

ARCHAEOLOGY IN NEW ZEALAND



This document is made available by The New Zealand Archaeological Association under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/4.0/.

ANTHROPOLOGY AND HISTORY: THE STUDY OF TONGAN PREHISTORY

Kimi Pepa Auckland

Introduction

The study of prehistory in the Pacific has drawn extensively from anthropological and historical studies and source materials. This paper focuses on the archaeology of the Tongan islands. An island by island overview of the archaeological work that has been undertaken there is provided and I focus on the effects of the four following categories of source material for the study of Tongan prehistory:

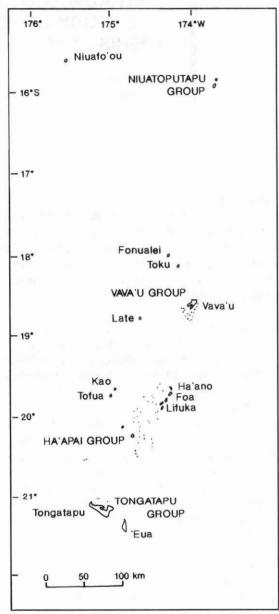
- 1. The records of early European explorers.
- 2. The record left by the colonial administrator Basil Thomson.
- 3. The Bishop Museum monographs of the Bayard Dominick expedition.
- 4. The post-World War II archaeological enquiry.

The Niuas

The modern nation of the Kingdom of Tonga consists of three main island groups: Tongatapu and 'Eua, the Ha'apai islands, and Vava'u. There are also outlier islands in the northernmost reaches of the kingdom. Of these, the island of Niuatoputapu has come under the most extensive archaeological scrutiny. During 1970-71, a field survey was undertaken on the island by Garth Rogers and a site record of archaeological monuments were an incidental result (Rogers 1974). Rogers highlighted the following categories of structures:

- Mounds and platforms.
- 1.1. Named 'esi or commemorative flat-topped platforms for chiefly persons.
- 1.2. Named sia and un-named, un-faced earth mounds.

- 1.3. Earth-mounds with some form of stone facing or edging (paepae) in the form either of vertical coral slabs or of small stones placed on edge.
- 1.3.1 Named *langi* or chiefly burial mounds.
- 1.3.2 Unnamed, square or rectangular mounds with *paepae*.
- 1.3.3 Fa'itoka or low earth-mounds.
- 1.3.4 Fa'itoka or high earth-mounds.
- 1.3.5 Contemporary village or descent group graveyards.
- 2. Miscellaneous structures.
- 2.1. Named and unnamed stone boundaries, stone markers, former sacred stones and quarry sites.
- Fortifications, ditches, former sunken roads.
- 2.3. Luo maa or food fermentation pits; vai tupu or wells.
- 2.4. Abandoned historic settlement sites.
- 2.5. Pottery-bearing non-concentrated middens.



Location map of Tonga.

The oral traditions on the island suggested that the named mounds and burials did not exist before the establishment of the Ha'a Falefisi lineage in the seventeenth century. There were two stone mounds on the eastern extreme of the island unlike anything in the rest of Tonga but akin to mounds in Western Samoa, which led Rogers to speculate and propose that such structures belonged to an earlier "Samoic" period or were built by Lapita pottery voyager-traders for astronomical purposes.

Patrick Vinton Kirch (1988) published a report on the island of Niuatoputapu based on a six-month project in 1976. The synthesis with which Kirch concludes the publication, focuses on the effects of Niuatoputapu's changing landscape as a result of progradation. Network models and connectivity matrices are utilised in order to understand the nature of interisland contacts.

Richard Walter (1992) reviewed the publication. He points out how archaeological techniques were used to predict patterns and how ethnoarchaeological approaches provided a means to "retrodict". Kirch (1990) also used the Niuatoputapu data in an article on social stratification that compared the use of monumental architecture in Tonga with those in Hawaii.

Vava'u

Janet Davidson (1965) helped Jens Poulsen with his Lapita pottery excavations on Tongatapu island from 1963-64. In 1971, Davidson published a report on Vava'u. Davidson also described mound structures. Due to inconsistent local reports, she stuck to a typological classifications system. Most were considered by Davidson to have been used for interments and she viewed these structures as being recent introductions to Vava'u from Tongatapu (see also Davidson 1976).

Kirch (1980) also published an article in the *Journal of the Polynesian Society* based on fieldnotes during a stop-over at Vava'u. Kirch cites the then current "New Archaeology" literature concerning the search for universal regulations and studies proposing a link between societal rank and the amount of labour involved in constructing archaeologically designated interment structures (Tainter 1973, 1976; Tainter & Cordy 1977).

Ha'apai

Archaeology in the Ha'apai islands has come to be characterised by the endeavours of David V. Burley, working from Simon Fraser University in Canada. In a 1993 paper presented at the University of Calgary in Alberta,

Burley proposed that the monumental archaeological landscape in Ha'apai was constructed in order to symbolically subjugate local chiefs and bring areas under the central control of a paramount in the island of Tongatapu. Tu'i Tonga Kau'ulufonua Fekai. The interpretations of the oral traditions concerning Kau'ulufonua as representing the extension of chiefly influence from Tongatapu to the rest of the Tongan islands and other parts of Western Polynesia are presented. It is also pointed out that on each of the four main Ha'apai islands with contemporary villages, a ring ditch fortification has been located.

Burley (1994a) went on to provide a case study, focusing on the monumental structures of Mala'e Lahi and Makahokovalu on the island of 'Uiha and how they provided a means through which claims of rank and authority could be expressed. Burley (1994b) also went on to expound on Tongan settlement patterns, even bringing into account the Christian missions on chiefly institutions and traditional ideologies. He (Burley 1995) has also commented on the usefulness of monumental archaeological data for interpreting localised traditional histories. This perspective is also applied in interpretations of precontact religion and the role of the fertility goddess figure Hikule'o (Burley 1994c), and in a study on the role of pigeon snaring mounds in the northern Ha'apai islands (Burley 1996). As Burley (1996:1) explains:

In the study of Polynesian chiefdoms, monumental architecture has become a virtual requisite in the recognition of complex chiefly polity (e.g., Kirch 1984). Sepulchral architecture serves as a visual indicator of status and hierarchical position within and between classes. Elaborate forms of religious architecture, and their associated rituals, emphasize and legitimize the sanctity of chiefs as mediators between supernatural and worldly realms. And in various other public works of a secular nature (irrigation systems, fortifications, etc.), the abilities of chiefs to organize or appropriate massive amounts of labour can be clearly evidenced.

Tongatapu

The island of Tongatapu is covered by Dirk H.R. Spennemann as part of a multi-volume doctoral thesis for the Australian National University. Spennemann has also done tourism work for the Tongan National Centre in Nuku'alofa.

Spennamann also provided a definitive chronology for Tongan history as part of a feasibility study on the set-up of an Ha'amonga Historical Trail (Spennemann 1987:35). It is outlined here with the chronology provided by Burley (1994:380). There are two points to note. Firstly, the "Dark Ages" was originally termed by Janet Davidson to mark an hiatus between a period in the archaeological record characterised by the presence of distinctive pottery also found throughout Melanesia and a period where major differences in social status are clearly evidenced archaeologically by the elaborate mortuary practices and large-scale public architecture (Kirch 1984:220). The second point is the distinction of a Civil War period by myself (Pepa 1997b), as outlined by Ian Campbell (Campbell 1992: Chapter 4). The period began, more precisely, in 1777, the year that Captain Cook was in Tonga, and ended at the death of Tupouto'a, the father of Taufa'ahau, in 1820.

- 1. Early decorated ceramic Lapita period (3,200 2,500 B.P.)
- 1.1. approx. 1500/1300 BC, Initial settlement of the Tongan Islands
- 1.2. approx. 1500/1300 to 1000 BC, Early Tongan Lapita Period
- 1.3. approx. 1000 BC to 700/500 BC, Middle Tongan Lapita Period
- 2. Plainware ceramic period (2,500 1,800 B.P.?)
- 2.1. approx. 700/500 to 200 AD, Late Tongan Lapita Period
- 3. A-ceramic Dark Age period (1,800 1,000 B.P.)
- 3.1. 200 to 1000 AD, Dark Ages or Formative Period
- 4. Monument building period (1,000 250 B.P.)
- 4.1. 1000 to 1500 AD, Pre-classical Tongan Period
- 4.2. 1500 to 1770 AD, Classical Tongan Period
- 5. Historic period (250 B.P. to the present)
- 5.1. 1770 to 1830 AD, Civil War or Contact Period
- 5.2. 1830 to 1945 AD, Missionary Period and Modern Tonga
- 5.3. 1945 AD, post-World War II Tonga

'Ata Island

Atholl Anderson (1978) provided an archaeological investigation of the plateau settlement area of this island in the southernmost reach of the kingdom. It is concluded that the main settlement area was protohistoric and that the community was isolated, unable to fully exploit the surrounding marine resources and dependent on gardening. No large earth mounds were found on the island. An excavation unit yielded a couple of burials which included a cache of adzes.

Source Materials

Quoting Ian Campbell's standard history of the kingdom of Tonga (Campbell 1992:33-34):

Europeans had first visited Tonga in 1616 when the Dutch explorers Willem Schouten and Jacob

Le Maire, looking for trading opportunities, arrived at Tafahi and Niuatoputapu, and Niuafo'ou. Fighting had taken place, but this visit had no important consequences. In an unconnected expedition, another Dutchman, Abel Tasman, came to Tonga in 1643, visiting Tongatapu and Nomuka. He also saw 'Ata and 'Eua. He spent about ten days in the group and it is thought that the citrus tree, known in Tonga as moli, was introduced by him.

Tasman's visit has an additional importance in assisting the dating of events in Tongan history. Tasman did not discover the personal names of any of the leading chiefs, but in 1777 the celebrated English navigator, James Cook, inquired whether there was an oral tradition of Tasman's visit, and was told that two ships had paid a short visit five generations before. "They told us the name of the Fattafee [Fatafehi] that was then King, and of those that succeeded down to the present, which is the fifth sence [sic] that period, the first being an old man at the time". Unfortunately, Cook did not record the names, but the fifth before the time of his visit was 'Uluakimata II, the thirty-second Tu'i Tonga.

The information on Tongan society that Cook gathered described a society that was well regulated, at peace, and apparently free of social or political tension. To quote Kirch, on the topic of agricultural intensification in Tonga (Kirch 1984:221):

The intensity of Tongan agriculture is well documented in the journals of early European explorers, and we can do no better than to quote Cook's observations on Tongatapu in 1773:

"I thought I was transported into one of the most fertile plains in Europe, here was not an inch of waste ground, the roads occupied no more space than was absolutely necessary and each fence did not take up above 4 Inches and even this was not wholly lost for in many of the fences were planted fruit trees and the Cloth plant, these served as a support to them... Nature, assisted by a little art, no were [sic] appears in a more flourishing state than at this isle (Beaglehole 1969, Book II:252)."

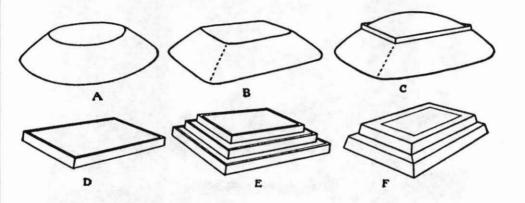
Comments have been made on Kirch's work on agricultural intensification in Polynesia (see Helen Leach 1997).

Initial enquiry

I have incorporated archaeology into the study of Tongan history, critiquing the records left by the British colonial administrator, Basil Thomson (Pepa 1997a). Although various reports on Tongan antiquities were presented to museums around the world, official archaeological studies in the kingdom of Tonga can be said to have been initiated by W.C. McKern as a member of the Bayard Dominick Expedition of the Bernice P. Bishop Museum. E.W. Gifford (1929) was also present. McKern's study provided a classification of the artificial mounds and platforms present in the Tongan islands. Quoting McKern (1929:10):

Most ancient Tongan structures of mound or platform type may be classified as belonging to one of four groups:(a) esi mounds; (b) pigeon mounds; (c) house platforms, and (d) grave mounds. A few mounds with strong individual peculiarities and a few difficult to identify are, for convenience in presentation, treated as one group, (e) unclassified mounds. In this class are included the very rare stone walled house mounds. In general, this classification is based both on purpose, as recorded by tradition or determined by history, and on structural form. Purpose seems to have determined basic peculiarities in form.

McKern also detailed fortification structures as well as prehistoric pottery. (McKern 1929:80,115).

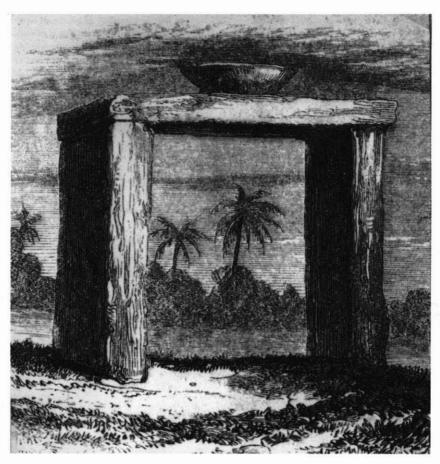


Sketch illustrating six types of mounds. (McKern 1929:35)

Update

Archaeological research in Tonga did not resume again until the 1960s. It can be said that there were two main research areas. One area of research focused on the study of ceramics. As Christophe Sand (1998:7) describes:

Since its discovery earlier this century, the dentate-stamped pottery known as Lapita has been the focus of many archaeological studies in the south-west Pacific region. Identified as the material signature of the first Austronesian populations to discover and settle "Remote Oceania" (Southern Melanesia and Western Polynesia) (Green 1979b, 1991a), Lapita pottery has now been identified in more than 200 sites spread over 3500 km (Kirch 1997, Kirch and Hunt 1988, Spriggs 1990). The characteristics of the Lapita settlement of Western Polynesia (Green and Davidson 1974; Kirch 1988; Kirch and Hunt 1993; Sand 1992, 1993; Shutler et al. 1994) are today well documented, due to intensive research on different archipelagos and the continuing discovery and excavation of early sites.



Tongan trilithon from a drawing made by the Hon. Cecil Foljambe of H.M.S. Curaçoa in 1865.

For non-Lapita sites, I would like to refer to the work of Davidson (1979).

The other area of research focused on ditch and bank fortification structures. In 1965, Green and Terrell undertook a two-week survey of field monuments on Tongatapu which Lynn Swanson presented in a paper (1968). This study was also quoted in studies of fortification structures undertaken by Spennemann (1988) and Sosefo Havea (1990). Pepa (1994) incorporated these works in a discussion on the development of Tongan *kolo* structures for the New Zealand Archaeological Association and Anthony P. Marais (1995) took

on the topic in a thesis for Simon Fraser University in Canada.

Most recently, Pepa (1997b) has detailed research on fortifications in West Polynesia, incorporating the works of Simon Best (1984, 1993) for the Fijian and Samoan islands, Davidson (1965, 1971) for Vava'u and Western Samoa, Pepa (1995) for the island of Niue, and Sand (1993a) for the island of 'Uvea. Davidson (1998) has also reviewed a short popular account by Daniel Frimigacci on the archaeology and oral history of 'Uvea and its close links with Tonga. Claire Orbell (1995) has re-evaluated an ORSTOM typology of Uvean mounds for an University of Auckland thesis. The twin high islands of Futuna and Alofi were in regular communication with 'Uvea and although oral traditions refer to battles with invading Tongans, these islands never came under Tongan domination as was the case in 'Uvea (Kirch 1994).

Summary

Archaeological investigations begun by McKern and his etic as well as emic classification of sites appear to have been taken on by Dave Burley, with his discourse on the use of archaeological evidence to validate oral traditions. Otherwise, scholarship from New Zealand and France has focused on the production of archaeological site inventories and site records. This has led to a distinction between non-ceramic and ceramic-bearing sites. This distinction is manifested in the scholarship, with Melanesianist studies of Lapita on one hand and scholarship on the other that aims to better define the history of a neolithic culture that migrated from Taiwan and developed a complex society in Western Polynesia (see Bellwood 1997). The latter is complemented by research on prehistoric fortification systems and the role of earth mounds and stone constructions in expressing socio-political structures. As well there is Kirch's research on agricultural intensification in the region. Archaeological investigations of Tonga's past have gone beyond the boundaries of Tonga itself and have affected the interpretation of archaeological finds on other islands

APPENDIX

I. Rotuma

Thegn Ladefoged (1998) of the University of Auckland has undertaken research on this island. There are traditions that mention Tongan invasions and even burial sites claimed to have accommodated Tongans.

II. Vanuatu

I mention Vanuatu in reference to the importance of *kava* in traditional Tongan society (see Luders 1996). Apparently kava was traded and legends suggest a spirited rejection of its continuation when matters turned sour. It is proposed that Vanuatu was not part of the Tongan empire in any formal sense, but acted as a neighbouring state, so to speak, and as a source of traded items.

III. The Cook Islands

Archaeological commentary on ceramic sherds found in the Cooks attribute the Tongan islands with being a point of origin for the earliest inhabitants (Duff 1974; Walter & Dickinson 1989). Also, it has been proposed that slab limestone constructions on the island of Atiu point to a cultural connection with Tonga (Trotter 1974).

IV. The Solomon Islands

Raymond Firth (1961, 1967, 1983) undertook extensive anthropological research on the island of Tikopia in the Solomons. Firth (1954:121-123) has also outlined the military exploits of Tongans on the island of Anuta. The traditional evidence is supported by linguistic analysis (Green 1971).

Kirch, together with Douglas Yen, has provided an archaeological review of the island of Tikopia (Kirch & Yen 1982). Kirch (1982) has also provided an archaeological sequence for Anuta. A volume of archaeological studies for Anuta was reviewed by Janet Davidson (1975). This review was critiqued by Richard Feinberg (1976). Feinberg (1989) also went on to expound on the relationship that Tonga had with Anuta in prehistory.

Acknowledgements

An adapted version of this paper was presented at the Solomon Islands College of Higher Education and 12th Pacific History Association Conference held in Honiara, Solomon Islands from June 22nd to 26th, 1998. I would like to thank J. Kehaulani Kauanui for getting me interested in presenting a paper at the conference. I would also like to thank Max Quanchi and Grant McCall for arranging to have my paper presented in the panel topic "Anthropology and History; a continuing conversation", chaired by Grant McCall.

This paper was inspired by discussion that followed a paper presented at the New Zealand Archaeological Association annual conference held at Whakatane, New Zealand from April 9th to 14th, 1996. Joan Lawrence has also been a guiding hand with regards to drafting this article.

References

- Anderson, A.J., 1978. Archaeological explorations on 'Ata island, Tonga. in: M.M. Cresswell (ed.). Lau-Tonga 1977: Reports from the expedition of June-July 1977. Wellington: Royal Society of New Zealand, pp.1-21.
- Best, S.B., 1984. Lakeba: The Prehistory of a Fijian Island. Unpublished M.A. Thesis, University of Auckland.
- Best, S.B., 1993. At the halls of the mountain kings. Fijian and Samoan fortifications: comparison and analysis. *Journal of the Polynesian Society*, 102:385-447.
- Beaglehole, J.C. (ed.), 1969. The Journals of Captain Cook on his Voyages of Discovery. Vol. 2, The Voyage of the Resolution and Adventure, 1772-1775. Cambridge: Hakluyt Society.
- Bellwood, P., 1997. Taiwan and the prehistory of the Austronesian-speaking peoples (Review of Jen-Kuei Li, et al). *The Review of Archaeology*, 18(2):39-48.
- Burley, D.V., 1993. Chiefly prerogatives over critical resources: archaeology, oral traditions and symbolic landscapes in the Ha'apai islands, Kingdom of Tonga. in: R.W. Jamieson, S. Abonyi & N.A. Mirau (eds). Culture and Environment: A Fragile Coexistence (Proceedings of the Twenty-Fourth Annual Conference of the Archaeological Association of the University of Calgary. Calgary: University of Calgary, pp.437-443.
- Burley, D.V., 1994a. As a prescription to rule: the royal tomb of Mala'e Lahi and 19th-century Tongan kingship. *Antiquity*, 68:504-517.
- Burley, D.V., 1994b. Settlement pattern and Tongan prehistory, reconsiderations from Ha'apai. *Journal of the Polynesian Society*, 103:379-411.
- Burley, D.V., 1994c. The temple of Faleme'e: archaeological and anthropological considerations of a pre-Christian god-house on the island of Ha'ano, Kingdom of Tonga. New Zealand Journal of Archaeology, 16:55-67.
- Burley, D.V., 1995. Mata'uvave and 15th century Ha'apai. *Journal of Pacific History*, 30:154-172.
- Burley, D.V., 1996. Sport, status, and field monuments in the Polynesian chiefdom of Tonga: the pigeon snaring mounds of northern Ha'apai.

- Journal of Field Archaeology, 23:1-15.
- Campbell, I.C., 1992. Island Kingdom: Tonga Ancient & Modern. Christchurch: Canterbury Museum Press.
- Davidson, J.M., 1965. Archaeology in Samoa and Tonga. New Zealand Archaeological Association Newsletter, 8:59-71.
- Davidson, J.M., 1971. Preliminary report on an archaeological survey of the Vava'u group, Tonga. In Cook Bicentenary Expedition in the South-West Pacific. Wellington: Royal Society of New Zealand, pp.29-40.
- Davidson, J.M., 1975. REVIEWS: YEN, D.E. and Janet Gordon (eds): "Anuta: A Polynesian Outlier in the Solomon Islands". Journal of the Polynesian Society, 84:252-253.
- Davidson, J.M., 1976. Western Polynesia and Fiji: prehistoric contact, diffusion and differentiation in adjacent archipelagos. World Archaeology, 9:82-94.
- Davidson, J.M., 1979. Samoa and Tonga. in: J.D. Jennings (ed.). The Prehistory of Polynesia. Cambridge: Harvard University Press, pp.82-108.
- Davidson, J.M., 1998. REVIEWS: FRIMIGACCI, D. and M. Hardy with J.-P. Siorat: "Des Archeologues, des Conquerants et des Forts: Talietumu: Residence Tongienne d'Uvea". Journal of the Polynesian Society, 107:199-200.
- Duff, R., 1974. Introduction and summary. in: M.M. Trotter (ed.). Prehistory of the Southern Cook Islands. Christchurch: Canterbury Museum, pp.9-21.
- Feinberg, R., 1976. Archaeology, oral history, and sequence of occupation on Anuta Island. Journal of the Polynesian Society, 85:99-101.
- Feinberg, R., 1989. Possible prehistoric contacts between Tonga and Anuta. Journal of the Polynesian Society, 98:303-312.
- Firth. R., 1954. Anuta and Tikopia: Symbiotic elements in social organization. Journal of the Polynesian Society, 63:87-131.
- Firth, R., 1961. History and Traditions of Tikopia. Wellington: The Polynesian Society.
- Firth, R., 1967. Tikopia Ritual and Belief. London: George Allen and Unwin.
- Firth, R., 1983. We, The Tikopia: A Sociological Study of Kinship in Primitive Polynesia. Stanford: Stanford University Press.
- Frimigacci, D., J.P. Soirat & B. Vienne, 1984. Inventaire et Fouille des Sites Archeologiques et Ethnohistoriques de l'ile d'Uvea. New Caledonia: Centre ORSTOM de Noumea.
- Gifford, E.W., 1974. Tongan Society. Honolulu: Bernice P. Bishop

- Museum.
- Green, R.C., 1971. Anuta's position in the subgrouping of Polynesian languages. *Journal of the Polynesian Society*, 80:355-370.
- Green, R.C., 1979. Lapita. in: J.D. Jennings (ed.). *The Prehistory of Polynesia*. Cambridge: Harvard University Press, pp.27-60.
- Green, R.C., 1991. Near and Remote Oceania disestablishing "Melanesia" in culture history. in: A. Pawley (ed.). Man and a Half: Essays in Pacific Anthropology and Ethnohistory in Honour of Ralph Bulmer. Auckland: Polynesian Society, pp.491-502.
- Green, R.C. & J. Davidson, 1974. Archaeology in Western Samoa. Volume II. Auckland: Bulletin of the Auckland Institute and Museum 7.
- Havea, S.F., 1990. Tongan Kolotau in Tongatapu Settlement Pattern. Unpublished M.A. Research Essay, University of Auckland.
- Kirch, P.V., 1980. Burial structures and societal ranking in Vava'u, Tonga. Journal of the Polynesian Society, 89:291-308.
- Kirch, P.V., 1982. A revision of the Anuta sequence. Journal of the Polynesian Society, 91:245-254.
- Kirch, P.V., 1984. *The Evolution of the Polynesian Chiefdoms*. Cambridge: Cambridge University Press.
- Kirch, P.V., 1988. Niuatoputapu: The Prehistory of a Polynesian Chiefdom. Seattle: Burke Museum.
- Kirch, P.V., 1990. Monumental architecture and power in Polynesian chiefdoms: a comparison of Tonga and Hawai'i. World Archaeology, 22:206-222.
- Kirch, P.V., 1994. The Pre-Christian Ritual of Futuna, Western Polynesia. Journal of the Polynesian Society, 103:255-298.
- Kirch, P.V., 1997. The Lapita Peoples: Ancestors of the Oceanic World. Oxford: Blackwell Publishers.
- Kirch, P.V. & T.L. Hunt, 1988. The spatial and temporal boundaries of Lapita. in: P.V. Kirch & T.L. Hunt (eds). Archaeology of the Lapita Cultural Complex: A Critical Review. Seattle: Thomas Burke Memorial Washington State Museum Research Report No. 5:9-32.
- Kirch, P.V. & T.L. Hunt, 1993. The To'aga Site: Three Millennia of Polynesian Occupation in the Manu'a Islands, American Samoa. Berkeley: University of California.
- Kirch, P.V. & D.E. Yen, 1982. Tikopia: Prehistory and Ecology of a Polynesian Outlier. Honolulu: Bernice P. Bishop Museum.
- Ladefoged, T.N.; J. Wall, P. Black, W.R. Dickinson, 1998. Exotic and indigenous: Ceramic sherds from the island of Rotuma. *Journal of* the Polynesian Society 107:301-311.

- Leach, H., 1997. REVIEWS: KIRCH, P.V.: "The Wet and the Dry: Irrigation and Agricultural Intensification in Polynesia". Journal of the Polynesian Society, 106:301-303.
- Luders, D., 1996. Legend and history: Did the Vanuatu-Tonga kava trade cease in A.D. 1447? Journal of the Polynesian Society, 105:287-310.
- Marais, A.P., 1995. Kolo Velata: An Analysis of West Polynesian Fortifications. Unpublished M.A. Thesis, Simon Fraser University.
- McKern, W.C., 1929. Archaeology of Tonga. Honolulu: Bernice P. Bishop Museum.
- Orbell, C.E., 1995. An Analysis of Monumental Mounds from Tonga and the Island of Uvea. Unpublished M.A. Thesis, University of Auckland.
- Pepa, K., 1994. Tonga Malohi: Tongan fortifications in Western Polynesia. Archaeology in New Zealand, 37:44-57.
- Pepa, K., 1995. Me'a Lahi Mo'oni: Tongan and Niuean Prehistoric Monuments. Unpublished M.A. Dissertation, University of Auckland.
- Pepa, K., 1997a. Tongans in Niuean oral traditions: a critique. Journal of Pacific History, 32:103-108.
- Pepa, K., 1997b. Koro: thoughts on West Polynesian forts. Archaeology in New Zealand, 40:278-284.
- Rogers, G., 1974. Archaeological discoveries on Niuatoputapu island, Tonga. Journal of the Polynesian Society, 83:308-348.
- Sand, C., 1992. Differenciation des chronologies ceramiques de la Polynesie occidentale a partir d'une origine commune situee dans l'ensemble culturel Lapita. in: J.C. Galipaud (ed.). Poterie Lapita et Peuplement. Noumea: ORSTOM, pp.207-217.
- Sand, C., 1993a. A preliminary study of the impact of the Tongan maritime chiefdom on the late prehistoric society of 'Uvea, Western Polynesia. in: M.W. Graves & R.C. Green (eds). The Evolution and Organisation of Prehistoric Society in Polynesia. Auckland: New Zealand Archaeological Association, pp.43-51.
- Sand, C., 1993b. Donnees archeologiques et geomorphologiques du site ancien d'Asipani, Futuna (Polynesie occidentale). Journal de la Societe des Oceanistes, 96:117-144.
- Sand, C., 1998. Archaeological report on localities WKO013A and WKO013B at the site of Lapita (Kone, New Caledonia). Journal of the Polynesian Society, 107:7-33.
- Shutler, R. Jr.; D. Burley, W.R. Dickinson, E. Nelson & A.K. Carlson, 1994. Early Lapita sites, the colonisation of Tonga and recent data

- from northern Ha'apai. Archaeology in Oceania, 29:53-68.
- Spennemann, D.H.R., 1987. "The development of the Ha'amonga Trilithon Historic Park: The Ha'amonga Historical Trail". Nuku'alofa: Government Printing Office.
- Spennemann, D.H.R., 1988. Pathways to the Tongan Past. Nuku'alofa: Tongan National Centre.
- Spennemann, D.H.R., 1989. 'Ata 'a Tonga mo 'ata 'o Tonga: Early and Later Prehistory of the Tongan Islands. Unpublished Ph.D. Dissertation, Australian National University.
- Spriggs, M., 1990. Dating Lapita: another view. in: M. Spriggs (ed.). *Lapita Design, Form and Composition*. Canberra: Australian National University, pp.6-27.
- Swanson, L., 1968. Field Monuments of Tongatabu. Unpublished Anthropology department manuscript, University of Auckland.
- Tainter, J.A., 1973. The social correlates of mortuary patterning at Kaloko, North Kona, Hawaii. Archaeology and Physical Anthropology in Oceania, 8:1-11.
- Tainter, J.A., 1976. Spatial organization and social patterning in the Kaloko cemetery, North Kona, Hawaii. Archaeology and Physical Anthropology in Oceania, 11:91-105.
- Tainter, J.A. & R. Cordy, 1977. An archaeological analysis of social ranking and residence groups in prehistoric Hawaii. World Archaeology, 9:95-112.
- Trotter, M.M., 1974. Archaeological survey of Atiu, Cook Islands. in: M.M. Trotter (ed.). *Prehistory of the Southern Cook Islands*. Christchurch: Canterbury Museum, pp.95-119.
- Walter, R., 1992. REVIEWS: KIRCH, P.V.: "Niuatoputapu: The Prehistory of a Polynesian Chiefdom". *Journal of the Polynesian Society*, 100:423-424.
- Walter, R. & W.R. Dickinson, 1989. A ceramic sherd from Ma'uke in the Southern Cook Islands. *Journal of the Polynesian Society*, 98:465-470.