

AUSTRONESIAN CULTURAL HERITAGE

Historic Preservation and Archaeological Conservation in the Western Pacific

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Abstract

The idea of shared cultural heritage is significant today for many who speak languages of the widely-dispersed Austronesian language family and who are bearers of a set of related island cultures found extensively in Southeast Asia and the Pacific Islands. Shared heritage is an emerging issue throughout the region from Taiwan to Rapa Nui (and even Madagascar to the west), and from Hawai'i to New Zealand. In this paper, cultural heritage is considered in relation to 'historic' or 'heritage' preservation and archaeological conservation. Historic preservation includes a set of concepts related to conservation of materials from the past and their interlinked interpretations that we value today and selectively re-use. Since the 1970s, archaeological work done in the chains of small islands representing Micronesia in the west central Pacific has been adding to our understanding of the origins and adaptations of early Austronesian colonisers beginning some 3,000-4,000 years ago; it has also provided training in historic preservation at the local level. Illustrations, primarily from Pohnpei, Federated States of Micronesia, reflect some of the developments in historic preservation in that area.

Key Words

Historic preservation, island archaeology, archaeological heritage, Austronesians, Micronesia, Pohnpei

I. Historic Preservation and Austronesian Cultural Heritage Issues

The concept of cultural heritage is important today for many people who recognise that they speak languages of the widely-dispersed Austronesian language family. They are bearers of a set of related, usually island cultures found extensively in Southeast Asia and the Pacific Islands, and they maintain traditions that reflect language and cultural connections over a vast area of the world, from Taiwan to Madagascar to Rapa Nui (Easter Island) and from Hawai'i to New Zealand (Bellwood, 2009). The issue of common heritage is of interest as well to a wide range of other individuals and organisations, including those engaged in 'historic' or 'heritage' preservation. Oceania, the Pacific Islands area of the Austronesian world of greatest interest for this paper, is significant for discussions of the politics of heritage and historic preservation because it is a place where political action, social identities, and ethnicities interconnect in old (traditional) and in new (transnational) ways. A training project in Micronesia provides an

illustration of the connections between archaeology, oral history and historic documents, all relevant for discussing cultural heritage.

Cultural heritage might be generally understood as a concept but its meaning becomes less clear when we take into consideration the broad range of 'historic' or 'heritage' preservation efforts and interlinked archaeological conservation. These diverse concepts are pertinent for any discussion of cultural heritage for the people who speak any of the more than 1,200 Austronesian languages, who also form the distinct groups making up the Austronesian cultural entity. Understanding the methods of historic (or heritage) preservation and archaeological (site) conservation is essential because—beyond the basic conservation concerns—it is these processes through which new information about the past can be acquired and made relevant to communities today. There is much to be learned about cultural heritage by archaeologically studying the remains of the past (we could include even human memory in this category) and, because much of this information is in forms that are easily lost, vigilance and action are required. The importance hinges on the idea that the past, including the archaeological past, is important for knowing not only where we came from, but also where we will go.

Historic preservation includes a set of concepts related to conservation of materials and places from the past and their connected ideas that we value today and selectively re-use (Ayres, 2006). The 'historic' reference applies to things known to us not only from the viewpoint of written documentation (the most specific meaning) but any remains or evidence reflecting earlier human culture. The use of the phrase developed primarily after the 1950s in the US, in discussions about conserving or protecting the past; it had a strong chronological orientation and, initially at least, was concerned primarily with preservation of buildings and other architectural remains. Even today, historic preservation is often thought of in terms of preserving historic buildings but it also has much broader significance and extensive archaeological and anthropological applications. Outside of the US, the term 'heritage preservation' is typically used instead of 'historic preservation'. Both kinds of preservation were practiced sporadically in the 19th Century, but did not become widely discussed or applied until the mid-to-late 20th Century. The facet of historic preservation referred to as 'cultural resource management' developed in the US in the 1960s and reflects the idea that the past and its markers—archaeological sites in particular—represent a resource to be managed in the same way natural resources are (see, for example, King et al, 1977; Hardesty and Little, 2000).

A topic widely discussed today is the cultural impact of modernity and its global effect on cultural (and linguistic) survival. Questions that come up with regard to such wide-ranging impacts concern the significance of historic preservation or heritage conservation for cultural survival. Will the conservation of the physical remains and the knowledge that is considered essential for cultural maintenance allow for the survival of indigenous cultures? Opinions are split but some writers believe that it will not, and even should not, in favor of greater cultural integration (see Appiah, 2005). Another perspective on the issue of how archaeology is related to cultural conservation is from Olivier (2011), who claims that archaeology does not study the past directly, but rather studies material culture existing in the present, and that it deals with memory recorded in matter, not with events or moments from the past. Still, the material culture that exists in the present holds the key to that incorporated memory and because historic preservation and the supporting archaeological evidence rely fundamentally on material culture, it will continue to be critical to how these questions are answered. Rethinking

the past and its inter-relationships with the present is a continual cultural process. In the Pacific area, such discussions of the past carried on into the present day provide a forum for recognising the islanders' prerogative of considering as an important resource such things as the status and value of people who form a community. Archaeological sites represent communities from the distant past and, in contrast to some views that archaeology is antithetical to contemporary oral traditions about the past, both should be viewed as complementary ways of looking at earlier islander lifeways. However, as Lilley et al (2012: 40) have rightly noted, "the limits of 'translatability' of archaeological objectives and findings compared to local conceptions of history" are great and still being explored.

In sum, archaeological discussions of the past contribute to Austronesian, or here more specifically Oceanic, peoples striving to imagine their futures; they also provide a global perspective on the development of human culture. This viewpoint is important for a professional, scientific assessment of archaeological evidence, as well as for the contemporary use of information about the past.

Some Key Components

Four key components of historic or heritage preservation help define the scope of interest here:

1) **Sites.** With regard to sites—that is, archaeological locations—land use related to a place is the main conservation issue. There are also conservation needs relevant for materials from each place. Sites, artifacts, and related evidence make up, in a complex way, the archaeological record (see, for example, Falgout, 1987; Tsang, 2000; Thomas, 2004; Mijares, 2007; Bellwood, 2009).

2) **Artifacts.** As site-specific collections of past material culture, these represent one of the most important aspects of archaeological conservation. In the absence of definite site associations, these specimens can be considered a museum curatorial conservation issue.

3) **Documentary data.** Conservation of documentary evidence for historic preservation (such as written texts and photos) may be accomplished in a variety of different ways. The main concern, however, is that the documentation be maintained or developed relative to specific sites or at least areas (see Hanlon, 1988, 1989).

4) **Oral Traditions.** Oral traditions passed on from generation to generation and which often have historical components are important for heritage conservation. The traditions may be general or specific; held by only a select number of individuals or understood by nearly everyone in a community; in the form of standardised oral traditions or in the form of informal ideas held by individuals sharing a culture (see, for example, Bernart, 1977; Hisakatsu, 1997; Olsudong et al, 2004; Nero, 2011). Individual memories, which I consider here to include personal memories of life in a particular area (such as an archaeologically known settlement), form one dimension of this information.

Archaeological conservation is concerned most directly with sites and artifacts. From this standpoint, sites are seen as many-faceted places that are multi-dimensional, in that they include information about material and non-material representations of cultural beliefs and values. Thus, there are diverse reasons for which they are significant places for heritage conservation. A strong case can be made that material culture represents the primary data source in cultural conservation because of its durability, its documentation of great time depth and its representation of many aspects of human behavior in both general and specific ways. For example, one view is that material culture, through cultural landscapes, can effectively objectify ideology because it can make what is patently cultural appear as if it were natural (eg Derry, 2000: 15). Hicks and Beaudry argue that, "recent thinking in archaeology and historical anthropology provides a basis for retaining the coherence of the idea of material culture studies by understanding things, and also the knowledge that is generated by studying them, as events and effects" (2010: 5). Some merge this under a general concept of 'materialisation'.

II. Why Austronesian Cultural Heritage Is Significant

While it is useful to consider commonalities of cultural traditions throughout the Austronesian area as they reflect or affect heritage conservation, it must be kept in mind that there is not one cultural frame for Austronesians (see, for example, Bellwood et al, 1995). There are a number of specific characteristics that re-appear as important in many heritage and archaeological contexts but these are not uniformly encountered throughout the Austronesian area. Those cross-cultural features that are associated with Austronesian cultural frameworks are important, when these can be identified, because they provide a pattern of broader connections among the diverse peoples today who speak Austronesian languages (Blundell, 2011). The resurgence of traditional Formosan dance culture in Taiwan (Anderson, 2000; Hipwell, 2007), long-distance voyaging in Polynesia, and elaboration and re-invention of outrigger canoes in the Marshall Islands or in Kiribati within Micronesia (Whincup, 2007); are recent examples of this overarching revitalisation. Austronesian cultural heritage is unusually important for questions of human migration and adaptation, as well as for understanding the distinct conceptions of the past represented by the linguistically distinct migrant groups, because Austronesians have been involved in one of the world's most geographically extensive dispersals into varied landforms, especially islands.

This raises issues about islands as distinct places from the standpoint of cultural heritage and historic preservation. Of interest are questions of different relationships between islands and cultural heritage and its management. Do islands have varying kinds or degrees of cultural heritage? The answer is yes, and they do with regard to the sometimes more narrow concerns of historic preservation, as well. Islands pose specific challenges and opportunities for heritage management and the issuer mirrors debates about the distinctiveness of 'island archaeology' (see Rainbird, 1999, 2007; Broodbank, 2006; and Fitzpatrick et al, 2007). Each island is unique in this regard but some general patterns emerge. One challenge is that, in small islands, conservation of site areas is often problematic because of the limited land, as well as because of the concentration of significant places and sites on coastal strips that have been, to this day, heavily occupied. Gaining consensus is another potential issue, as most Pacific Islands have highly divided territorial entities and land-holding groups. A third concern for island-wide planning is that concepts of heritage can often become very localised and

fragmented along kinship lines. Also, having sufficient on-island infrastructure to manage site conservation and heritage issues is an ongoing complication in most Pacific Islands. Increasingly, island participants in, or practitioners of, historic preservation are comparing notes with representatives of other governments to recognise aspects of heritage that represent shared interests.

One key element of shared heritage, especially in Remote Oceania, is based on the use of recognisably related Austronesian languages but beyond that, various island cultural traditions provide further connections. In Remote Oceania, this is due in general to the relatively recent dispersal of island migrants, mostly within the last 3,000 years. Examples of material-related cultural practices include food production, especially root crop cultivation; canoe design and technology allowing for inter-island communication; household architecture and use; and ritual architecture, including burial structures and features. These cases highlight both conceptual and material conservation issues with regard to heritage. Other typical features of an island cultural heritage include concepts related to, not surprisingly, origins of islands as land masses (geological and mythical); human settlement or contacts via migrations and inter-island sailing (see Maurico, 1987); maritime issues; coastal land use; places of significance for past ritual activity, such as tombs or temples; and colonial administration remnants.

Components of heritage and its conservation from the standpoint of historic preservation programs, then, include sites, artifacts, documentary data, and oral traditions. Cultural landscapes can provide an overarching connector for these four components. Islands have distinct kinds of cultural heritage and they consequently have distinct archaeological sites in structure and content because of the nature of island and coastal resources, methods of establishing ritual places, and compactness. While island sites, such as house foundations and midden deposits, are often found more globally, it is their incorporation into broader cultural landscapes that makes them distinctly insular in character (eg Burley, 1993). Especially for historically known periods, oral history makes landscapes understandable and establishes their significance for purposes of cultural heritage conservation.

III. Archaeology and Historic Preservation in the Austronesian Context

Some of the early archaeological and conservation studies for Austronesian heritage documentation were undertaken in Southeast Asia and the Pacific Islands beginning in the 19th Century. These were conducted in colonial Indonesia by Dutch archaeologists, in Taiwan by Japanese researchers from the end of the 19th Century and in Vietnam by French archaeologists (eg at Chamic sites in southern Vietnam). Elsewhere in the Austronesian area, archaeology, and historic preservation concerns in particular, did not develop typically until later in the 20th Century. Much has been accomplished since, including a rapidly escalating scale of investigation during the last few decades. Now, across the Austronesian sphere from Taiwan to Rapa Nui, historic preservation efforts and concern for shared heritage are intensifying both locally and internationally. Awareness of things that are different, yet valued, in other Austronesian contexts broadens the scope of what is relevant for assessment in historic preservation. The interplay of ideas about cultural heritage that is not held in common, yet associated with the Austronesian tradition, may encourage greater attention to conservation of archaeological and other aspects of traditional heritage.

Early Austronesian language divergence occurring in Southeast Asian island groups, such as the Philippines, Taiwan and Indonesia, took place where non-Austronesian languages represented the older founding populations - ones that were later replaced by Austronesian speakers. This is in contrast to Remote Oceanic regions such as in Micronesia, where there was no human presence prior to the arrival of the Austronesians (Figure 1). The greater time depth for Austronesians in the western Pacific and Southeast Asia complicates issues of heritage and broadens the range of stakeholders. In addition, in some island groups, such as islands within Micronesia, colonial languages such as Spanish, for example, have been in use as part of a different, historic, non-Austronesian presence for more than 400 years. This also heightens the complexity of representing cultural heritage through the archaeological record (see Skowronek, 1998).

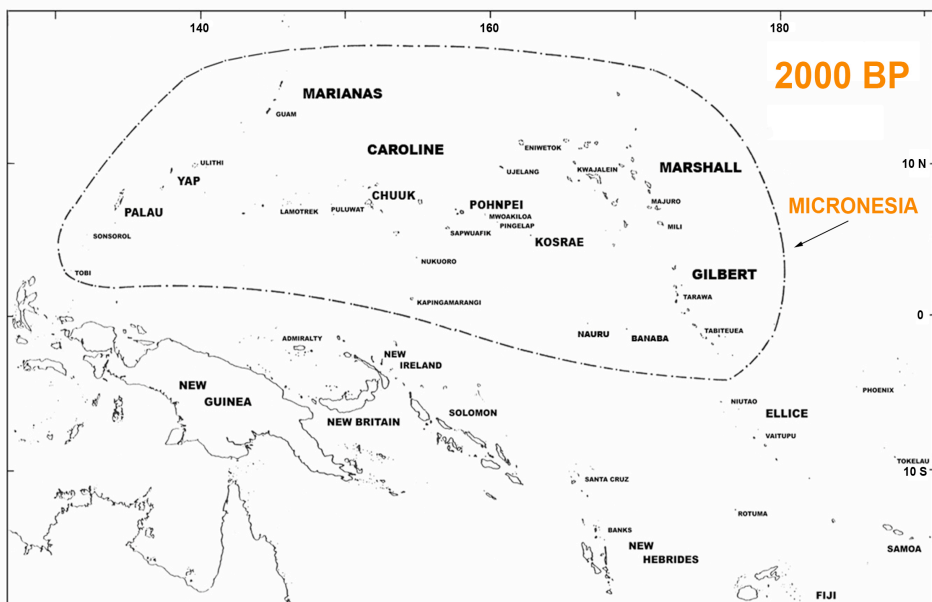


Figure 1. - Map of the Micronesia area showing islands that were colonised or exploited for resources by at least 2,000 years ago. 'Micronesia' is included within the larger area identified as Remote Oceania (drafting: W.S. Ayres).

IV. Historic Preservation in Micronesia, the Western Pacific

Since especially the mid-1970s, archaeological work done in the chains of small islands representing Micronesia, in the west central Pacific, has been contributing to our understanding of the origins and adaptations of the early Austronesian colonisers. Much of this effort has been sponsored by the US National Park Service's Historic Preservation Program, and so it fosters a particularly North American perspective about heritage conservation, although it has evolved to include perspectives from Japan and Australia. The following examples, primarily from Pohnpei, Federated States of Micronesia, reflect some of the developments in historic preservation and understanding of cultural heritage (Figure 2).

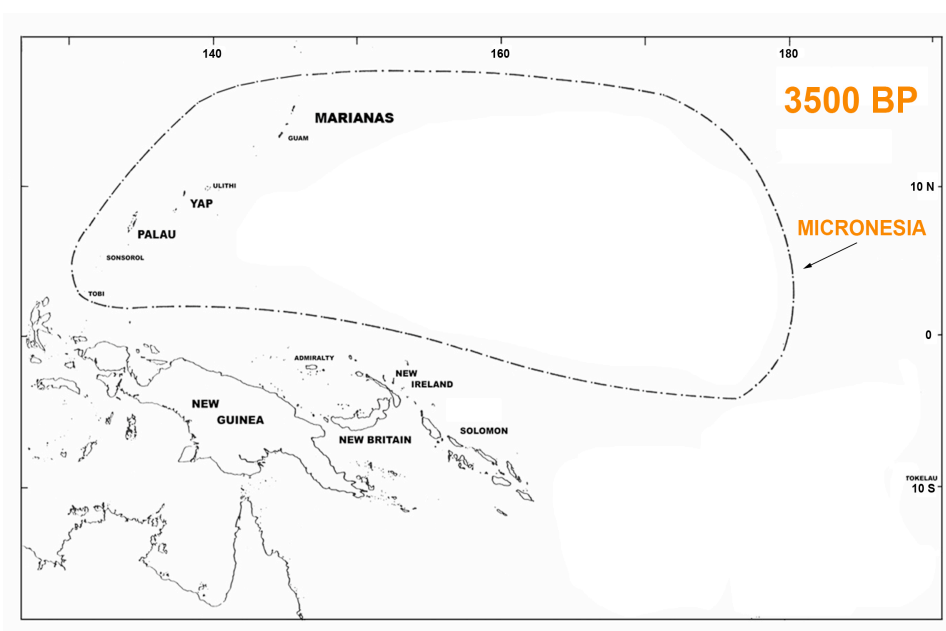
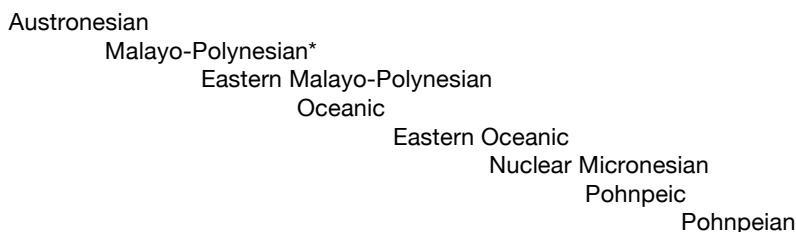


Figure 2 - A hypothetical map of the Micronesian and Western Pacific area as known approximately 3,500 years ago (drafting: W.S. Ayres). The string of islands forming the western fringe of later 'Micronesia' might be referred to as 'Ancestral Western Micronesia'. Other islands to the east had not emerged from a late-Holocene sea stand that kept coral atolls as uninhabitable reefs until later, or if they existed as islands, they were unknown to Austronesian migrants at this time.

We might ask how Pohnpeians are related to other Austronesians in general and specifically with regard to cultural conservation and commonalities of heritage. Because we are discussing Austronesians, linguistic relationships provide a good place to start. The language, now called Pohnpeian (in the older literature, Ponapean), is spoken today by some 30,000 people on the island of Pohnpei (Ponape). Its relationships to the more distant Austronesian languages (including the Formosan languages in Taiwan) are shown in the following diagram:

Language relationships expressed as a tree (not all branching levels are represented):



*Almost all Formosan languages are related to M-P at this level

As can be seen, Pohnpeian is an Austronesian language that, as a lower branching level, became a distinct language probably only after the island was colonised some 2,500 years ago (Ayres, 1990). We find that the archaeological record of initial colonisation fits reasonably well with the dispersal of early Micronesian languages throughout these islands (see Rehg, 1995). In addition—in contrast to the situation described for island groups like the Philippines, Indonesia, Taiwan, and many parts of Melanesia—all archaeological remains prior to historic, Western contact in Pohnpei are those left by earlier Austronesians, a characteristic of the Pacific's 'Remote' Oceanic islands (Pawley and Green, 1973). The languages of the main western island groups, the Marianas and Palau, are branching at a higher level (Western Malayo-Polynesian), and they show a more distant connection to those in central-eastern Micronesia. I refer to these two island chains, probably excluding Yap, as 'Ancestral Western Micronesia.'

Training Projects in the Federated States of Micronesia

A significant aspect of contemporary historic preservation is setting up programs and training individuals to recognise cultural resources, to evaluate their significance with regard to conservation, and then to implement conservation policies. A basic element of historic preservation is therefore site documentation and the development of expertise at varying levels for managing such information. A closely linked aspect in most Austronesian areas is the maintenance of oral history or traditions. The preservation of sites, instigated locally, of artifacts and of interpretations of the past based on the archaeological records as well as oral traditions, is a valuable objective (Ayres, 2006). In Micronesia, one goal is to incorporate indigenous skills and ideas of conservation into short- and long-term planning and implementation (Ayres, 1990; Beardsley, 1996; Ayres et al, 1999; Ayres and Mauricio, 1999; Ayres and Eperiam, 2001; Ayres, 2003; see also Liston et al, 2011).

The basic purpose of these projects is to build field archaeology skills and the training to conduct site documentation for historic preservation requirements. Another purpose is to assess the results of non-staff researchers conducting archaeological and heritage projects in the islands. At the same time, these projects can create new archaeological data on Pacific Islands' prehistory that improves understanding of inter-island relationships and long-term culture change. Projects I have organised have had archaeology as a fundamental component but have also included linguistics and oral traditions. They have been undertaken in Micronesia (the Federated States of Micronesia and Palau) (Fitzpatrick and Kanai, 1997; Fitzpatrick, 2002), as well as Samoa and Rapa Nui in Polynesia. As noted in Ayres and Eperiam (2001), the projects have been designed to train government employees in the historic preservation program, as well as other individuals who can work at varying levels, ranging from clearing archaeological sites to mapping and interpreting site remains, collecting oral traditions, participating in excavations, and conducting other aspects of site assessment. Local landowners have typically participated in the training, and such involvement is critical for long-term conservation of archaeological sites, related oral traditions, and other cultural places. There remains a significant need for training in site records management, such as computer databases. A further complication is monitoring land development and infrastructure projects for purposes of issuing site conversation clearances.

Project Background and Recent Activities

The Micronesian projects have included fieldwork doing basic archaeological survey, defining sites, developing mapping skills and recording sites using a variety of techniques. The training has been based on the procedures developed by Pohnpeian archaeologist Rufino Mauricio and myself (Ayres and Mauricio, 1997, 1999) through extensive field archaeology on Pohnpei, including in the Salapwuk area, in Awak, Wene and Nan Madol (Figure 3). The Salapwuk project was conducted within the context of a Micronesian Resources Survey program funded by the US National Park Service. These training programs have also been supported by funding agencies such as by the Sasakawa Foundation (SPINF), Japan, and have been conducted principally in Micronesia. They have focused on transferring skills and updating technical expertise for government staff members who are responsible for recording cultural and historical resources. Team members have carried out training sessions with a group of participants doing field survey at the Nan Imwinsapw area of Sokehs, mapping at the Nan Madol site, and various site management projects at historic preservation offices. The work has concentrated on pre-contact or prehistoric sites but has also included sites created during the periods of colonial governments. Results have included setting up comprehensive on-line site databases and assisting with inter-governmental consultations among historic preservation representatives of states within the Federated States of Micronesia.

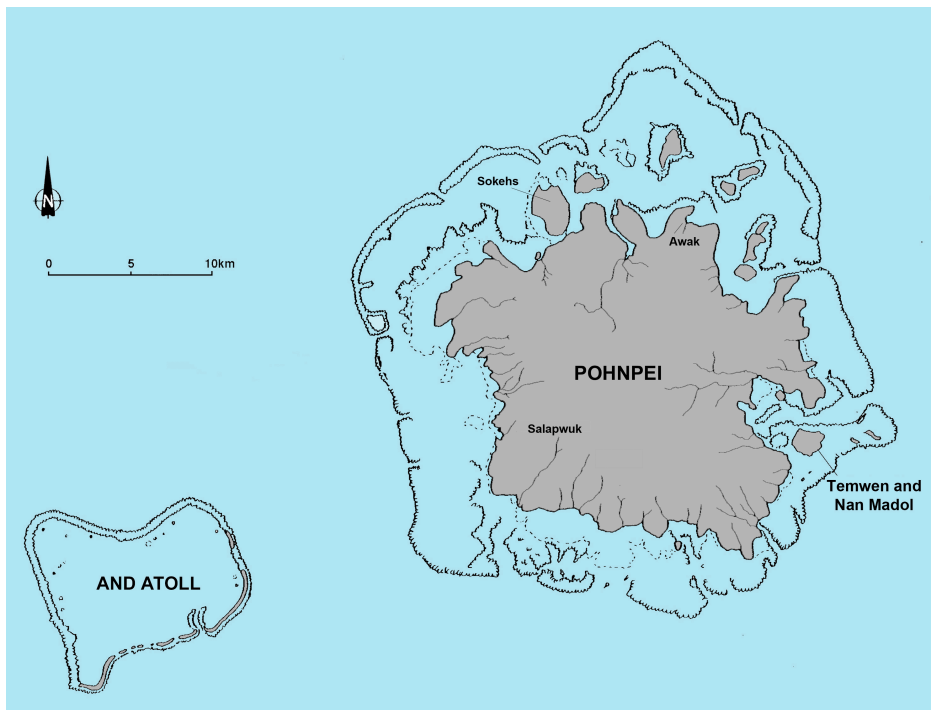


Figure 3 - Map of Pohnpei Island showing location of some key archaeological areas (drafting: W.S. Ayres).

Trainees studied field mapping at varying levels, conducted written and photographic site recording, and helped develop computer-based site inventory and map data. Site clearing, mapping, and documentation have been accomplished. We have reviewed how oral traditions can be integrated into historic preservation site inventories and have developed a new survey form for recording oral traditions.

As an island, Pohnpei has a distinctive archaeological record and insular cultural landscapes that can be described through indigenous terms as well as in those of non-islanders. The archaeological record is known in artifact types (including ones uniquely linked to social status marking, in part via the mass production and consumption of prestige goods); site types (tombs and ritual centers with culturally-specific patterning); the nature of stone construction itself (in addition to building with boulders, the extensive use of prismatic rock columns); and aspects of monumentality that include centralisation in the Nan Madol ritual complex. Artifacts for most islands are distinct because of limitations of natural resources for craft production; in Pohnpei, then, imported materials can be technologically and visually different as well. All of these are understood in archaeological terms, as well as in Pohnpeian terminology and concepts of relatedness. The landscape dimension comes into play in site distributions that contrast coastal and inland settlement foci; that show spatial configurations of center-periphery form at various scales, including politically-defined land divisions; and, especially from the indigenous perspective, ideas of coastal settlements, such as Nan Madol, and its deep-sea counterparts offshore, which are described in their oral traditions. Significant also is the interplay between archaeological perspectives on the functional inter-relatedness of tools and tool kits as well as islander concepts of their own material culture and its contemporary (or historic) social context.

As an example of training and field recording, we can look at the work done at sites on Pohnpei's north coast, specifically the Nan Imwinsapw site (PoS2-2) and Ipwal sites (PoS4-1), located on the shore of Sokehs island. The area is important because of the contrast it provides to better-known sites around the island, and training efforts and archaeological field recording were proposed here by the staff of the Pohnpei State Historic Preservation Office. The site complex has numerous stone features, such as house foundations, terraces, paved trails and ritual structures, as well as food refuse deposits and a cemetery, all representative of 'Traditional Pohnpeian' sites (Figure 4). The area preserves a number of historic-era sites as well, including a German circumferential roadway dating to the early 20th Century and numerous fortifications dating to the Japanese period (1914-1945) (Ayres et al, 1999; see also Denfeld, 1988).

The training projects have demonstrated that the multi-component Nan Imwinsapw site shows in microcosm many conservation issues for Pohnpei: the activities spanned the prehistoric period (probably more than 1,500 years ago); the era of early outside contact; the early historic colonial periods (Spanish, German, Japanese, US); and the events of the last few decades. This has meant that many differing aspects of site recording and site conservation can be studied at this single site complex. In addition, the complex multi-national character of heritage in this Austronesian context can be addressed.



Figure 4 - View of a stone architectural complex of terraces and house foundations at Dauen Kioak, Nan Imwinsapw, Sokehs. A meeting house foundation showing megalithic construction is preserved on the main platform at the left. (Photo: W. S. Ayres).

Trainees did mapping and surveying as well as test excavations in both prehistoric and historic sites; in this way, they learned something of archaeological data recovery and how to represent archaeological evidence in map and other formats. A basic concern was consideration of potential damage to the sites from development plans for road improvements and other construction, such as rock quarrying. The team cleared and mapped parts of 10 major traditional Pohnpeian architectural features, house foundations, sets of associated stone terrace walls, a water well, and connecting trails. As mentioned above, historic features included a section of the German road built about 1910 for transport around the island and Japanese fortification stonework, with trenches and gun emplacements.

Oral traditions and family and individual history related to the site included clan associations with the land, that is, the Souleti subclan of the Dipwinmen clan (*sou* or *dipw*). In addition, colonial history is reflected in family history through site features connecting the Sokehs area to a revolt taking place there in 1910-11 against German colonial rule. It is significant that relatively little oral history could be recorded about the pre-colonial settlement; some of this has to do with the exile of most of the former Pohnpeian residents after the revolt. A well-preserved meeting house (*nahs*), terraces, and elevated stone house foundations were linked to the pre-contact period by evidence from architecture, associated artifacts and spatial layout (Figure 5). Older burial structures were recorded at the shoreline. Based on family history, we know that the small meeting house was in use during the early 1900s, providing a connecting link between the German and Japanese colonial periods.



Figure 5 - Well-preserved late historic architecture in meeting house (*nahs*) style, Dauen Kioak, Nan Imwinsapw, Sokehs. (Traditional Pohnpeian; photo: W. S. Ayres).

Control of knowledge is critical for Micronesian social systems (Alkire, 1980) and Pohnpei is no exception. We encouraged local landowners to preserve personal and family histories related to places and sites within their land and to share these with the Historic Preservation Office staff to help maintain this information.

Other Training Locations:

The Nan Madol Site Complex

Since the 1970s, a significant element of training has been part of research activities at Nan Madol, which is a major site complex built up as artificial islands on Pohnpei's East coast coral reef flat. This training was through early work by Steven Athens (eg Athens, 1980) and, beginning at the same time, by Ayres and co-researchers (eg Ayres, 1990), who also incorporated staff and students from the College of Micronesia, Pohnpei, in some of these endeavors. The most recent field project was in 2011. Figure 6 shows a sample of the distinctive megalithic architecture at this site.



Figure 6. View of the north corner of Peinkitel tomb enclosure, Nan Madol, Pohnpei. This large enclosure has a wall made up of massive basalt columns in header-stretcher construction style typical of later prehistoric building at Nan Madol. This tomb figures prominently in oral traditions about Nan Madol's demise as the island's most important political and administrative centre on the island in the pre-contact period.

Major opportunities at Nan Madol for trainees have involved studying links between oral traditions and archaeological remains, including well-known chiefly associations of the highest status; making observations of well-preserved examples of the most elaborate ritual architecture on Pohnpei; examining the unusual preservation of a wide range of artifacts and food remains; and articulating concerns about conservation of the spiritual and sacredness of ritual sites. Also, a significant aspect of training in site documentation at Nan Madol has involved mapping surface details of the artificial islets forming the complex. A plan view of a corner of the large artificial islet of Pahndipap (PDI) provides an idea of the site recording in the form of map details (Figure 7). These maps are created at a scale of 1:100 and allow good depiction of complex architectural details such as features (platforms, canoe landings, house foundations, cook houses, and other structures) and earlier wall alignments, as well as artifact distributions on old islet surfaces. Remains on the surface of Pahndipap include a range of food remains, raw materials, environmental markers, and material culture; among the last are large numbers of potsherds. These are indicative of a time before approximately 800 years ago when pottery was regularly used on Pohnpei. The computer reconstruction of a ceramic bowl (Figure 8) helps make potsherds understandable as whole pots.

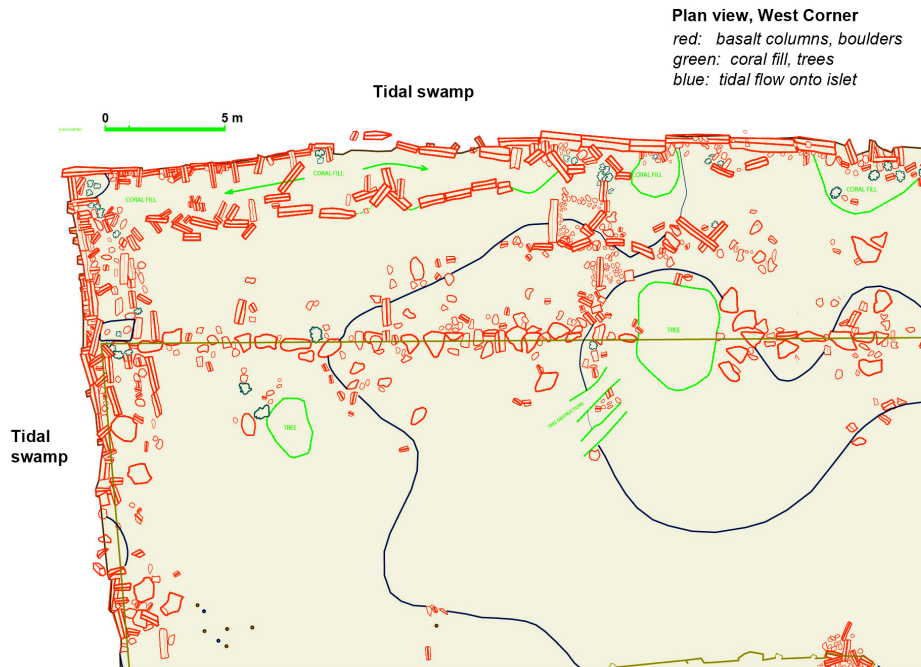


Figure 7- Architectural plan of Pahndipap Islet, Nan Madol, Pohnpei. This section of the SW corner of the artificial islet (45 x 55 m) shows construction of individual features and use of different stonework types. A partially buried boulder alignment shows an exterior wall of an earlier, smaller, Pahndipap Islet. (Drafting by W.S. Ayres).

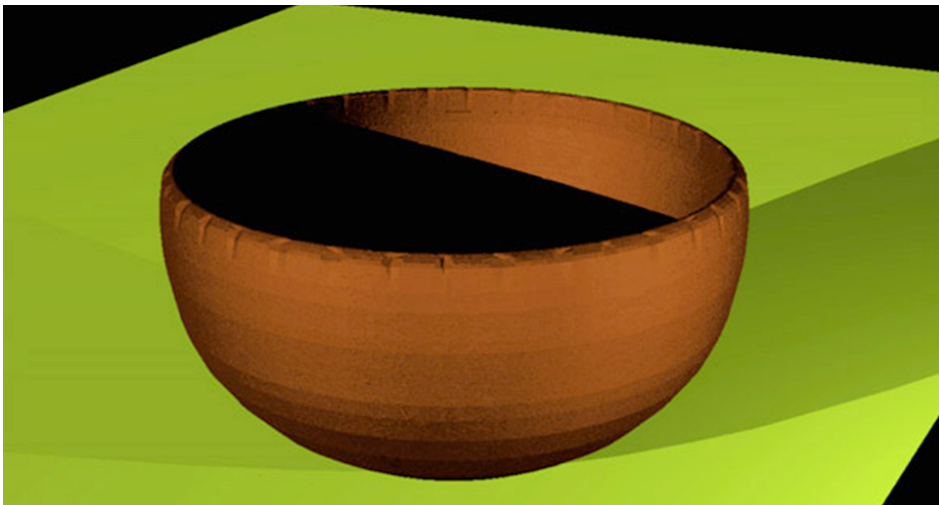


Figure 8 - Reconstruction of a ceramic bowl of the type used on Pohnpei prior to approximately 800 years ago (image: W.S. Ayres). This thin redware pottery is part of an early Austronesian technology that dispersed with migrants into the Pacific Islands.

Today, debates continue over the role of the national government in conserving and managing the Nan Madol site and how its historic and cultural values can be preserved in the face of increased visitor access, site deterioration, and natural transformation of the remains. All of these represent critical issues for long-term preservation of Nan Madol and other coastal sites throughout Pohnpei and Micronesia.

Mwoakilloa (Mokil)

Training projects have been conducted on Micronesian atolls, including my work on And (Ahnd) and Mwoakilloa. These atolls are both included within Pohnpei State. In addition to a range of site types typical of Eastern Caroline atolls, the common occurrence here of historic sites related to copra production and lagoon transport marks a special feature of atoll archaeology (Figure 9). In addition, there are village sites spanning more than 1,000 years and agricultural features indicative of the special Austronesian adaptation to coral atoll life.



Figure 9 - Archaeological features on an eroded lagoon beach, Mwoakilloa Atoll, (Mokil), Pohnpei State, Federated States of Micronesia. This stone foundation documents beach erosion of a maritime feature (photo: W.S. Ayres).

V. Discussion and Conclusions

Heritage Conservation Goals

Increasingly, archaeologists and others interested in the past, through conversation with culture bearers as stakeholders, are asking what should be accomplished by historic or heritage preservation and cultural resource management. In the Micronesian case, the result of asking what the culture bearers (or 'owners') want is a broadening of goals.

This is manifested particularly in more attention being paid to the recent archaeological materials that are within the frame of oral traditions and memory culture, as well as training that allows for, or even requires, local participation in the site conservation procedures. In addition, the expanded scope of heritage conservation is reflected in the integration of more ethnographic and linguistic evidence in the process of determining what is important.

Cultural heritage can be understood and studied with regard to several different dimensions, specifically: 1) material culture; 2) conceptual culture; 3) memory culture; 4) landscape; and 5) re-creation and development, in which case 'authenticity' becomes a major issue. The ability to communicate cross-culturally is a desirable end result of the process—which includes training experiences of the sort discussed here—both for those whose heritage is represented and for those of different backgrounds. In conducting the Micronesian fieldwork and training, the project staff and I discussed with residents of research locations and with the historic preservation office staff how local knowledge provides the essential context and meaning for archaeological sites. The importance of preserving sites and the various ways of looking at site values—including ones significant on a national or international scale as well as on a local one—were communicated and linked to the documentation process through work with oral traditions, memory culture, and language. As seen in recent cultural heritage work in New Caledonia (Lilley et al, 2012) and elsewhere in the Pacific, the conservation of physical remains must be one element of this endeavour; the preservation of indigenous knowledge is an equally important goal.

The Pacific Results

The success of historic preservation and its acceptance as a means of preserving aspects of Austronesian cultures across the Pacific is varied. For example, on Rapa Nui (Easter Island) today, there is significant disjunction between the Chilean Government's priorities for heritage conservation programs and what some members of the local community want. This is not as pronounced in the pattern currently existing in Micronesia. In the Pohnpei case, the government officials and the local communities seem to be engaged in more congruent thinking about heritage conservation. Much of this is likely because of a greater level of traditional culture practice, that is, more of a lived experience, still functioning in Pohnpei (and many Austronesian areas in the Western Pacific; eg Hughes, 1983) compared to some of the main Polynesian islands. However, in both regions, what historic preservation is and what archaeology is 'for' in the assessment of heritage continues to be unclear to many people in local communities (also see Lilley et al, 2012).

A significant result of historic preservation training and field study in the Pacific is that they provide not just maintenance of the material record but something previously unknown about cultural heritage. One example of this is documentation of migration patterns in the discovery of the Pacific; these patterns also show where islanders originated (see Figures 1 and 2). The archaeological evidence found on Pohnpei, such as kinds of fishing gear, shell ornaments, and early pottery (lost as a technology in the later prehistoric period), represents interpretations being incorporated into the conceptions of these islanders' heritage. The same pottery-use pattern has been discovered in Samoa (Ayres et al, 2002), and details about the stone statuary on Rapa Nui, discovered in my recent research there, offer new ways to characterise and appreciate cultural heritage on those islands.

The training projects discussed here have attempted to address the interface between the differing perspectives about the past held by, on the one hand, the scientific community (culture history, archaeological documentation) and, on the other, those typically maintained by local communities (memory culture, oral traditions) that reflect long-standing Austronesian concerns. The two are not mutually exclusive; they must be integrated and both considered important for the long term conservation of the human past.

Across the Austronesian sphere in the Pacific, traditional history that is based on oral transmission, tourism and heritage, dance and music, language revitalisation, heritage conservation of material culture—including especially artifacts and ethnological specimens, often meaning craft items that people today recognise—are some of the current topics of interest. The material record of past life, especially that preserved in archaeological sites, is increasingly being transformed by both natural and cultural processes, and heritage conservation is being altered by new interests and concepts of what this entails. Some shared heritage topics among Austronesian communities in the Pacific include ones centering on: 1) migration and colonisation; 2) debates about the original or initial colonising population or group; and 3) a concern about indigenous people versus outsiders. In these communities, what archaeology is useful for within the context of heritage conservation continues to be a debated issue. Training programs and related discussions that have a perspective broader than just the basics of archaeology seem to contribute most to these persistent questions.

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Bibliography

- Alkire, W (1980) 'Technical Knowledge and the Evolution of Political Systems in the Central and Western Caroline Islands of Micronesia', *Canadian Journal of Anthropology* v1 n2: 229-237
- Anderson, C (2000) 'New Austronesian Voyaging: Cultivating Amic Folk Songs for the International Stage', in Blundell, D (ed) *Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory*, Taipei: SMC Publishing
- Appiah, K.A (2005) 'The Case for Contamination: No to purity, no to tribalism, no to cultural protectionism', *The New York Times Magazine* January 1: 30-37, 52

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Athens, S (1980) *Archaeological Investigations at Nan Madol: Islet Maps and Surface Artifacts*, Guam: Pacific Studies Institute

Ayres, W.S (1990) 'Pohnpei's Position in Eastern Micronesian Prehistory', *Micronesica*, Supplement 2: 'Proceedings, Indo Pacific Prehistory Association, Guam, 1990': 187-212

----- (2006) 'Archaeological Training Programs in Emerging Micronesian Island Nations', *Micronesian Journal of the Humanities and Social Sciences* v1/2: 568-579

Ayres, W.S, and Eperiam, E (2001) 'Training in Pohnpei, Federated States Micronesia', *CRM, Cultural Resource Management*, v24 n1: 48-50

Ayres, W.S, Fitzpatrick, S and Descantes, C (1999) 'Historic Preservation Field Archaeology Training/Mapping Project: A Report on Training Activities, September 1998' (prepared for the Sasakawa Foundation and Bishop Museum, Honolulu), Honolulu: Bishop Museum and East-West Center, Hawai'i

Ayres, W.S and Mauricio, R (1997) '*Pohnpei Archaeology Component: Salapwuk Archaeology: Survey of Historic and Cultural Resources of Pohnpei State*', San Francisco: Micronesian Endowment for Historic Preservation and US National Park Service

Ayres, W.S, Wozniak, J, Robbins, G and Suafo'a, E (2002) 'Archaeology in American Samoa: Maloata, Malaemi and Malaelo', In *Archaeology of Easter Island and the Pacific - Pacific 2000 Conference* (Kamuela, Hawai'i) Proceedings, Los Osos: Easter Island Foundation: 227-235

Ayres, W.S, Levin, M and Seikel, K (n.d./2012) 'Archaeological Survey, Architectural Studies and Agricultural Analysis, Nan Madol and Temwen, Madolenihmw, Federated States of Micronesia, 2011', Final Report to Historic Preservation Office, Pohnpei, Federated States of Micronesia

Beardsley, F (1996) *Fragments of Paradise: Archaeological Investigations in the Republic of Palau*, Honolulu: International Archaeological Research Institute, Inc.

Bellwood, P \ (2009) 'Formosan Prehistory and Austronesian Dispersal', in Blundell, D (ed) *Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory* (revised edition), Taipei: Shung Ye Museum and Berkeley: Phoebe A. Hearst Museum, University of California: 336-364

Bellwood, P, Fox, J and Tryon, D (1995) *The Austronesians: Historical and comparative perspectives*, Canberra: Research School of Pacific and Asian Studies, Australian National University

Bernart, L (1977) *The Book of Leulen* (translated and edited by Fischer, J.L, Riesenbergs, S and Whiting, M (Pacific History Series 8), Honolulu: University of Hawai'i Press

Blundell, D (2011) 'Taiwan Austronesian Language Heritage Connecting Pacific Island Peoples: Diplomacy and Values', *International Journal of Asian Pacific Studies* v7 n1: 75-91

Broodbank, C (2006) 'The Origins and Early Development of Mediterranean Maritime Activity', *Journal of Mediterranean Archaeology* v19 n2: 199-230

Burley, D (1993) 'Chiefly Prerogatives over Critical Resources: Archaeology, Oral Traditions and Symbolic Landscapes in the Ha'apai Islands, Kingdom of Tonga', in Abonyia, S, and Mirau, N (eds) *Culture and Environment: A Fragile Co-Existence*, Calgary, University of Calgary: 437-443

Denfeld, D.C (1988) 'Peleliu Revisited: An Historical and Archaeological Survey of World War II Sites on Peleliu Island', Saipan: Micronesian Archaeological Survey

Derry, L (2000) 'Southern Town Plans, Storytelling, and Historical Archaeology', in Young, A.L (ed) *Archaeology of Southern Urban Landscapes*, Tuscaloosa: University of Alabama Press: 14-29

Falgout, S (1987) *Master Part of Heaven: The Ethnohistory and Archaeology of Wene, Pohnpei, Eastern Caroline Islands*, Micronesian Archaeological Survey Report Series n22, Saipan: Historic Preservation Office

Fitzpatrick, S.M (2002) 'AMS Dating of Human Bone from Palau: Evidence for a Pre-2000BP Settlement', *Radiocarbon* v441 n1: 217-221

Fitzpatrick, S.M and Kanai, V.N (1997) 'Palau Five Year Historical and Cultural Preservation Plan: 1998-2003', report submitted to the US Department of Interior, Office of Insular Affairs, San Francisco: National Park Service

Fitzpatrick, S.M, Erlandson, J, Anderson, A and Kirch, P (2007) 'Straw Boats and the Proverbial Sea: Response to Island Archaeology: In Search of a New Horizon', *Island Studies Journal* v2 n2: 229-238

Hanlon, D (1988) *Upon a Stone Altar: A History of Pohnpei to 1890*, Honolulu: University of Hawaii Press

----- (1989) 'Micronesia: Writing and Rewriting the Histories of a Nonentity', *Pacific Studies* v12 n2: 1-21

Hardesty, D, and Little, B (2000) *Assessing Site Significance: A Guide for Archaeologists and Historians*, Walnut Creek: Altamira Press

Hicks, D and Beaudry, M.C (2010) 'Introduction - Material Culture Studies: A Reactionary View', in Hicks, D and Beaudry, M.C (eds) *The Oxford Handbook of Material Culture Studies*, Oxford: Oxford University Press: 1-21

Hipwell, W.T (2007) 'Taiwan Aboriginal Ecotourism: Tanayiku Natural Ecology Park', *Annals of Tourism Research* v34 n4: 876-897

Hisakatsu, H (1997) *The Collective Works of Hijikata Hisakatsu*, Tokyo: Sasakawa Peace Foundation

- Hughes, D (1983) 'Continuity of Indigenous Ponapean Social Structure and Stratification', *Oceania* v53 n1: 5-17
- Intoh, M (1997) 'Human Dispersals into Micronesia', *Anthropological Science* v105 n1: 15-28
- King, T.F, Parker, P, Hickman and Berg, G (1977) *Anthropology in historic preservation: caring for culture's clutter*, New York: Academic Press
- Lilley, I, Sand, C and Valentine, F (2012) 'Collaborative Research in New Caledonia', *SAA Archaeological Record* v12 n4: 40-42
- Liston, J, Clark, G.R and Alexander, D (eds) (2011) *Pacific Island Heritage: archaeology, identity and community - Terra Australis* n35, Canberra: ANU E-Press
- Mauricio, R (1987) 'Peopling of Pohnpei Island: Migration, Dispersal and Settlement Themes in Clan Narratives', *Man and Culture in Oceania* v3: 47-72
- Mijares, A.S.B (2007) *Unearthing Prehistory: The Archaeology of Northeastern Luzon, Philippine Islands*, Cambridge: British Archaeological Reports
- Nero, K (2011) 'Paths to knowledge: Connecting experts in oral histories and archaeology' in Liston, J, Clark, G.R and Alexander, D (eds) (2011) *Pacific Island Heritage: archaeology, identity and community - Terra Australis* n35, Canberra: ANU E-Press: 127-154
- Olivier, L (2011) *The Dark Abyss of Time: Archaeology and Memory* (translated by Greenspan, A) Walnut Creek: Altamira Press
- Olsudong, R, Emesiochel, C.T, Kloulechad, E.T (2004) 'Inventory Of Cultural and Historical Sites And Oral Histories Of Ngatpang State', Koror: Bureau of Art and Culture/HPO/Ministry of Community and Cultural Affairs, Republic of Palau
- Pawley, A. and Green, R (1973) 'Dating the Dispersal of Oceanic Languages'. *Oceanic Linguistics* v12 n1/2: 1-67
- Rainbird, P (1999) Islands out of time: towards a critique of island archaeology, *Journal of Mediterranean Archaeology* v12: 216-34
- Rainbird, P (2007) *The Archaeology of Islands: An Archaeology of the Sea*, Cambridge: Cambridge University Press
- Rehg, K (1995) 'The Significance of Linguistic Interaction Spheres in Reconstructing Micronesian Prehistory', *Oceanic Linguistics* v34 n2: 305-326
- Skowronek, R (1998) 'The Spanish Philippines: Archaeological Perspectives on Colonial Economics and Society', *International Journal of Historical Archaeology* v2 n1: 45-81
- Thomas, F (2004) 'Historic Preservation in the Marshall Islands: 2003-2004 Research', *Micronesian Journal of the Humanities and Social Sciences* v3 n1-2: 90-93

Ayres: Austronesian Cultural Heritage

Tsang, C (2000) *The Archaeology of Taiwan*, Taipei: Council for Cultural Affairs, Taipei: Council for Cultural Affairs, Executive Yuan

Whincup, T (2007) 'Te Wa: The Social Significance of the Traditional Canoes of Kiribati', *Shima: The International Journal of Research into Island Cultures* v1 n2: 43-45