

Space and Place in an Ocean of Islands: Thoughts on the Attitudes of the Lapita People Towards Islands and Their Colonization

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Abstract

The colonisation of the western tropical Pacific Islands around 3000 years ago by neolithic groups known as the Lapita people was an extraordinary achievement. It has long been assumed that the colonisation process was driven by intentional inter-island voyages involving large numbers of pioneer settlers and all the plants and animals they needed to establish a broad marine and horticulture based lifestyle on the uninhabited islands they expected to find. This paper suggests that at least some of these groups may not have been tethered to the land but were 'sea nomads' who chose to spend most of their time on boats rather than on land. The stimulus for this idea came from geoarchaeological research on the Lapita settlement on Qoqo Island, southwest Viti Levu Island, Fiji, where traces of large numbers of Lapita people are found on what was a short narrow tombolo at the time of the island's colonisation, about 1000 BC.

Key words: geoarchaeology, Lapita people, marine resources, nomads, sea-level change

Introduction

The first people to occupy the island groups south and east of Solomon Islands are known informally as the Lapita people, named after the place in New Caledonia where their distinctively-decorated pottery was first recognized (Fig. 1). The neolithic Lapita people are acknowledged as the most successful ocean voyagers of their age, covering distances of at least 900 km of open ocean - between Vanuatu and Fiji, for example - and then returning the same way. The Lapita people are also of interest because they are the ancestors of most modern Pacific Island peoples, from those occupying the islands of Melanesia in the west to Easter Island in the east, and from Hawaii in the north to New Zealand in the south (KIRCH 1997, 2000, IRWIN 1992).

The author is actively researching the Lapita colonization of the Fiji Islands, apparently occupied first about 1100 BC, more than 3000 years ago (NUNN *et al.* 2003, 2004, KUMAR *et al.* 2004). This paper discusses some contemporary ideas about the

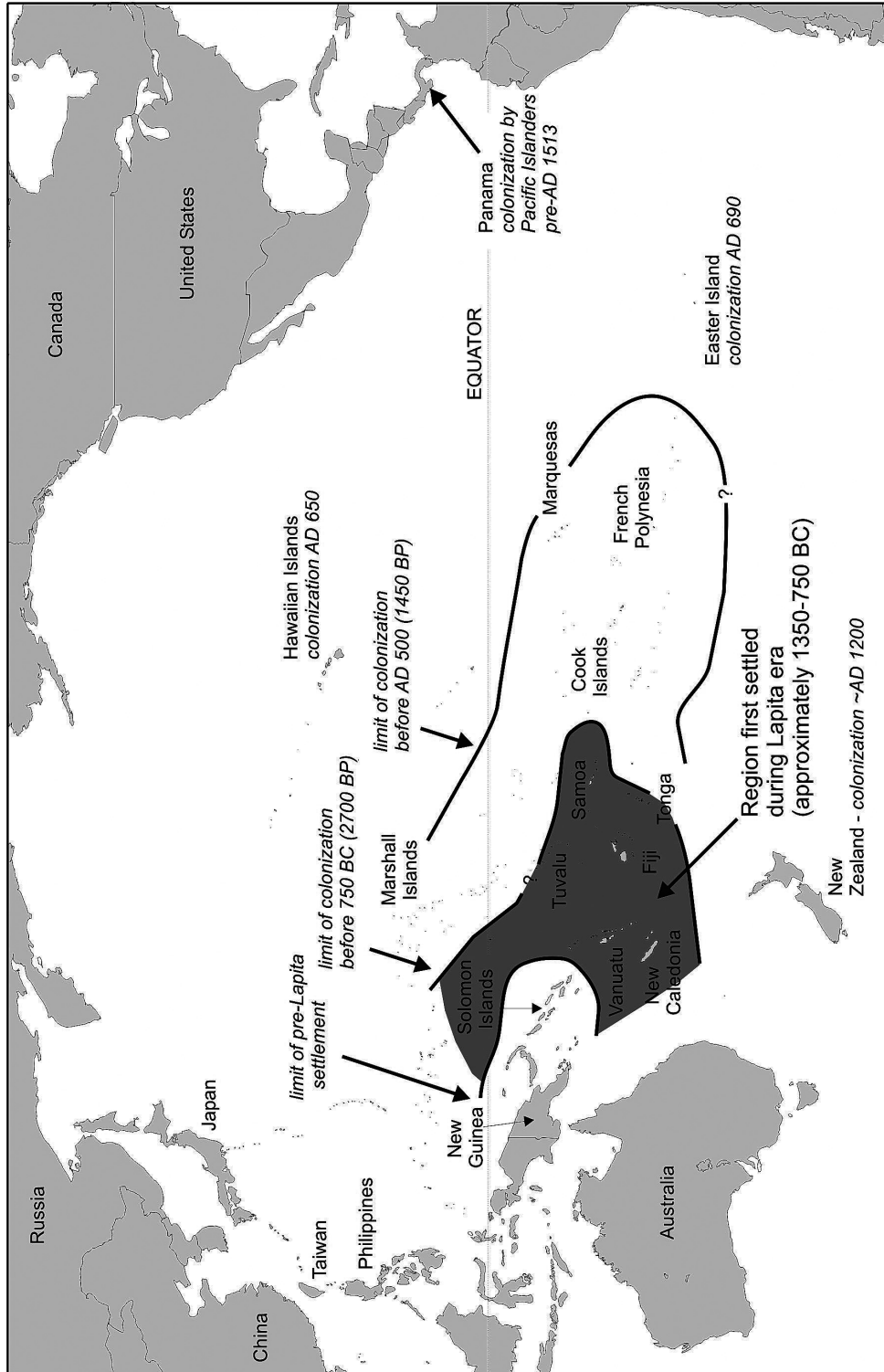


Fig.1 . Map of the Pacific showing the pattern of west to east island colonisation.

Lapita people, their inter-archipelagic movements, and their settlements and proposes the radical idea that at least some of the Lapita people were not the land-favouring dwellers that most scientists believe them to have been but 'sea nomads' whose preference around the time of apparent island colonization was for the ocean not the land.

The Origins and Dispersal of the Lapita People

The origins of the Lapita people lie in East Asia. An older idea, based largely on linguistic study, is that they originated in what we now call Taiwan and southern China (BELLWOOD 1979, BLUST 2004) but more recent work, particularly that concerned with tracing ancient DNA of humans and their commensal animals, suggests that their origins lay in island Southeast Asia (OPPENHEIMER 1999, 2003, MATISOO-SMITH and ROBINS 2004).

The Lapita people first appeared as a distinct cultural group about 1350 BC in the Bismarck Archipelago of Papua New Guinea. Their lifestyles differed from those of the other ethnic groups occupying this area because of the range of their food-gathering strategies (horticulture and marine resources), their construction of stilt house villages (raised above island reef flats), and a number of other traits including the decoration of some of their pottery. Lapita pottery decoration utilized a technique that is unique in Pacific Island ceramic history - that of dentate-stamping - by which designs are constructed from small dots. Many of the designs are extraordinarily complex, and it has been suggested that the Lapita people had a quasi-religious set of beliefs focused on ancestor worship and expressed as designs not only on pottery but also in wood and human flesh (as tattooing) (BEST 2002).

The conventional model for Lapita dispersal involves the Lapita people beginning to spread eastwards from the Bismarck Archipelago about 1330 BC, colonizing the eastern outer Solomon Islands, and then within some 200 years the island groups of Vanuatu, New Caledonia, Fiji, Tonga and Samoa. It is widely accepted that the Lapita groups which settled these islands had set out on intentional voyages of colonization, carrying with them all the animals and plants that they needed to establish themselves on the uninhabited islands that lay to the east. Once their colonies had been established, most groups kept regular contact with their home bases (probably in the eastern outer Solomon Islands) and the Lapita culture appeared to have flourished. Then, about 550 BC, it came to an end. The descendants of the Lapita people continued to occupy many of the same places, but the pottery they made was wholly undecorated, purely functional, and their long ocean voyages became far less frequent (KIRCH 1997, GREEN 2003).

The ocean and Lapita people

Many mysteries remain about the Lapita people. One of the handicaps faced by modern scientists is the need for explanations for phenomena that are observed. Scientists who ponder historical events, especially those involving humans, are particularly vulnerable to error in this regard. How can we know, for example, what motivated people 3000 years ago to do what they evidently did? We cannot know, so we bring scientific evidence to bear on the issue, all along making assumptions that people 3000 years ago were influenced by the same things that would influence us today (were we in the same situation, which manifestly we are not).

Modern humans are mostly land-based. It is understandable then that we assume that most humans in the past were also land-based, particularly when we find - as we apparently do with Lapita people - evidence for their settlements on land. We then assume (or take for granted) that such people *preferred* to live on the land rather than be at sea. In other words, they constructed geographical space and place in the same way as modern people do. On the land, they could build houses and plant crops and develop complex societies just as we do today. And the ocean was perceived as something that had to be crossed to get from one piece of land to the next piece; the ocean was largely an inconvenience.

The author has spent a lot of the last 20 years travelling on small boats between islands in the Pacific. Most of that time he spent looking at the island he had left or, as the halfway point was crossed, at that which was approaching. To him on such occasions, the ocean was a nuisance, something dull that he yearned to exchange for the comparatively interesting things on land. The author's perceptions of ocean space and land space were 'hardwired' in him by his upbringing in northwest Europe where that is what people think.

Like other scientists studying the Lapita people, the author long assumed that the same perceptions were hardwired into them, and their settlement pattern, for example, could be satisfactorily explained by someone who held such assumptions. But in December 2004, the author's field research made him begin to question this.

The Lapita settlement on Qoqo Island

As part of an ongoing geoarchaeological research programme in southwest Viti Levu Island in Fiji (NUNN *et al.* 2004), the author's research team was alerted to a pottery collection made on Qoqo Island (Fig. 2A). Qoqo is about 40,000 m² in area, with two rounded hills fringed by a small coastal flat. Except for a small area abutting the Tuva River, the whole island is surrounded by impenetrable mangrove swamps, not the kind of environment the Lapita people would be expected to have favoured. Yet they evidently did, for Lapita pottery was collected in large amounts from this tiny island, all along the southern side of its coastal flat, radiocarbon dates showing that the Lapita

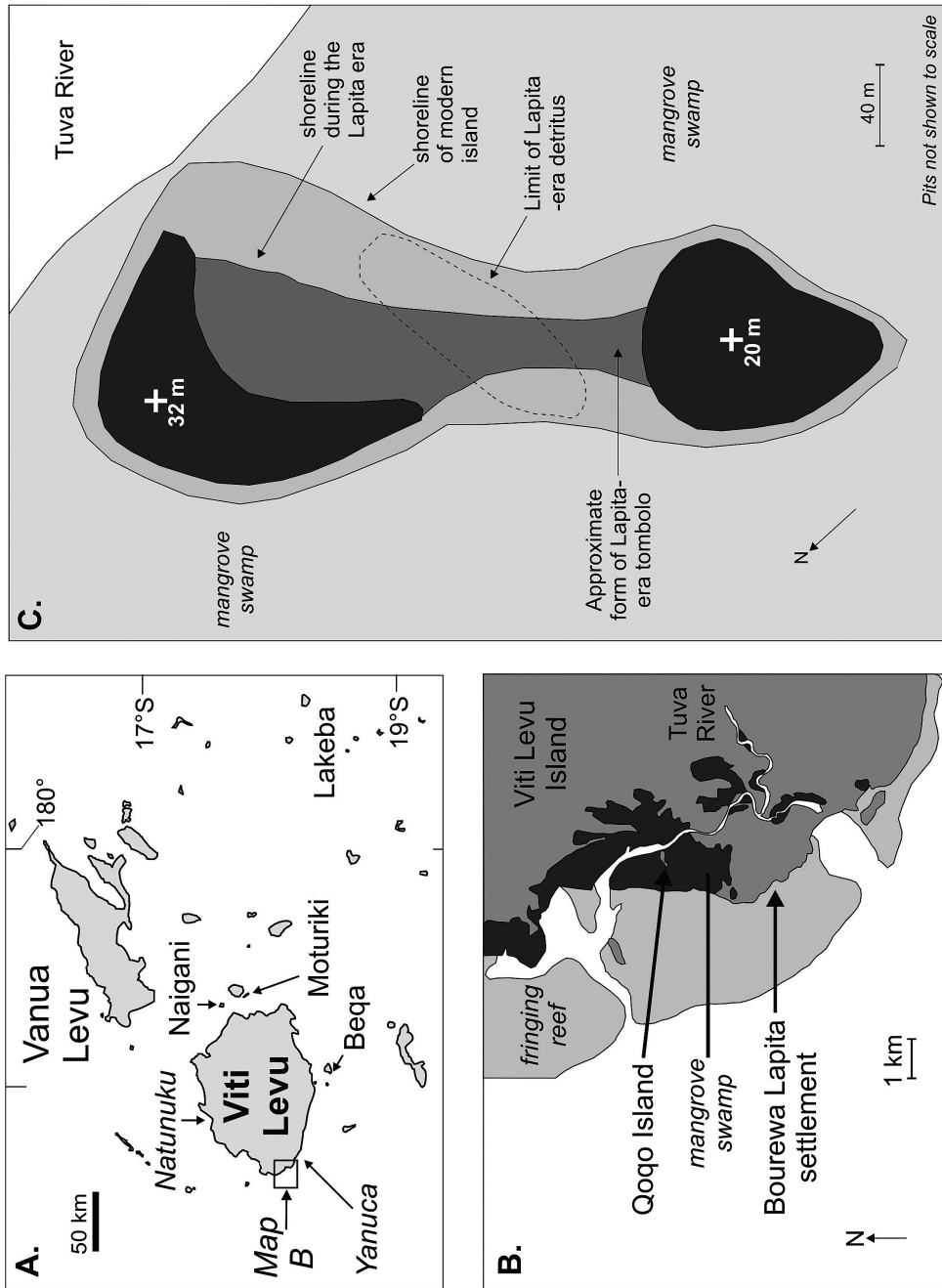


Fig. 2. A. Map of the main Fiji Islands showing the locations of selected islands and Lapita-era settlements. The location of Map B in southwest Viti Levu is shown.

B. Map of the area of southwest Viti Levu Island where the Lapita sites referred to in the text are located. The dark shading is mangrove swamp, the light shading is the fringing coral reef.

C. Map of Qoqo Island showing the modern shoreline and the Lapita shoreline (approximately 1000 BC), the extent of the former tombolo, and the extent of dentate-stamped (Lapita) pottery, as determined by surface collection and excavation.

people arrived on Qoqo perhaps 1000 BC. The question that arose was why would they choose to occupy such a small, mostly high, island in the middle of a huge mangrove swamp.

Part of this question was easily answered, for it became clear from excavations on the Qoqo coastal flat that the shellfish the Lapita people (and their descendants) consumed were all characteristic of an open coast and reef-lagoon environment not mangrove swamps. So it is inferred that 1000 BC and for several hundred years thereafter, Qoqo was surrounded largely by coral reef not mangrove. The reasons why the environment here changed subsequently relate ultimately to sea-level changes and the movement of people inland within the last millennium (NUNN 2005).

The critical part of the question was less easy to answer. Why would the Lapita people - a sizeable number to judge from the occupation detritus (potsherds, shells, bones, lithics) - have chosen to occupy the coastal flat of such a small island? Indeed, because the sea level was about 1.3 m higher 1000 BC (NUNN and PELTIER 2001), the area of coastal flat they occupied would have been even smaller than it is today. It seems clear from excavations and mapping that the Lapita people living on Qoqo occupied a tombolo - a narrow strip of lowland connecting two hills - and that they dropped their detritus into the shallow water along its sides (Fig. 2B). This is the only possible interpretation if one assumes that the Lapita colonisers of Qoqo were land dwellers.

Yet Qoqo Island is so small that every part of it has ready access to the shoreline, even the hilltops, so why would the Lapita people not have lived on the hills and traded a minute's extra walk to the shoreline for the security, view and airiness of the higher location? In response to this question, the research team searched the two hills of Qoqo Island for Lapita pottery, but found nothing - indeed, had they done so, it would have been remarkable, for Lapita people are well-known within the current orthodoxy for living as close as possible to the shoreline.

The Lapita people as sea nomads

A new idea is that some of the Lapita people, of whom abundant traces are found on Qoqo, were not tethered to the land, as assumed, but rather were tethered to the ocean. Perhaps they regarded the land as a hostile place, even an inconvenience, so lived on their boats close to the shore where they could access raw materials (for pot-making) and intertidal foods. Perhaps the ocean was the only place they felt secure because almost all their foods came from the ocean, or perhaps because they had longer-standing, deep-rooted cultural ties to the ocean.

There are hardly any nomads left in the world today. We almost all have dry places on the planet that we call home. For such reasons it is doubly difficult to understand a people who neither had such places nor sought them (KHAZANOV and WINK 2001, BERLAND and RAO 2004). It is possible that some of the Lapita people were

true nomads, defining place by resources (particularly the availability of marine foods) and conceptualizing space largely in terms of the controls on movement of the vessels they occupied (wind, ocean currents), perhaps within a broad framework of ocean landmarks and stars.

The Lapita people - at least the early ones - may have had good reason to avoid the land any more than necessary. Their ancestors may have come from parts of East Asia 7000 years ago, when no malaria existed there, to enter the Bismarck Archipelago of Papua New Guinea where the malarial mosquito was endemic. Finding that they had no resistance to malaria may have encouraged the Lapita people to remain at sea: a similar response to those people in Solomon Islands and elsewhere who in the last few hundred years have built artificial islands sufficiently far off the shores of the larger islands to be mosquito-free (IVENS 1930).

Nomadism of the (earliest) Lapita people should not be interpreted as meaning that they spent most of their time on the ocean, any more than modern 'sea gypsies' do. The ocean may have been a place where they felt comfortable but it was also a source of possible danger. Probably these nomads would have spent most of their time at sea within reach of island shores, perhaps spending prolonged periods anchored within island lagoons gathering marine foods. An illustration of how such areas may have been perceived is shown in Fig. 3.

Sea Nomads of Eastern Asia-past and Present

There are other lines of evidence that support the idea that the earliest Lapita people were sea nomads, at least in some parts of the western tropical Pacific Islands.

While there is evidence that the earliest Lapita people in some of the outer islands of Papua New Guinea practiced agriculture on flats adjoining island shorelines (KIRCH 1997, GREEN 2003), similar evidence is conspicuously lacking from the earliest period of Lapita occupation in the Fiji and Tonga island groups to the east (BURLEY *et al.* 2001, NUNN *et al.* 2004). This has been taken to support the view that these early Lapita people, in contrast to later arrivals, lived largely by foraging from reef flats. It could also be taken to support the idea that these first people were ocean-based by choice rather than land-based by necessity.

Not only do sea nomads feature in the ethnographic record, particularly in south-east Asia (SOPHER 1974, IVANOFF 2005), but also in prehistory (CHEN CHUNG-YU 2002). The key characteristics of the associated onland archaeological sites in southern China and Taiwan documented by CHEN CHUNG-YU are as follows.

- Sites are located alongside estuaries or on small islands.
- Sites are small with thin cultural strata suggesting short or seasonal occupation.
- Livelihood depended mainly on fishing and gathering of shellfish, with hunting of small animals.

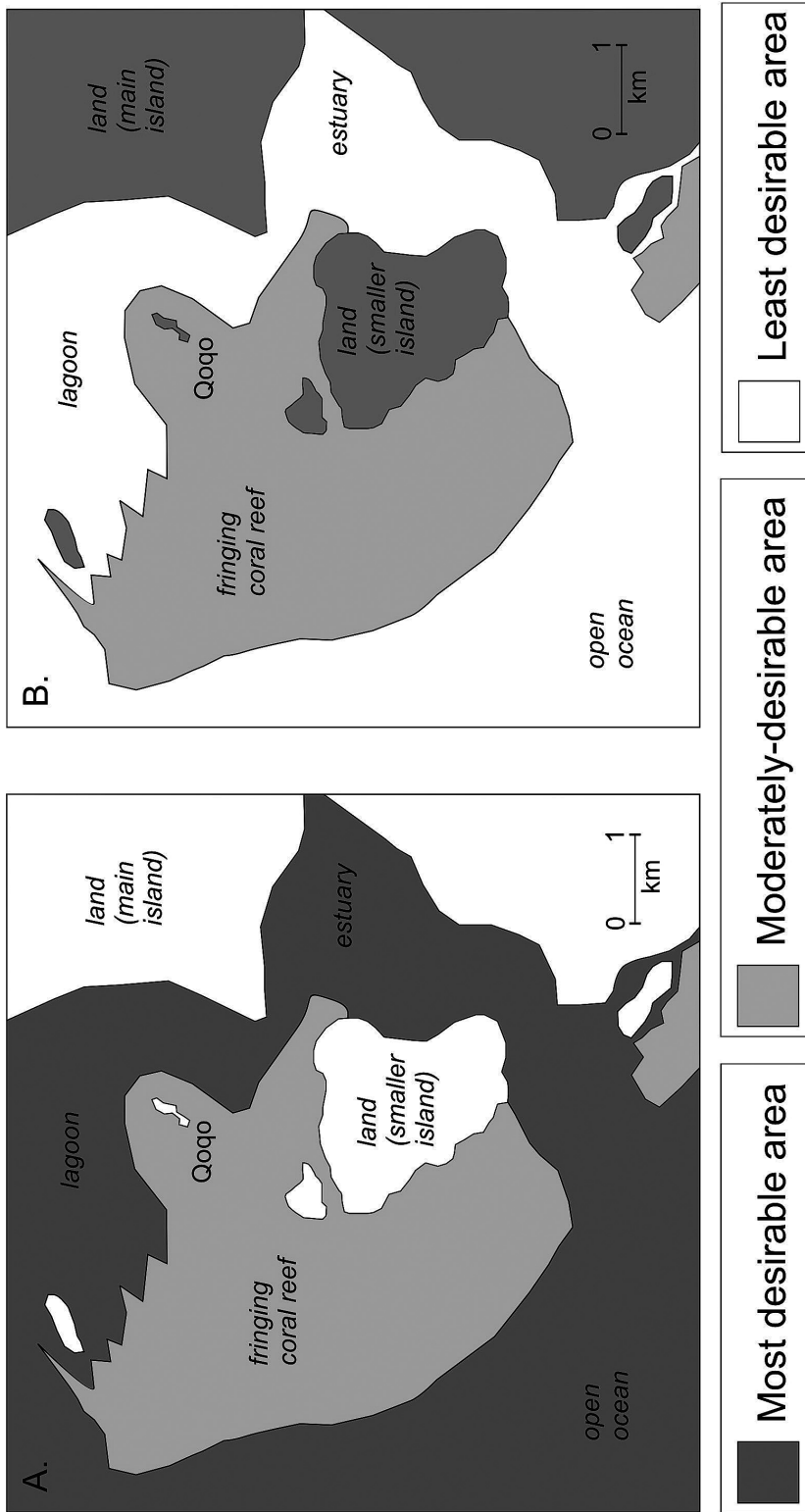


Fig. 3. Contrasting perceptions of the desirability of a coastal environment during Lapita times. The base map is from Fig. 2B.

A. The area as it may have been perceived by Lapita sea nomads showing the open ocean, lagoon and estuary as the most desirable environment, the reef flats as moderately-desirable, and the land as least-desirable.

B. The conventional view of the desirability of such an area (by land-tethered people) showing the land as the most-desirable environment, the reef flats (especially their inner parts) as moderately-desirable, and the open ocean and associated environments as least-desirable.

- No signs of any agriculture are present.

While these qualifications are met by some Lapita-era sites, they are all met by Qoqo except for the second. At Qoqo the cultural deposit is more than two metres thick in places, with Lapita potsherds occurring throughout. If this was a site established by sea nomads, then it might have been a favoured one to which they returned again and again. Alternatively it might have been established by sea nomads who, encouraged by the increasing land area associated with sea-level fall, began moving off their boats to settle onland.

Modern sea nomads in monsoon Southeast Asia build houses onland in which they live out the wet months (IVANOFF 2005), but there are few clues as to whether Lapita people built houses onland in the Pacific Islands beyond the reach of the monsoon. In parts of Papua New Guinea, it seems clear from the numbers of postholes found that the Lapita people lived in stilt-house villages that extended far out into island lagoons (KIRCH 1988, 1997) but there are few such signs in the eastern parts of the Lapita realm. Stilt houses might seem the obvious way for a land-based community to occupy a narrow tombolo, as they appear to have done on Qoqo (see Fig. 2B), but it is equally likely - on the basis of the available evidence - that they lived on boats on the surrounding reef flat or river estuary.

Many archaeologists will be unhappy with the suggestion that the earliest Lapita people in the archipelagoes east of Papua New Guinea and Solomon Islands were sea nomads, not least because there is evidence that Lapita people lived onland. It could be that Lapita sea nomads arrived in island groups like Fiji and then, finding that malaria did not exist, began a gradual movement onland, exchanging the value system in Fig. 3A for that in Fig. 3B. The transition may have involved stilt houses, marking the point at which ocean space was favoured equally with land space.

Conclusion

It is impossible to be certain that the earliest Lapita people were sea nomads because of a lack of clear and sufficient evidence. But even scientists must sometimes be mindful of the significance of absent evidence. So may not the fact that, in island groups like Fiji and Tonga, there are no traces of early Lapita dwellings and early Lapita agriculture be a sign that they never existed?

The first Pacific Islanders and their descendants were the greatest seafarers of their age. They crossed the entire Pacific from west (Papua New Guinea) to east (Panama) before Europeans first saw the world's largest ocean (NUNN 1999, ANDERSON 2003). They did all this without the knowledge of space that we have today, they had no maps, no sense of the geography of the Pacific Basin, or what might for certain lie over an unknown horizon. Perhaps they were able to accomplish this great feat (al-

though of course they would not have recognized it as such) only because they did not have the sense of place that we have today; they had no 'home', no desire to travel in one direction rather than another, because they were Neolithic sea nomads.

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