## "The Pleasure of Speculation and Conjecture:" Early Euro-American Visions of Nan Madol and their Relevance to PostModern Archaeological Investigations

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Abstract—Using contemporary post-modern ethnographic discourse as a yard stick, this paper examines the conceptual limitations of early Euro-American descriptions ("visions") of Nan Madol and the ways in which they reflect the context of their times.

Among the foreign ships that reached Pohnpei with increasing frequency in the 1830s was the British cutter *Lambton* which arrived at the island in January, 1836. During the course of the *Lambton*'s initial stay, the ship's surgeon, a Dr. Campbell, composed one of the earliest extended accounts of life on Pohnpei, then known to the larger world as "Ascension." As would many who followed, Campbell noted the majestic beauty of the island, the quality of its harbors, the fertility of its soil, and the bounty of marine life in its surrounding waters. Campbell described the people as friendly, intelligent, physically attractive, and fearless, though suffering from a listlessness caused by a superstitious belief in island spirits. They also, thought the observer, knew precious little about their island's past (Campbell 1836).

In his journeys about the island, Campbell found particularly fascinating an extensive complex of stone ruins that lay immediately off the southeastern coast of the island (Fig. 1). The site consisted of numerous artificial islets built upon coral fill and enclosed by large faceted columns of basalt rock. Campbell thought the ruins boasted "an antiquity as great as that of the Pyramids." Language barriers combined with culturally prescribed silence on matters of sacred knowledge thwarted his efforts to gain more information about the site. A frustrated Campbell (1836: 136) proclaimed the Pohnpeians ignorant of all traditions concerning, "the work of a race of men far surpassing the present generation, over whose memory many ages have rolled, and whose history oblivion has shaded forever, whose greatness and whose power can only now be traced from the scattered remains of the structures they have reared, which now wave with evergreens over the ashes of their departed glory, leaving to posterity the pleasure of speculation and conjecture."

Campbell's account was not the first written description of the stone ruins. Writing for the New South Wales Literary, Political and Commercial Advertiser in February 1836, John Lhotsky, citing information from a Mr. Ong who had resided for several months on Pohnpei, reported on the ruins of a town "now only accessible by boats, the waves reaching to the steps of the houses." Lhotsky (or Ong) erred in his estimates on the location and size of the complex; he placed the site at the northeast end of the island where, he wrote, it extended over an area approximately two and a half miles in length. Many later visitors to the island compounded the errors made by Campbell and Lhotsky about the complex of

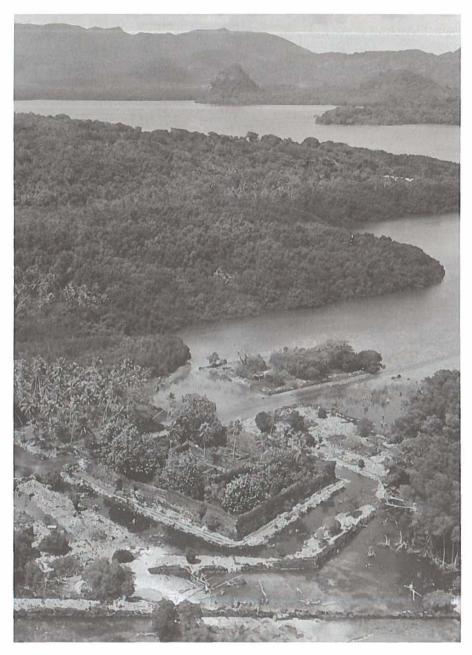


Figure 1. An aerial overview of the northwest section of the Nan Madol ruins. Photo courtesy of Dr. J. Stephen Athens.

artificial islets the Pohnpeians called *Nan Madol* (Athens 1981, Chapman 1964). The result has been more than a century of "speculation and conjecture" by foreigners about *Nan Madol* and the larger Pohnpeian past, marked by inaccuracies, distortion, inappropriate analogies, and outright bias.

The language used to describe Nan Madol by nineteenth and early twentieth century observers ranged from the sensational to the near-scientific. Early voyagers used adjectives like "awesome," "remarkable," "massive," "mysterious," "ghostly," and "stupendous" to characterize the site. Later accounts employed the words "Cyclopean" and "megalithic." The analogies inspired by Nan Madol also varied. Some saw a "deserted Venice" or a "fortified town" with well-laid out "streets" while others wrote of haunted castles, sacred altars, deadly cold dungeons, and abandoned courts. Comparisons were made with the ancient ruins of Egypt, Mexico, Stonehenge, and the Andes. Efforts to determine the site's exact dimensions led to some rather inexact specifications. James F. O'Connell, an escaped convict from a British prison ship who resided on the island for an indeterminate period of time before departing on 27 November 1833 aboard the trading vessel Spy, placed Nan Madol on Pohnpei proper (O'Connell 1972). Three separate visits to the ruins in March 1895 did not prevent the British anthropologist F. W. Christian from calculating the area of the entire Nan Madol complex to be eleven square miles (Christian 1899a) when, in fact, it covers approximately 0.2 of a square mile. Japanese researchers in this century, despite visiting the site themselves, accepted Christian's figure (Muranushi 1932, Koyama 1932). Indeed, the error was repeated as late as 1962 (Brandt 1962).

The scientific vocabulary of spatial configurations defined *Nan Madol* in new and different ways. Observers described *Nan Madol*'s structures in terms of lines, angles, prisms, and geometric shapes. One missionary visitor (Clark 1852) saw *Nan Madol*'s islets as parallelograms while another noted the polyhedral features of the columnar basalt that formed the foundations and walls of the different islets (Gulick 1857b). Early cartographers of *Nan Madol* such as John Thomas Gulick, Johann Stanislas Kubary, Frederick J. Moss, and the previously cited F. W. Christian all drew neat linear diagrams that depicted *Nan Madol* as a collection of intersecting lines and quadrangular figures. Later attempts at more exact representations of *Nan Madol* produced somewhat different, more nearly perfect forms. Western instruments of measurement such as the compass, the tape measure, and measuring rods gave neatness, precision, regularity, balance, and symmetry to *Nan Madol*'s rough shapes.

Aware of the dilemma, Paul Hambruch, who worked at *Nan Madol* in 1910 under the sponsorship of the German Südsee Expedition, admitted that the stone enclosures were neither as perfectly straight nor as regular as they appeared in his drawings (Hambruch 1936 III: 12). In short, *Nan Madol* had been measured by Westerners in ways that belied its actual layout and design. Perhaps, it was the perceived immensity of *Nan Madol* that caused these nineteenth and early twentieth century observers to overestimate its true dimensions. Perhaps, too, the need to render familiar a strange complex of megalithic ruins led to these simplified representations. Bernard Smith (1985) has noted that the depiction of the exotic in terms of familiar categories of reference was one way Europeans sought to understand and thus dominate the Pacific. What intrigued most early commentators on *Nan Madol*, however, was not its size but the identity and origins of its builders.

From his brief informal survey of Nan Madol that included hurried diggings at Nan

Dauwas, the most prominent of the islets, O'Connell commented that the skills needed to plan and construct such a site lay far beyond the capacities of the island's living population. He thus concluded that the remains were left by a "people far superior to the present inhabitants" (O'Connell 1972). As had Campbell, O'Connell consigned Nan Madol's past to the realm of conjecture and speculation, using those very words. A series of captions that accompanied an 1840 drawing of the central vault at Nan Dauwas reported the discovery of a gold crucifix and a silver-handled dirk (Ward 1967). Based on these findings, the unknown composer of the captions surmised that the entire complex appeared to be of Spanish origin. Andrew Cheyne, a Scottish trader who made three separate visits to Pohnpei between 1842 and 1844, thought Nan Madol to be the work of Spanish buccaneers who had reached the island some two or three centuries earlier (Cheyne 1852). Karl Scherzer, an officer aboard the Austrian naval frigate Novara which anchored at Pohnpei on 16 September 1858, seconded Cheyne's assessment. The Austrian naval officer added that Nan Madol's past could best be uncovered not through the "naive imagination of the natives" but by the investigations of learned travelers (Hambruch 1932 I: 167-68).

Concern over the origins and identity of Nan Madol's builders was not confined to various voyagers, visitors, beachcombers, and ships' officers. Nan Madol attracted the attention of professional inquirers who sought to reconcile Nan Madol with then current theories of natural history and human migrations. From the accounts of O'Connell and from interviews with individuals who had resided on Pohnpei at length, Horatio Hale, the philologist with the United States Exploring Expedition that traversed the Pacific from 1838 to 1842, believed that *Nan Mudol* had once rested upon solid ground, before time, wind, and sea had taken their erosive toll (Hale 1968). Hale felt that Nan Madol provided evidence to support Darwin's general theory on the subsidence of islands; indeed, Darwin himself had mentioned the site in his treatise on the formation of coral atolls (Darwin 1851). Hale also thought he detected linguistic clues as to the identity of Nan Madol's builders. He noted several accounts in which Pohnpeians, when asked directly who had constructed Nan Madol, replied with the words "hani" or "animan" meaning ghosts or spirits. He took these replies to be an oblique reference to ancestral spirits; he thus concluded that Nan Madol was built by the ancestors of nineteenth century Pohnpeians (Hale 1968).

The American Protestant missionary Luther H. Gulick shared Hale's theory. A member of the first group of missionaries sponsored by the Congregational Church's missionary arm, the American Board of Commissioners for Foreign Missions (ABCFM), Gulick had a scholarly bent to which he gave expression during his seven years of work on the island from 1852 to 1859. The Honolulu-born physician and missionary provided extensive descriptions of Pohnpeian history, language and culture. He too was fascinated by Nan Madol. In an article on the ruins, Gulick (1857b) took exception to the widely accepted notion that Nan Madol was the product of a separate, distinct and earlier race of people. Gulick called attention to an extensive body of local traditions concerning the site, the continuing use of several islets for religious ceremonies, and the stone-working capabilities of the present population all as powerful evidence that strongly suggested Nan Madol had been built by the ancestors of the Pohnpeians. Until the end of the century, Gulick, along with Hale, would stand alone in this conviction.

Later practitioners of nineteenth century Western science used seemingly more sophisticated techniques to reach somewhat different conclusions. From a comparative study of skull sizes carried out in 1874, Johann Stanislas Kubary decided that *Nan Madol*'s architects were members of a distinct black race; the island's present inhabitants, argued the Polish naturalist, were a mongrel people (Kubary 1874). Based upon his own investigations of the site, Kubary rejected the idea that *Nan Madol* offered proof of island subsidence. The evidence, he insisted, showed clearly that *Nan Madol* consisted of artifically constructed islets intentionally built upon water and linked by a system of canals designed and crafted by human hands.

Concern over the identity of 'Nan Madol's builders often involved more than idle, harmless musings. Underneath the seemingly innocent ruminations lay harsher, more judgmental sentiments that absolved Euro-American exploitation by damning the supposed shortcomings of modern Pohnpeians. Whalers and traders stopped at the island with considerable frequency during the middle decades of the nineteenth century. Frustrated in their pursuit of profits by an island society that did not lend itself easily to commercial enterprise, these foreign groups vented their bitterness by using the issue of Nan Madol's builders to demean contemporary Pohnpeians. During the course of an 1843 cruise, Captain Isaac B. Hussey of the whaleship Potomac lamented the violence often employed to counter the pilfering of the savages of the Caroline Islands. He went on; "And yet how else are we to prevent the annoyance and seizure of our property? We cannot reason with them, nor can we punish them according to any civilized form of law" (Macy 1877: 234-35). These words served as introduction for Hussey's comments about a far superior race of people who had built Nan Madol "with a knowledge of arts and of mechanical powers far beyond the capacity of the present owners of the soil." John Mahlman, a very frustrated employee of the Pacific Trading Company on Pohnpei that collapsed in 1870, declared, "... as the present race on Ponape is altogether incompetent to perfect or even undertake such an extraordinary piece of work, we may be sure that the builders of those forts were of a superior race" (Mahlman 1918: 54). Noting what appeared to be Chinese characters engraved on a boulder lying partially submerged among the network of channels and the Japanese-like physiognomy of the Pohnpeians themselves, Mahlmann hinted at an Asian homeland for the builders of Nan Madol.

Williams Fish Williams, who visited the island as a boy aboard his family's whaleship Florence in 1874, thought the ruins of Nan Madol were the work of a lost party of Inca voyagers from South America (Williams 1964). He claimed that the present inhabitants of the island, having never had to work a day in their lives for anything, were soft and indolent; they most certainly were not the descendants of the people who had constructed Nan Madol. C. F. Wood, a trader out of Auckland, New Zealand, was depressed by the general state of affairs on the island and the poor prospects for trade. He wrote in 1875 that the astounding ruins of Nan Madol were all that remained of an amazing people who had long since disappeared from the face of the island (Wood 1875).

More scientific inquiries suffered from differently motivated biases. In many ways, Christian's 1895 work constituted the most extensive investigation of *Nan Madol* to be carried out in the nineteenth century. In three separate visits to the ruins during March 1895, he surveyed the entire site, made maps and took photographs of the islets of *Nan Dauwas* and *Pahn Kadira*, and conducted excavations of several tombs on *Nan Dauwas* 

that yielded a rich collection of bead and shell burial goods (Christian 1899a). Unlike any researcher before him, Christian supplemented his description of *Nan Madol* with lengthy accounts of Pohnpeian traditions concerning the history of the site. The Britisher also provided general descriptions of Pohnpeian language, material culture, and social organization.

Despite his scientific posture, Christian's ideas reflected the late nineteenth century's essentially racial—often racist—approach to issues involving the origins and migrations of Pacific peoples. Christian held Pohnpei's settlement to be the result of separate waves of migration, most of which had swept outward and eastward from the Malay archipelago beginning some one thousand years ago (Christian 1899). He described Pohnpeians as a branch of a widely dispersed Malay family that linked the inhabitants of the Carolines with the people of Formosa (Taiwan), Borneo, the Philippines, and the Marianas. On Pohnpei, these different migratory waves had resulted in an intermingling of different races which explained the variety of racial types on the island that ranged from a primitive Negroid strain to Malayo-Polynesian and even Mongoloid physical features. These Mongoloid features were the result of a party of migrants from Japan who had swept down into Pohnpei from the northwest. The upward sweep of the junction of the northern and western walls of *Nan Dauwas* provided further evidence, believed Christian, of the Japanese influence.

Like Kubary, Christian believed the construction of *Nan Madol* to have been initiated by a black race that had eventually declined and become lost in the extensive racial intermingling that had taken place on Pohnpei. This centuries-old pattern of racial mixing had diluted the ingenuity and talents that *Nan Madol*'s builders had brought to the island. Christian saw contemporary Pohnpeians and indeed all Caroline Islanders as a "strange, apathetic folk, with all of the Malay naivete, and, alas! some of the Malay treachery—in a word, endowed with all the strange power and strength and the equally strange weaknesses and limitations of the Malay" (Christian 1899b: 288).

International political considerations added to the mix of prejudices that affected the speculation and conjecture surrounding *Nan Madol*. Felipe Maria de la Corte y Ruano Calderon, governor of the Spanish Marianas from 1855 to 1866, never visited *Nan Madol*, Pohnpei, or any of the Eastern Caroline Islands. In 1875, however, Corte proclaimed that a casual examination of the history of Spanish exploration in Micronesia led to the inevitable conclusion that the ruins of *Nan Madol*, if not built, were at least used by Spanish pirates during the sixteenth and seventeenth centuries (Corte y Ruano Calderon 1875). Corte wrote at a time when German and British commercial and shipping interests were beginning to challenge Spanish claims to Micronesia. Spain based its territorial claim on the right of initial discovery. The former governor contended that *Nan Madol*, as an artifact of an earlier Spanish presence in the area, offered tangible evidence in support of Spain's right to governing authority over the island and waters of Micronesia. Anacleto Cabeza Pereiro, a military physician on the island in 1890 when violent Pohnpeian resistance had neutralized the Spanish colonial administration, also attributed the construction of *Nan Madol* to Spanish pirates (Cabeza Pereiro 1895).

Spaniards were not the only ones to use *Nan Madol* as support for their presence in the Pacific. American Protestant missionaries to Pohnpei also saw justification for their cause in the ruins of *Nan Madol*. Though acknowledging Pohnpeians' ancestors to be the

builders of *Nan Madol*, Luther H. Gulick's thinking also carried a strong rationale for the missionary cause. Gulick saw nineteenth century Pohnpeians as poor imitations of their more vigorous, capable forefathers. The missionary (1944: 20) wrote, "It is hardly just to decide upon the full power of the native mind from the generation now on stage, so greatly has it been deteriorated from contact with the civilized world during the now nearly thirty years."

The fact that Pohnpeians had once possessed the energy, drive and ingenuity to construct Nan Madol only served to attest to the magnitude of their decline as a result of contact with the outside world. The cavernous chasm of degeneration and decline that separated the builders of Nan Madol from their descendants gave ample proof of the great need for Christ's message. Conversion to Christianity was seen as necessary, desirable and mandated by the will of God; it could not save the Pohnpeians, however. Protestant missionaries working on the island in the latter half of the nineteenth century considered the extinction of the Pohnpeian race to be inevitable (Hanlon 1988). Like Nan Madol, the island was expected soon to become a silent, deserted place that would attest to the wrath of God against an essentially dark, heathenish and unrepentant people.

Nan Madol also sustained unabashed advocates of nineteenth century European imperialism in the Pacific such as British Admiral Cyprian Bridge. In attendance at a talk given by Christian at the Royal Geographical Society in London on 12 December 1898, Bridge, in the discussion that followed, voiced his reservations about the contentions of some that the ancestors of the Pohnpeians had built Nan Madol (Christian 1899c). From his own travels through the Caroline Islands as commander of the HMS Espiegele some twenty-five years earlier, the now retired Admiral remembered the Pohnpeians as a degraded race whose surviving capabilities showed not a trace of the talents required to build the megalithic structures of Nan Madol. Instead, reasoned Bridge, the ruins of Nan Madol attested to a larger truth that offered the white man reassurance against challenges to the just and benevolent character of imperial expansion. Bridge (Christian 1899c: 132) stated, "It appears likely, then, that these great ruins were built by a race entirely passed away; which had not only diminished but disappeared long before any white man visited the islands; and, it is comforting to think that the diminution and approaching disappearance of the present Pacific races is in no way attributable to us, but was probably going on long before we appeared on the scene. The builders of these ruins, like the mound-builders in the Mississippi Valley, or Yucatan, and Central America . . . have disappeared quite independently of contact with any white peoples."

In an earlier forum, Bridge had termed the British colonial presence in the Pacific a mutually desirable, beneficial development for both Europeans and islanders (Christian 1899a). He also emphasized the benefits to Europe that could be derived from study of Pacific peoples. His words bestowed an imperialist blessing on all future scholarly investigations into the Pacific.

Christian's account of his personal experiences on Pohnpei also revealed an imperialist arrogance. His efforts at a more thorough investigation of *Nan Madol* were frustrated by what he perceived to be Pohnpeians' incorrigible laziness, their childlike superstitious nature, and their penchant for chicanery, intrigue, and deceit. Christian's efforts were hindered also by the Nahnmwarki of Madolenihmw, the paramount chief of the area in which *Nan Madol* is located. Disturbed by reports of defiling activities among the sacred ruins

within his domain, the Nahnmwarki ordered Christian to desist from any further work at *Nan Madol*. Christian thought the source of the Nahnmwarki's objection stemmed from a failure to appreciate the importance of his work at *Nan Madol* to the general study of humankind. Ordered to appear before the Nahnmwarki at nearby Temwen, Christian failed to convince the Pohnpeian chief of the overriding significance of his scientific efforts. Christian could not contain his contempt. The frustrated, embittered scientist, convinced of the superiority of his methods and objectives, asked an attendant sitting near the Nahnmwarki to deliver the following message (Christian 1899a: 105), "Tell your king there that I will return in a year or two and bring with me a party of Irishmen with picks and spades and lamps and muskets, and we will dig where we please. By and by, you will understand white men better."

For those seeking to justify the dispossession of indigenous peoples, *Nan Madol* could indict the past as well as the present. Frederick J. Moss, a member of the New Zealand parliament who made a tour of the islands of the South Pacific in 1886, came from a land once called Aotearoa and inhabited by a people known as the Maori. The last vestiges of Maori resistance to Pakeha (Western) conquest had ended five years prior to the start of Moss' tour. Maori society did not impress Moss, and neither did *Nan Madol*. He considered the stonework crude: "no civilized people," he wrote, "could have wasted time and labor in raising such a structure" (Moss 1899: 196). Moss believed *Nan Madol* had been built by some powerful savage chief of a long-dead race as a testament to his own glory and to the power of his gods. Based on his one-day visit to the ruins, Moss considered a month's investigation sufficient to solve the riddle posed to the civilized world by *Nan Madol*. For Moss, the Pacific past amounted to little more than a dark memory. Primitive structures such as *Nan Madol* survived as a reminder of the barbarity of those times. Institutions of civilized government would direct, forcefully if necessary, the present toward a more enlightened, productive and Christian future.

Practitioners of a more professional, systematic science of inquiry also had their limitations. Though he spent only twelve days at the site in May, 1910, Paul Hambruch completed an extremely accurate scale drawing of the entire complex, gathered a considerable body of Pohnpeian traditions on *Nan Madol*, and carried out excavations on *Nan Dauwas* during which he recovered a variety of shell, bone and stone artifacts (Hambruch 1936). Considerations of religion and nationality, however, distorted Hambruch's view of the history of *Nan Madol*. The German ethnographer attributed the abandonment of the site to the profaning activities of American Protestant missionaries when, in fact, there existed evidence available to him that indicated *Nan Madol* had been uninhabited for at least two decades prior to the arrival of the missionaries (Hambruch 1914).

Despite their limitations, the more disciplined inquiries of Kubary, Christian and Hambruch were building toward a more thorough, cautious, scientific and locally focused understanding of *Nan Madol*. J. Macmillan Brown's writings on *Nan Madol*, however, marked a step decidedly outside of that developing pattern. Known for his rather grandiose and fanciful ideas about Polynesian migrations, Brown was fascinated by *Nan Madol* and the questions that it raised for Oceanic prehistory (Brown 1927). Visiting the site sometime during the first years of the second decade of the twentieth century, Brown found *Nan Madol* more impressive than the megalithic ruins of Peru. Grand migrations, empire building and island subsidence were all part of Brown's vision of *Nan Madol*'s

past (Athens 1981). Racial considerations also figured prominently in his theories. The spatial distribution of the islets, the nature of the artifacts recovered, the relative isolation of the site in the western central Pacific, and the sparsity of the population both on Pohnpei and in the wider Micronesian geographical area all led Brown to conclude that Nan Madol was the work of a Polynesian conqueror whose initial constructions were inundated by rising seas but later salvaged and elaborated upon in megalithic style by an influx of Japanese migrants. These Asian people then developed an extended Oceanic empire that endured for several centuries before declining and finally succumbing to the assaults of local Pohnpeians. With information gained from only the briefest of surveys, Brown was able to force Nan Madol into his grand scheme regarding the origins and migrations of Pacific people.

At first glance, the earliest descriptions of *Nan Madol* seem a collection of sensational travelers' tales, self-serving accounts by missionaries and colonial apologists, and inaccurate scientific treatises. But when seen in a larger context, they reveal *Nan Madol* as something more than a complex of ruins about which outsiders have innocently mused. In a sense, Euro-Americans appropriated *Nan Madol* to serve as a powerful symbol that justified their presence in the Pacific and their domination of its people. This symbolic use of *Nan Madol* has continued well into this century.

In 1936, Willard Price, as had so many before him, used *Nan Madol* to reflect on the characteristics and capabilities of different races. Price, a white American, held *Nan Madol* to be the work of a black race that had ruled the island from its off-shore stone fortress. A brown race, the Pohnpeians, lived on the soil of the main island but were not of that soil. The yellow race planted and grew their crops in the island's soil; these people from Asia took root on Pohnpei and other South Sea islands as no other race before them had ever done. Only the militarism of Japan's leaders prevented the Caucasian world from endorsing this otherwise welcome and necessary development of the islands (Price 1944). For Price, then, the ruins of *Nan Madol* provided a valuable reference point against which three of the world's races could be measured.

Lt. Commander Walter Karig, an official with the United States Naval Administration that governed Micronesia in the years following the conclusion of World War II, also concerned himself with the issue of development. Karig's task was to help bring a seemingly backward, primitive people into the post-war world; he too read contemporary lessons in the ruins of *Nan Madol*. Karig declared the builders of *Nan Madol* to be not only expert stonemasons but accomplished engineers as well; they knew the principles of the wedge, the inclined plane and the greased pulley (Karig 1948). Their skills rivaled those of the great pyramid builders in northern Africa and Central and South America. Modern-day Pohnpeians, commented Karig, knew nothing of such ingenious aids to muscle power. Thus, they were most sorely in need of the protection, social development and material betterment that the American administration would now provide.

Other less political though highly ethnocentric stereotypes have survived to this day. The term "Venice of the Pacific" is a Euro-American metaphor for *Nan Madol* that has remained constant since Westerners first encountered it. There exist, too, more popular interpretations of *Nan Madol* that stress the occult and the extraterrestrial (DeCamp & DeCamp 1964, Merritt 1919, Morrill 1970, von Daniken 1967). Though highly sensational, these accounts do reflect less prominent though equally revealing aspects of the

Euro-American world view. Indeed, at a broader level, what links past and present descriptions of *Nan Madol* is historical context. Modern archaeologists working at *Nan Madol* on Pohnpei, and elsewhere in Micronesia, will have to consider the implications of *Nan Madol*'s more recent history as an appropriated symbol of Euro-American domination. This is not to suggest that modern archaeological investigations in Micronesia are as exploitative or as grossly self-serving as those accounts examined to this point in the paper. There do abound, however, serious questions currently being asked of those who write on the cultures of others. These are questions generated by ethnographers that concern historians of both the near past and the more distant past (Clifford & Marcus 1986).

Commentators on developments in the general field of anthropology have frequently cited archaeology's long history of reaction to ethnography (Flannery 1967). Many ethnologists are currently grappling with the ramifications of a definition of culture that holds culture to be a composition of seriously contested codes and representations in which the poetic and the political are inseparable and in which science is not above but included in larger historical and linguistic processes (Clifford 1986). Ethnographies are analyzed against the determining set of social codes, conventions and experiences that inform the ethnographer's encounter with a culture other than his or her own. Ethnographic renderings of other cultures are regarded as, at best, partial rather than complete; as interpretive rather than real, objective, or descriptive. There is a call for a specification of discourse in which the ethnographer is asked to identify not only his research problem but himself, his audience, his purposes, and the social and institutional constraints under which he works. The political implications of ethnographic scholarship do not escape challenge. Ethnography's "posture of authority," to use George Marcus' phrase, is now regarded by many as ultimately promoting the hegemony of the capitalist world (Marcus 1986: 186). The contexts within which the ethnographer operates are thus seen as shaping his or her study in powerful and particular ways.

Archaeology's claim to be a science might constitute its first line of response to the kinds of issues being raised by "post-modern" ethnography. Many practitioners of the discipline would argue that archaeology is a science by right of its logical relation to the "hard" sciences, by right of the status of prediction in archaeological reasoning, and by right of its ability to originate new laws about human and social change through inferences derived from the testing of hypotheses concerning change, development or evolution (Watson 1978). Indeed, much of what has been written over the last twenty-five years on the epistemology of archaeology has concerned itself with the definition and directions of archaeology as a science (Dunnell 1982).

Sensitive to questions about meaning and interpretation, some analysts have argued for a symbolic approach (Hodder 1982a, 1982b, 1986). However, archaeology as a science, whether it be deductive and nomothetic, structural, symbolic, contextual or Marxist, will not satisfy the current reservations about the politics of writing culture or the histories of culture. Science may not be an archaic mode of thought as Stephen Tyler (1986) insists, but science, as it has been developed and practiced in the Euro-American world, is certainly a relative approach to knowledge. Thomas Kuhn, in *The Structure of Scientific Revolutions* (1962), recognized this. Kuhn described science as a social activity in which scientific theories develop from intellectual constructs imposed upon, not demanded by, data. Expanding upon Kuhn's thought, Stephen Jay Gould (1987) has noted

that scientific advancement is brought about not by empirical discoveries but by the application of metaphors, analogies, imagination, and personal philosophies.

If science is in a sense relative, it is also culturally contexted. Science, in essence, is the Euro-American world's way of attempting to know, understand and impose order on the cognitive planet. The discipline of archaeology is embedded in a post-modern world in which descriptions of cultures, by their very nature, are seen as interpretive, contexted, and limited. And, for archaeology, as for history, the dilemma is compounded by the fact that the temporal arena is not the present where a dialogue with the living is possible but the distant past.

Greg Dening (1980) has reflected on the problems involved in reconstructing the past of non-literate societies. In his work on the Marquesas, Dening writes of a once vibrant, now silent, land whose inhabitants have been dispossessed not only of their land, language and culture but of their sense of history as well. Material artifacts and early ethnographic descriptions are all that remain of a past whose study is now dominated by alien researchers. There is no historical moment, argues the University of Melbourne scholar, in which *Te Enata*, or the people of the Marquesas, have independence. Their existence in history is, for the most part, dependent on the words written down by intruders. Marquesan culture is only a series of disjointed memories, disemboweled, changed and remade by the dissection, examination and abstraction of Western scholarly disciplines. Fragments of the Marquesan past are now to be found in foreign places such as libraries, museums, and galleries; they lie frozen outside of time and the eccentricities of the culture that produced them.

Archaeologists certainly have shown themselves aware of the difficulties described by Dening and others. Lewis R. Binford (1986) has written recently of the received knowledge and conceptual tools that may misdirect archaeological investigations. Binford acknowledges that archaeologists, like all other scholars, cannot know reality in terms of itself but only through cognitive and explanatory devices that are culturally determined. Nonetheless, Binford concludes that archaeologists must ultimately concern themselves with the building of theory appropriate to a world of experience guided by scientifically rooted learning strategies. The prize to be gained from such an effort is an understanding of the macroforces that condition and modify lifeways in contexts unappreciated by the participants of the complex thermodynamic systems under study (Binford 1986).

Within Binford's reasoning rests the paradox of the larger discipline of modern anthropology. Anthropology is a science which seeks to overcome ethnocentric distortion; yet it is an approach to the understanding of others rooted entirely within Euro-American history, culture and tradition. As a particular category of Euro-American scientific inquiry, anthropology is culturally contexted. In light of this paradox and of the more general issues concerning history, science and culture, the question is how much better understood is Nan Madol today? Recent archaeological investigations into Nan Madol have certainly moved beyond the presumptions, ignorance, racism, self-justification, exploitation and factual errors of earlier accounts. But there still exists the need to consider the culturally determined ways in which late twentieth century researchers seek to know other peoples from other times.

In the last decade and a half, archaeologists working on Pohnpei have paid particular attention to general hypotheses concerning initial settlement, socio-political development,

and status differentiation (Athens 1980, 1983, 1984, Ayres 1983, Ayres et al. 1983, Bath 1984, Saxe et al. 1980). The discovery of pottery sherds estimated to be between twelve and fifteen hundred years old, when combined with existing linguistic theory and archaeological data from elsewhere in eastern Micronesia, suggests that Pohnpei was initially settled from areas to the east and south (Craib 1983). From this same evidence, there has also been developed a five-phase division of Pohnpei's past (Ayres & Haun 1980). At the center of this temporal sequence is Nan Madol. Phase I, from B.C. 1500-1000 to 1 A.D., consists of a period of initial settlement and adaptive integration with increasing inland occupation. A second or expanisionist phase, marked by the spread of settlements and the centralization of political control at Nan Madol, is said to have endured from A.D.1 to 1500. Phase III, associated with the decline of Nan Madol and its eventual conquest by the legendary Pohnpeian hero Isohkelekel, is placed between A.D. 1500 and 1826. What is termed the early historic or protohistoric period is identified as Phase IV: it lasted from A.D. 1826 to 1885. Phase V or the historic period begins in A.D. 1885 with the establishment of formal colonial rule. Analysis of house platforms, tomb architecture, and residential complexes at Nan Madol and elsewhere on the island suggest increasing status differentiation over time (Athens 1980, Ayres 1983, Ayres & Haun 1980, Ayres et al. 1983, Bath 1984).

An evaluation of the accuracy of modern archaeological interpretations of Pohnpei's past is beyond the competency of this reviewer; yet, there are questions that can be raised about the appropriateness of the theories, issues, and research problems seen in recent works. Dening (1980) has written that descriptions of other peoples need to be phrased in terms of their own metaphors; to dispossess a people of their own references of understanding is a reductionism that cannot be tolerated. Whether or not Pohnpeians view their past in terms of sequential periods and of issues such as political centralization, status differentiation and the development of complex chiefly systems is an important question yet to be fully addressed by professional researchers. The assumption of some archaeologists that Pohnpeians do conceive of their past in terms of these periods and issues runs the risk of reductionism mentioned by Dening.

The dominance of Nan Madol in interpretations of Pohnpei's larger past is another critical concern. While archaeologists have extended their investigations to such areas as Awak, Wene, Pehleng, Sapwtakai, and And Atoll, Nan Madol remains the focal point. Indeed, there is a strong evolutionary bias in much of the more recent archaeological literature that equates Nan Madol with the assumed progressive development of political centralization on the island. Such a position ignores the foreign identity of Nan Madol's founders and the complexity of indigenous forms of social organization that predated and survived the inhabitation of the islets.

There are the oral histories of *Nan Madol* to consider as well (Bernart 1978, Hadley unpub., Hambruch 1936). Pohnpeian accounts of *Nan Madol* speak of two men, Ohlosihpa and Ohlosopha, who reached Pohnpei with a large voyaging party from a land to the west called *Katau Peidi*. These accounts describe the two as wise and holy men who brought with them a "sacred ceremony." Having failed on four separate occasions to establish themselves at different locations around the island, the foreign party finally met success at Sounahleng, a small reef area just off the southeast coast of Pohnpei. With the assistance of gods and men, Ohlosihpa and Ohlosopha began to construct what was to become *Nan Madol*. Ultimately faced with the need for additional labor, Ohlosihpa and

Ohlosopha, their power and authority growing, coerced the people from other areas of the island to work on the project. The building of *Pahn Kadira*, the rulers' residence, symbolized the new order of the island. The people of Pohnpei built three of the four foundation corners for *Pahn Kadira*; a master stone cutter from *Katau Peidak*, or "Upwind Katau" in the east built the fourth. The meaning was that Pohnpei and the world to the east now lay under the authority of the people from *Katau Peidi* in the west.

As an ultimate testament to their dominance, the stranger-kings of Nan Madol renamed the different areas of the island. To the area immediately surrounding Nan Madol, they gave the name Deleur. Ohlosihpa having died, Ohlosopha became the first Saudeleur or "Master of Deleur." The east, west and north areas of the island received the names Malenkopwale, Kohpwaleng, and Pwapwalik, respectively (Hadley unpub.). Identified only as member of the Dipwilap or "Great Clan," the Saudeleurs remained apart. Distance bred mystery and intimidation. Local accounts suggest that Nan Madol's off-shore location and the megalithic character of its architecture attested to the alien, dominating nature of its inhabitants. Nothing grew in the coral rubble that formed the floors of the islets; tribute, in the form of food brought from the island, fed the Saudeleur. The rise of Nan Madol gave order to a contentious land but it was an order born of domination.

Pohnpeian histories (Bernart 1977, Hadley unpub., Hambruch 1936) of the Saudeleur period tell of the people's sufferings under the increasing cruelty of this line of foreign rulers. The ruling Saudeleur controlled all areas of human activity; so total was this dominance that, during the reign of Sakon Mwehi, a single louse found on a person's body had to be carried straight away to Nan Madol. The ruler of Nan Madol was said to be omniscient as well as omnipotent. At a magical pool called Peirot on the island of Peikapw, the Saudeleurs could view all events taking place on Pohnpei and beyond; no human activity escaped their notice. And their cannibalism could be real as well as metaphoric; one ruler, Raipwinloko, had an intense passion for the taste of human flesh. Defiance of the Saudeleurs' rule eventually arose. Later accounts, with their reference to the dissatisfaction of indigenous gods and spirits, foreshadow the fall of Nan Madol to the Pohnpeian hero Isohkelekel.

Such a cursory survey of Nan Madol's past does not begin to do justice to the extensive and complex nature of the Pohnpeian sources. Outside researchers need to more thoroughly consider these important local histories for the valuable clues they hold regarding Nan Madol's past and Pohnpeians' understanding of it. Many important questions persist concerning the identity of Nan Madol's residents, the nature of activities there, and its relationship with the rest of the island. The archaeological record indicates that the construction of megalithic architecture at the Nan Madol site began approximately in the thirteenth century and probably continued for several centuries (Athens & Hanlon unpub.). Occupation of the artificial islets ended sometime before the third decade of the nineteenth century. If the rulers of Nan Madol, as Pohnpeian accounts indicate, did achieve dominance over the island, that dominance still awaits definition. Some, e.g., Athens & Hanlon (unpub.), suggest that Nan Madol is better understood as a center of religious power and ritual that exerted considerable influence over the life of the island. Fivehundred years is a long time. It is likely that Nan Madol's relationship to the rest of the island changed in character over centuries. The challenge for researchers then is to view Nan Madol as a part of Pohnpei's larger past rather than as its focus.

In any examination of Nan Madol, modern archaeologists must confront the cultur-

ally determined nature of their discipline and their reasons for studying Nan Madol. They need to understand the rhetorical, institutional, generic and political contexts within which they carry out their investigations. The fact, for example, that almost all archaeological work conducted on the island since World War II has been carried out by Americans is not an accident. How the colonial and neo-colonial contexts of Pohnpei's post-war years have affected archaeological investigations is a topic that should be given careful consideration. There are also serious questions about the relevance and accessibility of modern archaeological findings to Pohnpeians themselves.

As most Pohnpeian and non-Pohnpeian observers have noted, there is much that will never be known about *Nan Madol*. In this light, one of the more fruitful areas of future research might be a consideration of *Nan Madol* not as ruins but as a living symbol that cautions modern-day Pohnpeians against the twin evils of centralization and foreign domination. *Nan Madol* may also represent a continuity with larger historical patterns that include cultural borrowing and creative adaptation. What will prevent Western research into *Nan Madol* from becoming fruitless exercises in self-absorption or imperialist science is a consideration of local conceptions and interpretations of the site. Pohnpeians are neither silent about nor dispossessed of their past. Like the good Dr. Campbell whose work was cited at the beginning of this paper, modern archaeologists, anthropologists and historians may have to resort at times to speculation and conjecture about *Nan Madol*'s past, but it should be a sensitive speculation and conjecture informed by the direct descendants of the people who have made that past. This is a point that most nineteenth and many twentieth century commentators on *Nan Madol* have not conceded.

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