TEMPLE ARCHITECTURE IN THE SACRED SITE OF MENKA, KOSRAE, FEDERATED STATES OF MICRONESIA

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Abstract: At the ancient sacred site of Menka, Kosrae, the architectural ensemble of the temples dedicated to Sinlaka, the goddess of breadfruit and principle deity of the island, has shifted and transformed over time. The older temple represents a small, intimate setting that fully reflected the key elements of the oral histories, including clan symbols, an altar oriented to Mt. Finkol, the highest peak on the island, and a colonnaded promenade. The younger temple is a larger, more expansive complex, reflects a more theatrical setting, sheds the key features of the older temple complex, and represents a shift in engagement with a spatial arrangement that accommodates greater numbers of spectators and participants.

INTRODUCTION

The architectural remnants of ancient Micronesia are most frequently described by the monumental sites of Leluh on Kosrae and Nan Madol on Pohnpei, the sculpted hills of Palau, the stone money of Yap, and the latte sets in the Marianas. Each of these sites is the very embodiment of the term monumental: they are larger than life productions of grandeur in style and expanse that is both imposing and altogether awe-inspiring to those viewing these sites. The complexity of their architectural expression transforms them into something so enigmatic that they continue to draw viewers of all stripes with magnetic force; even the early days of scientific expeditions of exploration saw these sites attract the almost exclusive attention of archaeologists in the region (Ritter and Ritter 1982; Rainbird 2004; Sarfert 1919). Unfortunately, this also meant that the many other ancient architectural features on these islands would be overlooked, or at best overshadowed and even dismissed as provincial and rudimentary (Cordy 1982b, 1993). Yet, these other, smaller, seemingly unsophisticated and simpler sites represent the foundational cultural fabric and support network fundamental to the design and construction of every one of the monumental sites scattered across this part of the western Pacific.

Often obscured by a farrago of vegetation in the jungle interiors of the region's high islands, the attention paid to the smaller, architecturally peripheral sites is a relatively recent phenomenon (Athens 1995; Bath et al. 1983; Cordy 1982b; Lilley 2006). General observations note that these sites consist of comparable structures, architectural plans, material sources, and construction styles exhibited in the remains of the monumental sites, though they are smaller in scale and display a wider variety of styles. Even more fundamental is the common use of stone in all these sites, monumental and not-so-monumental, often with the stone raised in multiple courses and trimmed or fashioned to accommodate a wide array of local styles and variations, from raised platforms to double-walled structures with rubble cores to more complex arrangements of retaining walls, simple platforms and truncated stepped pyramidal structures with internal compartments. The stone is often mined locally, transported to the sites either by land or over water, and fitted either roughly or with great precision.

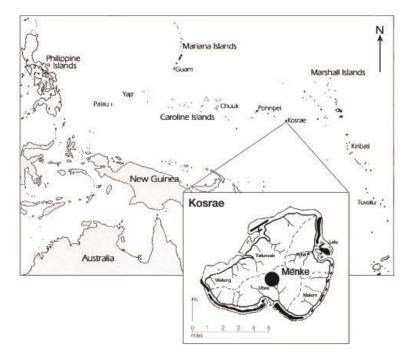


Figure 1: Map of the western Pacific with inset showing Kosrae. The site of Menka (alternate spelling Menke) is located just south of the centre of the island.

The Menka site on the island of Kosrae rests at the heart of Kosrae's culture (Figure 1); it was the centre of the old religion and is acknowledged in oral histories as the primary force in moulding Kosrae's traditional cultural system and the cultural systems of eastern Micronesia (Sarfert 1919). If any place on Kosrae should be expected to exhibit a high degree of monumentality to aid in the visual perception of transcending the physical into the realm of the spiritual, one would think it would be this site rather than Kosrae's ancient political centre at Leluh, known as the seat of secular rule. Yet the two temple structures at the core of Menka seem to be the antithesis of monumental; they respectively display the architectural ensembles associated with both the early and later more developed residential sites on the island. Were it not for their association with other unique features—statue fields, colonnaded paths, and deliberate orientation to the sacred peak of Mt. Finkol—one would dismiss the Menka temples as just another residential site on the island, though one that had a sufficiently long occupation to reflect the full array of architectural patterning visible in the other archaeological sites around the island.

Nowhere in the archaeological investigations on the island, or in eastern Micronesia, has the subject of architecture specifically related to temples or temple structures been discussed. Menka is the first such site, whether on the island or for that matter in the region, that is specifically associated with a temple and functions attached to a temple. In the remainder of the Pacific, many of the discussions on temple architecture focus on Polynesia, especially the heiau of Hawaii, the ahu of Easter Island, marae of the Society Islands, and me'ae in Marquesan islands (e.g., Bickler 2006; Kolb 1992; Martinsson-Wallin 1994; Millerstrom 2006; Rainbird 2004; Wallin 1993). In each instance, the generalized temple architecture consists of raised stone platforms upon which stood backrests or statues of deified ancestors, and often associated with a larger open area or plaza demarcated with a low stone or earthen wall. Whereas, in the south-western Pacific, standing stones, sometimes carved and sometimes not, or sites with more a complex arrangement of wall foundations outlining a discrete area may have served to mark a place of ritual, religious or ceremonial rite (e.g., Bickler 2006; Byrne 2005). In western Micronesia, discussions continue to focus on the monumental architecture associated with meeting platforms, dance platforms, terraced hillsides, and sequences of columnar stones

with capstones (Morgan 1988), but without reference to temple sites or temple architecture.

In the following pages, the two temples at Menka will be described, along with their commonalities and differences, and the transformations visible in their architectural remains that reflect a shift from the earlier to later styles on the island.

KOSRAE

Kosrae is one of three high islands in Eastern Micronesia. It is small, roughly 110 sq km in area at the easternmost end of the Caroline archipelago, and removed from the other two high islands by several hundred kilometres of open water. To the south, east and north lay the coral islands of Kiribati, Tuvalu and the Marshalls. Historically, Kosrae was described as an imposing landscape with a steep mountainous interior shrouded by impenetrable vegetation, abundant streams, and a hot and humid climate (Ritter and Ritter 1982).

The island was settled some two millennia ago (Bath et al. 1983; Athens 1995) by a population bearing a culture similar to that found on the low islands of the region, the main features of which were a general lack of pottery, a dependence on woven materials, the use of earth ovens, and subsistence practices dominated by breadfruit and marine fauna. The settlement pattern consisted of semi-autonomous polities occupying a strip of land from the reef to the island interior (Sarfert 1919, 1920; Cordy 1993; Athens 1995), and a culture dominated by a dual political structure composed of a secular and religious authority (Sarfert 1919).

History has taken a heavy toll on Kosrae and its traditional culture. In the last two centuries, Kosrae has essentially remade itself to suit the demands of traders, colonizers and missionaries. Every domain of traditional culture has been reduced to isolated, discontinuous fragments where no one person seems to hold all the clues to understanding any one domain. Short threads of memory, some retained in oral history, still exist, alongside a landscape covered in architectural and material remnants that make up the archaeological record of the island.

Within the archaeological record there are indications of an early occupation, primarily on the southern and western coasts where oral histories place the land of the ancestors (Bath et al. 1983; Athens 1995).

Sometime around AD 500, pottery appears in that record, but only briefly and locally confined to the lagoon islet of Leluh (Athens 1990); this is significant because at European contact, Kosrae had no indigenous pottery or pottery-making industry. Stone statues, composite figures of clay and stone, and portable clay figurines recently identified in the archaeological record were consistently present throughout much of the island's long occupational sequence, but by contact, Kosrae had gained the distinctive reputation as one of the few places in the Pacific with neither idols nor any other tangible feature of an artistic heritage (Ritter and Ritter 1982; Beardsley 2007, 2008, 2012). The statues, figurines and other non-utilitarian and decorative artefacts were either forgotten or went unnoticed as the population dwindled and settlements in the island interior were abandoned.

Other information about Kosrae's past includes the appearance of breadfruit and three aroid cultigens (Colocasia, Cyrtosperma and Alocasia) some 2,000 years ago (Athens 1995), all of which needed the intercession of a human hand in order to thrive. Even a shift in the regular exploitation of shellfish appears in the archaeological record and suggests population pressures, with an initial emphasis on bivalves before A.D. 500 and gastropods after that date (Athens 1995).

MENKA, THE SACRED SITE

Menka is located in the centre (or nearly so) of Kosrae, at the base of Mt. Finkol, the tallest mountain on the island (600 m amsl). It was the religious and spiritual centre of the ancient Kosraeans, and remained so even upon arrival of western explorers, missionaries, and establishment of the first foreign colonial governments in the 18th and 19th centuries. But unlike other villages or communities on the island, it was not part of a larger polity stretching from the shore to an inland point. In this regard, it was unique and quite distinct as it was positioned at the intersection of all polities, essentially belonging to all and to none at the same time; there is no other village or archaeological site on the island with this particular characteristic.

Menka was dedicated to Sinlaku, the Breadfruit Goddess and Prophet Spirit, who is said to have been the head of the traditional culture's pantheon of natural and supreme deities (Sarfert 1919). Information, histories and oral histories about Sinlaku are scarce and relegated to fragments of oral histories, ethnographic accounts drawn from the

German expeditions of exploration (e.g., Sarfert 1919, 1920), and remnants of diaries and journals of adventurers and missionaries (e.g., Buck 2005; Segal 1989). Today, practices and obligations of the traditional priestly societies dedicated to Sinlaku are relegated to the realm of practical obsolescence. How the priestly mediator called upon the goddess, conducted ceremonial rites in her name, or even received her messages to interpret and deliver to the people of Kosrae remain unknown; only brief fragments of oral histories touch on these practices, but even then, only at the most basic and superficial level. A search through the oral history archives at Kosrae's Historic Preservation Office yielded virtually no information on religious practices related to Sinlaku or her priestly mediators.

By 1852, Menka had lost its position as the centre of spiritual power and authority when the first Christian missionary, Reverend Snow, and his followers made their way to the island (Buck 2005). Over the next decades, conversion of the population to Congregationalism and establishment of churches across the island ensured the near disappearance of traditional knowledge as the new religion spread. Salvation and sanctuary, the islanders were told, would be found in the message of the Church, not in the past and most certainly not in the old traditions and belief systems. Stories about Menka and about the goddess Sinlaku faded rapidly.

ORAL HISTORY ABOUT MENKA, THE SITE AND THE GODDESS SINLAKU

When the first waves of settlers arrived more than two centuries ago, they brought with them the 'purposeful introductions' or material items necessary for their survival, as well as those intangible elements of ancestral traditions: narratives and other creative acts passed down through the generations, intended to teach as well as entertain, to instil a sense of historical continuity, and to perpetuate a common social and political identity and heritage in the listeners and observers. These vestiges of the ancestors assured their psychological well-being, maintained strong ties to the past, and included a pantheon of local gods, ancestral spirits and deities that reigned supreme over some realm or other of nature. From whence they came has yet to be established with any degree of certainty; however, the material culture

that dominates the core of the archaeological record suggests a low island origination while oral histories suggest ties to Yap.

Within the oral histories, the local gods were credited with providing guidance for nearly every aspect of daily life and annual ritual, from house construction and canoe building to the harvesting of breadfruit to the routines of weaving and gardening. Many of the deities also had ties to Yap, including Sinlaku, the most powerful of all. As the prophet spirit, she could give people the knowledge of medicine and magic through trances or dreams (Segal 1989), and as the breadfruit goddess, she controlled the ripening of breadfruit and could influence the forces of nature (Sarfert 1919). She held the power of life and death, and could conjure typhoons, famines, droughts, and when a specific type of punishment was needed, introduce disease (such as influenza). Yet, she was also generous and provided for her people, according to Sarfert (1919). The power of Sinlaku was so great that Reverend Snow found himself competing against her in his mission to Christianise the island (Buck 2005). According to local histories, Sinlaku, upon seeing the future of her people and the dawning of a new religion, left Kosrae forever and fled to Yap (Sarfert 1919).

When she still was favoured Menka was her place of worship. The old name for the village was Monika, which means something approximating "this is the right place for Sinlaku, that she and this place are just right for the people of Kosrae" (Hamlet Jim, personal communication, 2011). The village rests at the foot of Mt. Finkol, which in the oral histories plays a significant role—Finkol is the head of a snake monster that gave birth to the island and formed the mangrove channel surrounding it. In the legends, Fin, the highest point or place, and Kol, gold or shiny, referred to the image of the mountain when viewed from Leluh: under a full moon, at certain times of the year, the snake monster would be called to the surface; proof of its presence was the transformation of the top of Mt. Finkol into a pair of glowing eyes (Sarfert 1920).

Menka was also *tapu*, or off-limits, to all but a select few. It was considered a place where only the most powerful (usually the priests, healers, sorcerers, and/or magicians) would meet at specific times in the year as part of a celebratory cycle, or for special events such as the ascension of a new paramount chief (Cordy 1993). On these occasions, the house/place of Menka would be repaired and rebuilt, rites required

by the goddess would be administered, rituals would take place, and the goddess would deliver her messages to the people of Kosrae through her representatives, her intermediaries. A couple of her servants (ladies) were still living and making predictions through World War II; they were considered always right. Both ladies died more than 20 years ago, leaving behind no records of their duties, responsibilities, or actions with respect to the goddess (Berlin Sigrah, personal communication, 2010).

Within the archaeology on Kosrae, Menka is unusual because of its interior location. This has proved beneficial in that its isolation has protected it from infrastructure and development projects. Its place in oral history has also protected it from local curiosity, as it continues to retain an aura of *tapu* where powerful ancestral ghosts still roam.

What little is known about the physical place of Menka comes from local landowners and occasional pig and pigeon hunters who pass through the area. The village is described as having more than a hundred houses within its boundaries, far more than any other traditional village on the island, with perhaps up to a thousand people who could have occupied the village during times of celebration. Its location in the 'centre of the island' was also highly practical, because from this point the goddess and her servants could cross the island from one side to the other following a hidden network of stone paths. Somewhere deep within the jungled recesses of the village, there is also supposed to be a temple and a secret meeting place where Sinlaku's mortal representatives met and carried out the necessary rituals in her name.

Other stories refer to a standing stone of some spiritual significance somewhere within the village, as well as a line of standing stones that led to the goddess's temple within the confines of a cave where Sinlaku's agents would convene with the goddess. At one point, a hunter passing through the area some 15 or 20 years ago relates that the goddess revealed her compound (bigger than any others around) and throne (now possibly collapsed, but visible from the lone coconut in the drainage basin) to him, as if he had awakened from a dream; he never found them again, stating that the goddess has chosen to conceal these features from him and all others who enter the area (Flatney Tilfas, personal communication, 2010). To most Kosraeans, Menka is still a

place to be avoided, as it continues to be a place of great power, magic and mystery.

PREHISTORIC ARCHITECTURE ON KOSRAE

The study of prehistoric architecture on Kosrae has been influenced by the initial historical focus on the site of Leluh, a site of monumental proportions (Cordy 1982a, 1982b, 1985, 1993; Hambruch in Sarfert 1920; Morgan 1988). By comparison any other archaeological site with a more modest set of architectural remains has either been underreported or dismissed as of little consequence, considered mere stepping-stones in the path toward the architectural climax of Leluh. This is true of one of the earliest and most significant site on the island, Likinlulem, the place from which traditional titles originated, and is said to have housed the island's highest chiefs with the oldest lineages, at least until about AD 1400 when Leluh, its political rival, began to amass the political will and strength to conquer and unify the island (Bath et al. 1983).

The lack of monumentality at Likinlulem was sufficient to dismiss it as a major influence in the cultural development of the island (Cordy 1982b, 1993). Yet, next to Menka, it is the one site on the island that appears regularly (and in a key role) in legendary histories. Likinlulem is frequently described as having been occupied "before time began" or "before the before". Its architecture and layout form the model of virtually every other site so far recorded on the island, including Leluh (see below). It consisted of nine simple two-roomed compounds composed of low, rubble-filled basalt boulder walls, where one room housed a centrally-placed single to multi-tiered stone platform, and the other served as an entry and possibly a communal area. Following ethnographic descriptions, the platforms likely supported raised pole and wooden structures that likely served as sleeping houses (Sarfert 1919; Cordy 1995). The second room, the entry room, would have been without a platform and provided the entry-way area for the compound. An opening was built into the exterior wall of this communal room, often with larger boulders or standing stones flanking the entry. In general, there was no entry/break in the exterior walls defining the room with the platform, including the internal dividing wall between the two rooms. Each compound was connected by a paved stone pathway. Surrounding the entire complex was a low basalt boulder and rubble

wall that adjoined a canoe landing. A channelized perennial stream flowed through the centre of the village.

Likinlulem's walls consisted of unmortared, multi-coursed alignments of randomly placed undressed basalt boulders, with little to no fitting indicated. All boulders appeared water-rounded and collected locally, with the use of smaller basalt cobbles as interstitial fill to stabilize the boulders. Structurally, the walls were double retaining walls filled with a packed rubble core of a chaotic range of cobbles and boulders with no consistency in either shape or size indicated. According to archaeological investigations (Bath et al. 1983; Cordy 1993), Likinlulem was occupied by AD 435-630, with its peak period of occupation between about AD 1200 and 1600—a time frame that is becoming increasingly important in the history of Kosrae, as this was an era of independent polities, political rivalries, intra- and interisland conflicts and alliances, a social dynamic with an artistic tradition recognized around the island, the struggle to control resources or access to major resources, and the rise of Leluh.

Contemporaries to the early (pre-AD 650) Likinlulem era include Safonfok, Final Tokosra, an array of sites within the Tofol River drainage, and a scattering of other sites on the island (Beardsley 2007). Each reflects the architectural patterns visible in Likinlulem, although building materials may differ depending on the local availability of materials (Safonfok, for instance, incorporated coral into its walls, as the site is located on the island's south-western shoreline). Altogether, the archaeological and architectural ensembles visible in these sites reflect a common vocabulary:

- mortarless double retaining walls with multiple courses of undressed basalt (and/or coral) boulders and a packed rubble core;
- paved two-room compounds with a stone platform in one room, the other room without a platform but with a breach/opening in the exterior wall suggestive of use as an entry-way/communal area;
- a network of stone pathways connecting villages, occupation sites and compounds;
- canoe landings with external housing (paved areas defined by low retaining walls) near the docks;

- nearby taro gardens (where today relict varieties of taro only referred to in oral histories are found growing);
- cultural alterations and channelization of river courses, suggesting use as throughways across the landscape;
- artifact types distributed throughout sites, including clay figurines, pottery, coral fishhooks, stone statuary, and clan symbols new to the archaeological record of the island and beyond;
- a shift in dietary practices visible in shellfish remains; and,
- a settlement pattern indicative of a highly dense, populated environment.

The monumental site of Leluh ultimately became the seat of the paramountcy and ushered in a new era of political complexity. In its early phases, the construction of Leluh followed the same architectural model visible in the other sites on the island. By A.D. 1400, Leluh was at the peak of its architectural expression, where it exhibited the architectural features of the earlier, formative era, but further embellished and developed on a grander and monumental scale. Leluh was built as an extension of a small lagoon islet, forming a man-made island of fill on a shallow reef platform. Its walls were more than a meter thick and several meters tall, with some higher than 6 meters. Many of the walls culminated in a header-stretcher configuration with the use of columnar basalt logs. Every wall consisted of multiple courses of undressed basalt boulders, some more than a meter in length, that were generally fitted, but still retained interstitial fill of smaller boulders and cobbles. The interior rubble core of the walls consisted predominately of packed coral boulders and cobbles. Paving throughout Leluh was primarily of coral slabs, while the dividing walls within the interior of compounds were of basalt. Leluh also had a series of burial compounds that contained truncated semi-pyramidal platforms with internal crypts lined with a cribbing of columnar basalt (Cordy 1982a, 1982b, 1985, 1993; Hambruch in Sarfert 1920; Morgan 1988). The impressiveness of Leluh was commented upon by the first Europeans to visit the island (Ritter and Ritter 1982).

The difference between Leluh, as an example of later architectural style, and the earlier styles visible in sites like Likinlulem, other than size and impressiveness, included:

- increased attention to the selection of building materials;
- greater attention to the tailored, fitted quality of stone facades;
- use of header-stretcher construction style with columnar basalt fragments to finish corners, tops of walls, and those areas most visible to a viewer; and,
- architecture as theatrical presentation, with an apparent attentiveness paid to the aesthetic experience of the construction (e.g. finished wall facades only at structural entry points).

THE TEMPLES OF MENKA

During our 2010-2013 archaeological work in Menka, we documented two architectural complexes (the upper- and lower complex) that include compounds/areas suggesting use involving ceremony, a rock shelter with a painted ceiling, and other features such as residential areas and statue fields that further support the oral histories associated with Sinlaku's village (Figure 2). The complexes consist generally of multiple double-room compounds defined by rubble-filled stone retaining walls, with a truncated semi-pyramidal stepped platform within one of the rooms of each compound. The platforms have a rubble core and remnants of postholes. Construction methods range from randomly stacked unshaped basaltic boulders to columnar basalt fragments placed in a header-stretcher format. The lack of defensive walls surrounding the complexes was notable. Both complexes were identified as temple areas, with one compound in each associated with a predominately ceremonial role. These two compounds exhibited unique features found nowhere else on the island, including defined altar-like areas—one built into the platform in the form of an inset shelf/table complete with a small carved stone statue set upright on the back of the shelf/table, and a stone knife tucked just under the shelf/table; the second identified as a large, dressed boulder with surface carvings on all sides and a slightly concave, bowl-like top, adjacent to a field of large statues, and in a direct alignment to Mt. Finkol. Each complex of associated compounds is described below.

The upper complex

This complex, the smaller of the two, is situated deep within the headwaters of Menka River (Table 1).

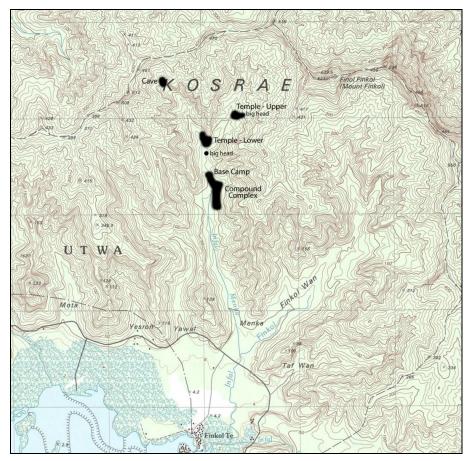


Figure 2: Contour map of Menka area on Kosrae showing location of two temples, two of the megalithic heads, the painted cave, our base camp, and a large archaeological complex identified as a residential compound complex.

It contains a single two-room compound 11 by 7 m in size, surrounded by clusters of large (> 1 m tall/long) statues and has a direct line of sight to Mt. Finkol (Figure 3). Just beyond the compound is a large boulder with a slighty flattened, concave top and series of raised relief engravings on all sides; we interpreted this as an altar as it rests on the edge of a ravine, faces Mt. Finkol, and is flanked by meter-long columnar uprights. Upslope from the compound and altar there is a cluster of statues carved from basalt and representing animistic forms, including several different kinds of fish, a clam, manta rays, and turtles. These have been interpreted as symbols of clans and other figures associated with oral histories from the island.



Figure 3: Map of the Upper Temple in Menka, Kosrae. Compound walls are outlined in solid black; upright columns associated with an entry way and the altar stone have been recorded in solid black.

A paved pathway with shallow, broad steps and flanked by a colonnade of standing stones leads directly from the river to the compound, the altar and the statue cluster. At the end of the pathway (on the west side of the compound), there is a meter-long statue of a box-fish, *ot wot* in Kosraean, a clan symbol. At least two large basalt heads are located by this complex—one at the immediate upslope (east) entry to the compound, altar and statue cluster (Figure 4, upper), and a second

farther upslope at an access point from a small residential complex. Each head is over 1.5 m tall, and nearly as wide, carved with anthropocentric features that include a topknot, a symbolic feature identified with men of status. The upslope head has two faces carved into it—one on the upslope side, the second on the downslope side.



Figure 4: Two of the colossal heads identified with the both the Upper and Lower Temples in Menka, Kosrae. The upper two photos (A, B) show the downslope and upslope sides of one megalithic head associated with the Upper Temple. The lower photo (C) illustrates the giant face carved from breccia bedrock, located at a point between the Lower Temple and the large archaeological residential compound complex to the south (Photos: Felicia Beardley).

Architecturally this compound is comparable to the early sites on the island, in terms of its size and construction (see above for description on early sites). It makes use of smaller basalt boulders, roughly fitted together with interstitial fill of cobbles and pebbles. The platform in one room appears to be a single-tiered structure, but trees growing within it are obscuring any structural details. The second room, the entry/communal room, has two entries, one each in the east and west walls of the room. The western entry is blocked and distorted by a large tree growing into the wall.

The lower complex

The second, lower complex is downriver from the first, and is centrally located within the river basin, at the confluence of Menka River and its principal tributary (Figure 5). It is composed of three compounds, including a large temple compound with an altar built into the platform (Table 1). A number of smaller statues (< 1 m tall/long) representing animistic figures are distributed throughout the complex; some are integrated into the stone facades of the walls and platforms, others flank the compound entryways. Statues include painted figures and composite figures with an unbaked clay appliqué for their finer surface details. Like the statues in the upper temple complex, these statues represent clan symbols, and other animistic as well as anthropomorphic forms that have received mention in the oral histories. A canoe landing is located at river confluence and several large open paved areas are adjacent to the complex. The rock shelter with a painted ceiling is upriver from this complex, in the headwaters of the Menka tributary (Figure 6). Downriver there is a colossal stone face 3 m in breadth and over 2 m tall, carved into a breccia outcrop located at the entry point from a residential area (Figure 4, lower).

Architecturally, the lower temple complex contains two unique variations on the standard two-room compound structure. The actual temple/altar compound is a single-room structure with a multi-tiered platform with an altar built into the platform in the form of an inset shelf/table. The second variant is a three-room compound with two multi-tiered platforms, each occupying a single room. The final compound of this complex is a typical two-room compound structure; however, it is also the smallest of the three compounds with an entry in the southeast corner reached by way of a stairway from a downslope

pathway linking this compound with the altar compound to the west. A second entry connects the common room and platform room; it is paved with smoothed boulders, with small carved statues resting within the passage. The platform here is a single-tiered structure. Large trees occupy this structure, distorting the outer wall of the common room, and making it difficult to identify the overall outline of the structure.

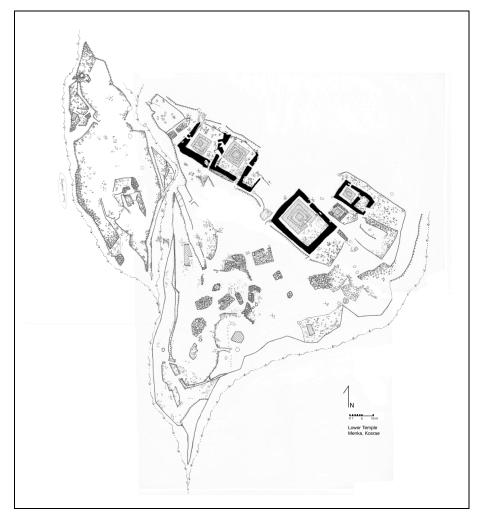


Figure 5: Map of the Lower Temple in Menka, Kosrae. Compound walls are outlines in solid black.



Figure 6: Two figures on the ceiling of the painted cave in Menka, Kosrae. The white figure in the middle is identified with Sinlaku, the Breadfruit Goddess; a red figure to the left is identified as one of the goddess's earthly mediators, a man with a topknot (Photo: Felicia Beardsley).

The three-room compound with the two multi-level platforms is entered through the common room by way of a four-stair passage from the stone path connecting the altar compound. Much of the common room has been damaged by pigs, which have uprooted much of the pavement and destroyed any defining walls in the north-eastern quadrant of this room. Another entry passes through the dividing wall between the common room and the first platform room. The dividing wall between the two platform rooms also contains an entry. This second platform room (the third room of the compound) also has entry in its south-eastern corner reached by a staired passage from the river side of the compound, as well as a third entry in its north-western corner; the third entry leads to a statue area and kitchen/workshop area. All entries are flanked by larger boulders and have a red stone sill or pavement inside the entries between rooms. The red stone is significant, as mentioned in the oral histories; red is identified with cleansing or neutralizing powerful negative spiritual energy (Sarfert 1919). This entire compound was covered in vegetation, with wall collapse covering many of the entry passages.



Figure 7: The Lower Temple mound showing the altar in Menka, Kosrae (Photo: Felicia Beardsley).

Finally, the altar compound, the single-room compound, retains a multilevel platform with an altar built into the eastern face of the platform (Figure 7). The altar is inset into the platform, with a step of a smoothed flat boulder and a ledge, shelf or table-like structure at roughly waist height defined by a single columnar basalt fragment on each side. To the north of the altar, in the north-eastern of the platform, there is a large depression flanked by standing stones. The depression is too large for a posthole, and has been interpreted as the foundation for a wooden pillar or possible statue. The platform is placed on a raised pavement of basalt cobbles and boulders with Yapese corners of extended columnar basalt fragments angled outward like the prow of a boat (Beardsley 2004; Figure 8). Two entryways are located in the northern wall of the compound; one is connected to the raised pavement by a paved walkway. Each entry is flanked by larger boulders and carved stone statues, each less than 1 m tall. A large banyan tree occupies much of the unpaved portion of the compound interior, and has grown into the platform itself, raising the prospect that the structure could collapse should there be an attempt to remove the banyan. The line of sight to Mt. Finkol is blocked by vegetation and the ridgeline that divides Menka River from its tributary.



Figure 8. Yapanese corner (Photo: Felicia Beardsley).

Construction methods for the compounds in the lower temple complex mimic those found across the island. However, here, basalt boulders are more precisely fitted together, although the builders still used interstitial fills of cobbles and pebbles. Columnar basalt was recruited for use in designing the Yapese corners of the raised platform in the altar compound. Rooms were larger, platforms had multiple tiers and generally covered a greater area, and smaller stone figures were built into the defining compound walls and platforms. These smaller figures are identified as *inuts*, or small guardian figures that act as watchdogs and place curses on trespassers (Sarfert 1919). All compounds are linked by stone pathways and intervening pavements.

Comparison of the two sites

While each temple complex has similar features and use comparable construction methods that consist primarily of mortarless, roughly fitted to semi-fitted methods on basalt boulders with interstitial fills of cobbles and pebbles, their arrangement and placement in the landscape differ. The upper temple complex has all the earmarks of an early site in terms of compound size and construction, the use of larger (> 1 m) statues carved into identifiable forms (likely clan symbols), and a clear

association with oral histories (colonnaded pathway, direct line-of-sight to Mt. Finkol) similar in many ways as other archaeological sites referenced in oral histories, such as Likinlulem. The upper temple is also more compact in its arrangement, creating a higher degree of privacy with little room for publically observed performance-related rites. Freestanding, carved megalithic stone heads stand at two principal entry points to this temple complex—one from a residential area further upslope and a second at the immediate entry into the site.

Table 1. Compound Room and Platform Size at Menka

Compound	Exterior			Room 1			Platform Room			Platform		
	L	W	A	L	W	A	L	W	A	L	W	Α
Upper	11.0	7.0	77.0	2.8	4.0	11.2	4.6	4.0	18.4	3.0	2.6	7.8
Lower, altar	23.9	17.7	423.03				18.4	12.9	237.36	11.6	10.5	121.8
Lower,2-	16.5	9.7	160.05	5.3	7.2	38.16	7.5	6.7	50.25	4.5	3.7	16.65
room												
Lower,3-	38.0	18.3	695.4	4.3	14.2	61.06	14.3	13.4	191.62	12.8	8.6	110.08
roomrm 1												
rm 2							8.8	14.2	124.96	7.2	6.3	45.36
-Average												
Areas-												
Upper			77.0			11.2			18.4			7.8
Lower, all			426.16			49.61			152.04			73.47

(L)ength and (W)idth measured in meters; (A)rea is in square meters.

The lower temple complex, by contrast is larger, more expansive, more elaborate and refined in terms of its architecture, and seems to lack the direct association with oral history details that appear in the upper temple. The presence of expansive open, paved swaths of adjoining ground, more complicated architecture (Yapese corners, multi-tiered platforms, red stone sills), smaller statues (< 1m) but more complex with composite structures that make use of unfired clay for finer surface

details, and a canoe landing suggest a more complicated and sophisticated construction with a greater level of grandeur and impressiveness, evoking the feeling of a staging area for a performance. Compounds are larger, and exhibit a style of construction comparable to somewhat later archaeological sites, including the latter phases of the site of Leluh. In short, within the confines of the site of Menka, there are architectural styles that bridge the gap between both early and later archaeological sites, from Likinlulem to Leluh, from the upper to the lower temple complexes respectively.

A painted cave is upriver from the lower temple complex, but there is no indication that it is directly associated with the lower temple. The cave rests on the opposite side of the river valley, roughly in-line with the upper temple and Mt. Finkol.

STONE STATUES AND MEGALITHIC HEADS

The presence of stone statues, especially monumental stone statues, and other carved figures of symbolic, anthropomorphic or animistic reference in the archaeological record of Micronesia was once thought to be restricted to the islands of the west and those outside the region. There, a rich history of figurative and symbolic art sculpted in stone and wood can be found (Hisaktsu 1995; Byrne 2005; Lilley 2006; Rainbird 2007), with the apogee of megalithic symbol-laden statues found on Rapa Nui/Easter Island (Van Tilburg 1994; Shepardson 2005). But in eastern Micronesia, the only imagery of symbolic allusion has historically referenced a small field of petroglyphs on the island of Pohnpei (Rainbird and Wilson 2002), even though the volcanic islands of this area are well-known for their mastery of stone masonry and extensive stone architecture, as exemplified by Nan Madol and Leluh (Athens 1995; Rainbird 2004).

The first recognition of stone statues and other three-dimensional art in eastern Micronesia came in 2006, with the excavation of Finol Tokosra on Kosrae (Beardsley 2008). There, a sophisticated stone working industry focused on the production of an array of figures was already well-developed by AD 650 (Beardsley 2007). Figures vary in size from 2 cm to nearly 1 m in length and embody clan-like symbols of manta rays, turtles and eels as well as anthropomorphic heads and even a torus-like figure reminiscent of Yapese stone money. All figures are skilfully carved, highly polished and symmetrical; most are basalt, with

at least two carved and incised pebbles of an exotic non-local stone; some retain traces of red paint; and a few are masked with an unbaked clay appliqué incised with detailed surface designs (e.g., fish scales, hair)—these latter were recovered from a burial dating toward the end of site occupation, between AD 1400 and 1600, during the Leluh era. All figures are effectively portable, so that the occurrence of stone statues of monumental proportions locked into a landscape were neither sought nor identified nor even imagined. Finol Tokosra was an anomaly in the archaeological record, at least initially, as no other stone carvings of any size had been documented on Kosrae or anywhere else in eastern Micronesia. But since it was documented, more statues and stone carvings are being recognized in archaeological sites on the island.

Between 2010 and 2013, three colossal stone statues were identified and documented in the interior of Kosrae (Figure 4 illustrates two of these megalithic heads). All three statues are in the shape of a head only, and exhibit shallow highly weathered features pecked and ground into 1) freestanding basalt boulders and 2) a breccia bedrock outcrop. Two are located at the access point to the upper and lower temple complexes in Menka, and the third is located in direct association with the upper temple. The heads reflect a high degree of craft specialization and are integral to an architectural arrangement designed to reinforce the visual narrative of the sacerdotal function of Menka (Sarfert 1919).

All three megalithic heads appear to be men as each displays a topknot, the symbol associated with a traditional man of standing and status (Ritter and Ritter 1982). The topknot not only indicates gender, but provides just enough specificity of appearance to signal a conventionalized portrait of an iconic authority figure. One freestanding basalt head has two faces and is fully carved with a symmetrical wraparound composition. It is 2 m tall, 1.5 m wide and 2 m deep from front to back. Each face displays a topknot, a well-formed nose, mouth and chin, eyes detailed down to the pattern of their irises, and remnants of white paint. The rear, upslope face has a diamond pattern cut into the forehead. On each side of the head there is an additional elaboration, perhaps part of a headdress, hairstyle, or ear. The head once stood on a paved platform at the top of a shallow ravine that separates a residential area from the upper temple complex; the head has since slid downslope and rolled forward. The second head, also a free-standing boulder, rests at the immediate entrance to the upper temple complex. It has a face pecked into the surface facing upslope, toward the pathway leading to the first free-standing boulder head and its associated residential area. It is 1.5 m tall, 1 m wide and 1m deep. The third head is pecked, carved and ground into a breccia bedrock outcrop exposed in the steep wall of the river channel at a point that marks an entry to the lower temple. It consists of two well-carved eyes, a nose, and a topknot. There is some indication of white paint on the side of the face. Overall, it is 3 m wide from cheek to cheek, 2 m tall and 1.5 m front to back. A small paved platform extends from the tip of the nose to the riverbank, a distance of 1.5 m.

Additional figures identified throughout both temple complexes reference the clan-like symbols documented earlier in Finol Tokosra, as well as male heads with topknots.

CONCLUDING COMMENTS

The presence of the megalithic stone heads, the symbol-laden stone figures distributed between the two compounds, the painted cave, colonnaded pathways, features described in oral histories, and the variations on traditional architectural structures together reinforce the powerful message that Menka was a site where the production of a religious narrative and ideological behaviour imposed by an ancient belief system were orchestrated. If, however, one were to view the single compound in the upper temple complex by itself, without the benefit of its surrounding features, it could easily be dismissed as just another simple, small and insignificant site. But, when the surrounding features are incorporated into that view, the image changes and in its place is a site transformed: here is a site with an architectural complex that inspires, that exhibits the trappings of a place of special significance, that integrates the imagery from oral histories, and becomes a place of rituals conducted in the shadow of Mt. Finkol, itself a place of legend.

The same can be said of the lower temple, although here the architecture is extensive, it is expansive and part of a larger complex that is publically more impressive, and dramatic in its landscape setting. The variations in the architectural structures alone raise the question of site function, and even hint at the possibility that this was a special site. When the accompanying features are added, there is no question that

this is a site of significance, one where events appear to be staged with an air of heightened theatricality permeating the site.

From an overall perspective, the shift from the upper to lower temples reflects the same transition from early to later architectural traditions that is visible across the island; the shift also appears to be one that moves from more localised, possibly tapu rites to those performed in a more open, public forum. Also visible in the features of the upper to lower temples is the decrease in statue size, but with a concomitant increase in the use of composite materials in the creation of greater surface details (on the clay applique), as well as an increase in size of megalithic carvings, progressing from smaller freestanding carved heads to the use of a cliff-face as the canvas for carving even larger stone heads/faces. In short, Menka is the one archaeological site on Kosrae that retains in one place the full complement of architectural styles, from early to later, visible across the full range of historical sites on the island. It is also the only site on the island that is associated with a painted cave, lending credence to the connection with the ancient religion and dedication to the goddess Sinlaku. Most importantly, this is the one site that supports the only archaeological complexes that suggest the orchestration of rites associated with the complement of features representative of temples and temple architecture.

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