the home of demi-gods (*chelib*).¹⁰ Krämer (1919:11, 181) lists Eleos, Ngeraod, Ngulitel and Ngadeg (Ngarchelong) as places of magic where *chelib* live in the form of fish and humans. Their association with demi-gods may have been why the priests built their homes on these same hills. Beautiful female spirits (*turang*) who turn into fish at night sleep in the water-filled depression in Aimeliik's Roisebong crown, and bathe in the hollow of the nearby Disechir era Turang crown (Olsudong et al. 1998:118). Hijikata (1996:76–78) was told the deity Odalmelech lived on Melekeok's Roismelech crown after it was constructed by the gods. Tellei (1998b:203) relates that the six gods who were building a *delengobel* (closed area) atop Roismelech planned to live below in what is now Ngeremelech village.

Often malevolent *chelib* inhabit the high-terraced hills. The demons residing in a beautiful clubhouse on the Klbael terrace complex brought a famine to the village below. They then 'pulled the dead people out of the houses, so that the residents had to hang on to them from the inside' (Krämer 1929:Legend 127b). Cannibalistic demons (*tekeelmeleb*) inhabit the Ngeraod crown to 'carry on their mischievous life in the forest on the hill, hunt for souls to devour ...' (Krämer 1929:Legend 137).

In Krämer's (1929:Legend 19) version of the lengthy Milad myth, Ngaraard's Ngulitel crown is the location of the heavenly village where the high god, Uchelelchelib, resides and from where Terkelel (Milad's son) steals the eye of the guard to heaven (Temedokl).¹¹

The seven *ketord* [demi-gods] came one day to Ngulitel, the hill near Ngkeklau in Ngerard [Ngaraard] out of heaven sent by Uchelelchelib, the 'first god', to visit the stone of Temedokl, which served as a watchman at the head of the path at Ngulitel and always inhaled loudly through compressed lips to warn the residents of heaven whenever strangers arrived.

Ngulitel, located at the south end of Ngaraard's extensive earthwork district, is one of Palau's largest and most impressive crown complexes. In addition to supporting a heavenly village and a priest's home, this massive forested earthwork is one of the 12 stops on Palau's rain path.¹² The mountain also figures in a version of the legend concerning the origin of dryland taro. In the narrative, the goddess Iluochel (Milad) travels the length and breadth of Palau creating taro

patches. The patches are all in wetland locations (*mesei*) except for the one she cultivated on the slopes of Ngulitel (McKnight and Obak 1960:7).

Warfare

Ethnographically, warfare was an institutionalised component of traditional Palauan culture and ‘dominates historical traditions as recorded in stories, chants, songs, proverbial expressions and pictorial carvings’ (Parmentier 1987:90; Liston and Tuggle 2006). Construction of earthworks for defensive purposes is related in Palau’s traditional history. A reference to *klaidebangel* (ditch cross-cutting a ridgeline) is found in the story of the battle between two Ngchesar villages (Tellei et al. 2005:70):

... *klaidebangel* were dug and lined with spears with their points pointing up, and then covered. On the day of the battle, the villagers of Ngerkesou baited the men of Ngemingel by holding a festive dance at the other side of the trenches. The men of Ngemingel were offended by this behavior since they felt that an inferior village should not hold a festive dance in their sight. The men of the village rushed to attack them whereupon some of them fell into the trenches and were killed.

Palauan children still play the game ‘*klaidebangel*’, in which, after digging a shallow hole in the beach and disguising it with twigs and leaves, they contrive to have someone fall into it through cunning and devious means (Basilius 2002:150). A post, a component of a palisade or possibly a lethal pointed stick, radiocarbon dated to 1420–1290 cal. BP, was revealed in the inner base of the ring-ditch around Ngatpang’s Ngebar crown (Liston 2010b). Often the ridges leading to crowns are dissected by multiple *klaidebangel*. Defensive ditches also cut the ancient trail systems that crisscross Babeldaob on flattened ridgelines, elevated paths bounded by steep descents and tracks eroded below the surrounding topography by centuries of use (Liston et al. 2002:44; Olsudong et al. 2008).

One narrative tells how trench defensive features originated. A demi-god from Koror is said to have assisted Melekeok in destroying its enemy, Oliuch, by directing the war party to construct wide, deep ditches perpendicular to terrace tiers (*chomedoiluach* ‘foot-catchers’) to hinder the advance of their advisories (Lucking 1984:29–30). These ditch features may have also functioned to channel water for drainage and to water crops.

The ditches ringing some levelled hilltops are also described as defensive in traditional history. Ngerbeluud villagers dug the deep ditch circling Ngaraard’s Obichang crown to trap the oppressive Ngeriteet warriors (Olsudong et al. 2000:158). At the ring-ditch around Ngchesar’s Roisersuul crown:

... warriors from Ngeremlengui, whooping their war cries, ran forward to intercept the warriors from Ngersuul and immediately fell into the trench. They were set upon by the warriors of Ngersuul and were beaten or speared to death (Basilius 2002:149–150).

Oral histories refer to the use of prominent hilltops, not all of which are shaped into crown earthworks, as signal towers (*klekat*) (Krämer 1929:95; Parmentier 1987:272–273; Tellei et al. 2005:72, 81). The allied villages of Oikull and Melekeok warned one another of impending attacks via smoke signals sent from high crowns, and Ngaremlengui signalled Oreor of approaching adversaries by building a fire on top of Etiruir. Ollei’s Eleos crown and Ngaremlengui’s Ngermengot crown also functioned as *klekat* (Olsudong et al. 1998:102).

Hills strategically located around villages, district borders and agricultural fields served as sentry posts. Sentries stationed on outposts along the Ngchesar Trail – crossing the terraced hills of Demalei, Roisersuul, Bluurois and parts of Mesial – protected Ngersuul village by warning

of imminent danger with signal fires (Basilius 2002:149). The Ngchesar trail is dissected by at least seven *klaidebangel*.

Locating earthworks in traditional history

In the majority of cases, Palau's oral traditions do not explicitly identify earthworks in themselves as anthropogenic, as imbued with meaning or as serving a function. However, the substantial reference to hills that are terraced can be interpreted as an implicit inclusion of the structures in the narratives. The lack of narratives connecting the contemporary community with the creators of the massive earthwork districts does not necessarily equate to a cultural discontinuity. Although new groups of settlers continuously landed on Palau's shores, there is no archaeological, linguistic or genetic evidence suggesting that today's population is not directly descended from the archipelago's earliest inhabitants. The question remains of why such monumental constructs are not an overt component of Palau's traditional body of knowledge.

The limitations of oral history collection in Palau probably contributed to the exclusion of terraces in the early ethnohistoric accounts. Restricted information would have been kept from early 20th century ethnographers due to their status as foreigners without clan ties and the unwillingness of Palauans to make knowledge public. The massive earth structures of the interior were long abandoned by the time Kubary, Krämer and others began collecting data, and these researchers, working and living in coastal stonework villages, may not have realised the actual extent of the inland earth construction. Hence, not only were they unlikely to have put much effort into asking about and understanding earthworks, but it is doubtful information on deserted terraces as anthropogenic features would have been spontaneously elicited. Furthermore, the bias of non-participant observation probably created gaps in the ethnohistorical record due to incomplete understanding or miscomprehension of Palauan society, although how far this extended into the role of monumental earthworks is not known.

The omission of earthworks in Palau's traditional history might relate to the lengthy period since their abandonment (Masse et al. 1984:119; Lucking and Parmentier 1990:135). It has been some 1300 years (52 generations, assuming a 25-year span) since earthworks were the defining components of sociopolitical entities. Not just the length of time but also the events impacting a culture over time have a strong influence on what is retained in the oral histories. As stated by Clark and Martinsson-Wallin (2007:31):

... given a tendency for such structures [monumental architecture] to achieve their final dimensions from multiple construction events, and the extensive rearrangement of indigenous societies due to warfare, the impact of introduced disease, and changes to native belief systems from missionary and colonial influence (Green 2002; Sand 2002), neither the origin nor the function(s) of monumental architecture should be expected to be fully documented in oral and textual accounts (Graves and Sweeny 1993:108).

Although these factors probably play a part, they are not seen as the key factor in the conundrum. The loss or change in value of particular aspects of traditional history, such as the earthworks, in Palau's collective consciousness is more likely linked to the dramatic alteration in the political order that is codified in the cosmology (Nero 1987, 1992; Parmentier 1987). An interpretative theme of Palau's creation myths is the attempt to establish harmony in the face of instability. The great flood that ushered in the current Era of Milad was in response to the chaos and lawlessness that erupted from the failure of political institutions in the time of Chuab. This shift between sociopolitical structures became 'embedded in the past through these founding legends' of symbolic transformations (Nero 1992:242).¹³

The 'Invention of Tradition' to validate contemporary hierarchical relationships, establish

group identity and endorse innovation is a cultural universal used to invoke a legitimacy and authority for the current sociopolitical structure in terms of the past (Hobsbawm and Ranger 1983; see Nero 1987:32–44, 75–80). In the Pacific, Firth (1961) demonstrated how traditional stories validate Tikopia's social order, while Alkire (1984) showed that central Carolinian oral traditions pertaining to migration are structured to conform to the ruling hierarchy.¹⁴ Ancient traditions and practices are adapted and re-used to establish continuity with the past. Once the transformations are established, grounded or 'sedimented' (Parmentier 1981:50; Sahlins 1981) into place, a culture will retain the body of traditional history that promotes its wellbeing and is relevant to its concerns.

In Palau's cosmology, the contemporary sociopolitical order did not develop through a historical process of succession through warfare and political alliances (Parmentier 1987:183). Rather, the ruling hierarchy in the time of Chuab was washed away by the flood to provide a fresh canvas for Milad's new world order. This provides an inherent supremacy to legitimise the current ideology. Hence, by providing a traditional explanation for the current hierarchical relationships, Palauan mythology supplies a vehicle to legitimise the new system and render the old obsolete (Nero 1987; Parmentier 1987:54, 138).

The creation myths could metaphorically reflect the relocation of the political economy from the more centralised authority of the interior earthwork polities (represented by Chuab) to the hierarchically structured alliances of autonomous stonework villages (represented by Milad). Palau's tangible cultural remains illustrate the dramatic transformations in the subsistence economy, settlement patterns and political organisation between these two eras, with the Earthwork Era referring to the former and the Stonework Era to the latter. The societal upheaval and instability described in the cosmology that invoked an inundation (Milad's flood) could relate to the period of transition, recognisable although not clearly defined in the archaeological record as the Transitional Era, between the Earthwork and Stonework eras. The flood annihilated the former population and with it any who could claim descent to its hierarchical structure, to give priority of rank to Milad's offspring. In a broad sense, the archaeological record mirrors the chronological framework provided by traditional history.

Though not directly linking the long-abandoned interior earthwork polities to Palauan historical narratives, this conceptual context may explain their relative absence. The massive terrace complexes' primary purpose as symbols of chiefly or polity power and prestige was no longer relevant to the inhabitants of the stonework villages. Their practical uses as cultivated fields, habitation foundations, community infrastructure, ceremonial space, defensive features and burial grounds continued in very limited and specific contexts. However, the majority of the massive structures were associated with a past obsolete lifestyle and of no value to the Stonework Era political structure. The exclusion of earthworks from overt reference in the oral accounts may be the strongest testament we have to their prehistoric importance.

Discussion

A review of the ethnohistoric literature, recent oral history documentation and newly collected oral history that focused on Babeldaob's interior landscape found that, contrary to historic perceptions, earthworks are a strong implicit component of Palau's historical narratives. In traditional history, terraces were used by humans and demi-gods alike for settlements, burial grounds, ceremonial events, transportation routes, cultivation and defence. A group of Palau's elders say the interior earthworks allowed humans to be closer to the heavens and gave gods and goddesses easy access between the upper and lower worlds. Many interior areas continue to be sacred and *mekull* (places not to go) due to their antiquity and association with the demi-gods.

In the 1930s, Hijikata (1995:70) observed that, despite not being part of daily life and found in impractical locations removed from the then inhabited villages, earthworks:

... do not seem to be treated irrelevantly either. Rather, it [earthworks] was taken care of and treated with consideration. Therefore, this was something reserved for religious beliefs ...

The altered interpretation of past and current ethnohistorical works and traditional history can be understood within its historic context. In the past decade, Palau's archaeological history has been largely rewritten due to archaeological mitigation for the Compact Road (Athens and Ward 2005; Wickler et al. 2005; Liston 2007a, 2010a; Tuggle 2010) and academic research (Fitzpatrick 2003; Clark 2005; Clark et al. 2006). These recent investigations on Babeldaob recognised the vast extent of modified terrain, identified a large number of previously undocumented earthworks, and radiometrically dated the era of significant terrace construction and use to ca. 2400–1200 cal. BP (Liston and Tuggle 1998, 2006; Liston 2007a, 2009, 2010a; Olsudong et al. 2008).

Many locations identified in Palau's oral narratives are only now being recognised as humanly modified or constructed earthwork sites. This archaeological information equipped contemporary oral historians with data useful for framing and guiding their inquiries towards specific earth structures as well as inland cultural properties in general. Currently, archaeological excavations in earthwork sites are open to public visitation and the new findings are widely publicised, taught and discussed to raise community consciousness of historic properties and assist in retaining cultural identity in a rapidly globalising Micronesia. Hence, the recent affiliation with, and the disclosure of information about, earthworks by some Palauans may be due to their exposure in archaeological work rather than a departure from indigenous knowledge.

An encompassing or interrelated causal factor to explain by whom, when or why earthworks were constructed is not presented in the narratives. Rather, individual structures appear as isolates in the larger landscape. The creation of specific structures is attributed to spirits and to humans for use by, or under the direction of, the gods. Only in the case of ditch defensive features is there an overt declaration of earthwork construction and only when described as a ladder is their shape distinguished from the surrounding topography. In the stories, the morphology of the earthworked hills is an inadvertent result of an activity (e.g. dancing, felled trees, leaping to heaven), seemingly unrelated to any conceivable ancient use.

The archaeological interpretation of earthworks defining ancient polities is not substantiated in traditional history. Terraced hills are not identified as boundary markers. Ethnohistoric and contemporary territory delineation refers to rivers, rock outcrops, boulders, stone paths, unmodified hills and tiny islands off Babeldaob's shores. Further investigation may reveal the use of crowns and modified ridges as marking political borders. Regardless, each of Babeldaob's 10 states roughly corresponds to the distributional patterning of an earthwork polity and its surrounding buffer zone.

A topographic setting could be included in a narrative due to its distinctive appearance, its strategic location or its religious or ancestral association. With at least 20% of Babeldaob formed into earthworks and many of these structures on the most prominent peaks and ridges, terraced hills are sure to be included in Palau's oral traditions regardless of their role in traditional history. A terrace as an anthropogenic construct with its own life history may have no relation to an accompanying traditional narrative. Even if acknowledging the constructed topography, the story may allude to re-use of the structure long after its construction and use as an earthwork district component.

Archaeological investigations of those ancient villages on interior earthworks that are

associated with traditional migration histories (e.g. Ngermeskang, Rois) have the potential to disclose a timeframe for the transition from interior earthwork polities to stonework village districts. Careful consideration of the full range of these terrace complexes' archaeological histories can tie earthworks directly to both oral traditions and to significant unresolved issues such as the relationship between monumental architecture and increasing sociocomplexity, the variables underlying the transformation in Palau's settlement pattern and subsistence economy, and the structure of interior political organisation.

Conclusion

In a recent oral history collection, a group of Ngaremlengui elders provided a strong connection between the earthworks, deities and humans. Contrary to historic perceptions about the role of terraces in traditional history, they said that long ago humans constructed terraces for ritual, ceremonial and sacred purposes. Because of their association with the ancient times when the gods and goddesses of the upper world interacted with humans, these earthworks are sacred areas with forbidden access. The elders stated that interior villages built on terraces were covered by sediment during Milad's flood. These settlements were thus forgotten and would not necessarily be included in the corpus of contemporary oral traditions.

A review of the ethnohistoric records identified a substantial though indirect reference to terrace complexes. Traditional history relates that earthworks were ladders for the *chelib* to travel between the upper and lower worlds, burial grounds for human chiefs and mythological figures and the homes of demons, spirits, high-status individuals and heavenly villages. Interior areas, not all terraces, were sacred and used for worship or ceremonies to petition the gods for better harvests, to end epidemics, to increase wealth and for other matters pertinent to village welfare. Cultivation of dryland taro is said to have begun on a crown earthwork complex. Oral histories tell of the defensive element of some ditches and high crowns constructed as traps for advancing adversaries and serving as lookouts, smoke signal towers and sentry posts.

The lack of overt references to terraces in traditional narratives may be due to a combination of the lengthy period since their abandonment and the nature of oral history in general, and in Palau specifically. The main mitigating factor is likely the transformation in sociopolitical regimes that is expressed in both archaeological and traditional history. This change is associated with the transplantation of the subsistence economy and settlement pattern from the interior to the coastal margins. Mythology provided a traditional explanation to legitimise the new political, social and ideological order and establish social cohesion after this dramatic cultural transformation. When the lowlands and shoreline became the socioeconomic focus, individual inland earth structures were no longer valuable or relevant to societal functions and traditional history relegated the earthwork polities to an obsolete past. The interior earthwork complexes became ancient relics and were forgotten. Incorporation of oral sources of information extends and illuminates the archaeological knowledge of Palau's Earthwork Era by locating it within a long-term sociopolitical context of change.

Archaeological research reveals information relevant to Palau's cultural identity that, due to its antiquity and transformations in the sociopolitical structure, has been lost from traditional history. Recent archaeological investigations have led to a greater public awareness of the deep timeframe of Palau's past, to identification of Babeldaob as an anthropogenic landscape, and to a broader more inclusive framework for oral history interviews. Simultaneously, traditional narratives have provided archaeological history with a better understanding of the complexities inherent to Palau's cultural system by assisting in identifying the symbolic, social and ideological

value of the material remains. Cultural dynamics are expressed in the transformations of traditional histories and leave traces in the material culture and landscape. The collaboration of archaeologists and oral historians allows for a multi-layered and holistic interpretation of the cultural journey.

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Notes

1. This collaboration has been most successful between the now defunct Palau Resource Institute composed of Julita Tellei, Umai Basilius, Faustina K. Rehuher and Maura Gordon and archaeologists Felicia Beardsley, Myra Tomanari-Tuggle, Steve Wickler and Jolie Liston of the International Archaeological Resource Institute, Inc. (e.g. Basilius and Tellei 1996; Tellei et al. 1998a, 2005).
2. On Babeldaob the villages of Chuab are Imul, Ngerusar, Ngersuul, Ngeruikl, Ulimang and Mengellang.
3. Earthworks are also found in volcanic portions of the three smaller islands of Oreor, Ngerekebesang and Malakal that are close to Babeldaob's southern end.
4. These 'eras' are archaeological labels used in organising long time periods and have no inherent meaning to Palauans.
5. Miko was the oral historian for the Bureau of Arts and Culture for almost a decade until moving to the Palau Visitors Authority to incorporate heritage tourism into Palau's travel industry. He also has strong ancestral ties to Ngaremlengui.
6. Later the Uudes clan left Aimeliik to settle in Melekeok where it became the first ranking clan.
7. Titled Obakrailames, he actually lived in Blissang, a village in Melekeok.
8. Some of the historic graveyards located on crowns include Techobei (Melekeok), Chisau (Ngaremlengui), Bisecherad (Ngarchelong), Ngertacherudel (Airai) and Oltangelmad (Aimeliik), while ridgeline cemeteries are found at Terull (Ngaraard), and in ridges whose names are not known in Ngkeklau (Ngaraard) and Ngiwal.
9. This terraced legendary gravesite in Ngaremlengui, just east of Ngermetengel village, has been destroyed by construction of a landing strip, dump site and road (Lucking 1984:76; Olsudong et al 1998:35).
10. There is no overall Palauan god. Each clan has its own spirits, with the village adopting the most powerful clan's deity, and the most important of these worshipped by a group of villages or an entire polity (see Kubary 1888; PCAA 1976:78). The *chelid* (demi-gods) often communicated through the priest (*kerong*).
11. Other versions of the story list this heavenly village as located on Ngeraod, a hill in Airai.

12. The interconnected paths the wind and the rain follow as they cross Palau run generally north to south with villages or hills listed as points Rak, Chuab's brother, stopped at while traveling with the moon (Klee 1973; Aoyagi 1982; Tellei et al. 2005:21–22). The significant concept of paths (*rael*) in Palauan culture is explained by Parmentier (1987:108–137).
13. Within a grander theme of oral history, Nero (1992:237) aptly demonstrates how works of art 'not only reflects political and structural transformations of Palauan society but are in themselves active agents through which Palauans negotiate such changes'.
14. Alkire (1984:7) concludes that this tailoring of the narratives renders them of limited use for reconstructing cultural chronologies.

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