

THE SEA PEOPLE

Late Holocene maritime specialisation in
the Whitsunday Islands, central Queensland

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Towards a Prehistory of the Whitsunday Islands

Holocene Change and the Whitsunday Islanders

The archaeological evidence from the Whitsundays has some unique advantages over work carried out previously on the tropical east coast of Australia, in that it provides relatively long temporal sequences spanning the period of the last post-glacial marine transgression. It has thus provided an unparalleled opportunity to examine the relationship between human coastal occupation and environmental change throughout the Holocene. In this chapter, I draw together some of the main points regarding this relationship and present a general explanatory model of Whitsunday prehistory.

Archaeological patterns of change

It would appear that a generalised coastal hunter-gatherer population first inhabited the region at ca. 9000 BP. At that time, to generalise from Nara Inlet 1, the occupation of sites was brief and ephemeral, with exploitation of a restricted range of largely terrestrially based marine resources, such as rock-platform shellfish and fringing-reef fish, and a greater emphasis on terrestrially based animals such as small macropods. The number of sites occupied on the coast and islands would have been relatively low. This picture, I argue, is indicative of reasonably small and mobile groups whose settlement and subsistence patterns reflect 'classic' models of Australian coastal foragers who utilised a substantial coastal hinterland area but pursued a largely shore-based marine subsistence strategy (Hallam 1987). I would suggest that these people had 'always' been coastal, following the coastline as the sea level fluctuated and occupying the Whitsunday region, including the extensive hinterland, when the coast was in close proximity.

This general pattern remains relatively unchanged until ca. 3000 BP, after which a range of modifications to settlement, subsistence and technology become apparent. These changes include a greater emphasis on marine resources, such as open-sea biota like turtle and dugong; a change in technology reflective of the increased importance of the marine resource base; a significant increase in discard rates of most cultural materials within sites; and an expansion of island use.

I argue that this general pattern suggests a demographic restructuring of populations in the region after about 3000 BP. By the term 'demographic restructuring' I do not necessarily mean population increase, but rather a regional and local reorganisation of populations over the landscape. The pattern is of markedly increased regional and site use, including the exploitation of previously unoccupied islands and an intensification of the marine resource base. After this time a group, or groups, of coastal peoples changed and expanded their use of the island system, which until about 3000 BP appears to have been less intensively utilised.

The changes after 3000 BP may have initially involved a simple broadening of the existing exploitation range of the coastal peoples. However, the total evidence suggests a trajectory that was followed to the status of separate 'tribal' entity, the archaeology revealing increased economic productivity, site patterning and use, a greater degree of marine specialisation and unique art styles, while the ethnohistory indicates the eventual development of possible linguistic differences and the identification of the island people as a permanent population.

Although these changes had their beginnings about 3000 BP, the rate of change intensified throughout the late Holocene. Further significant changes occurred after about 500 BP, including the addition of toxic plant species to the subsistence base (*Cycas* and *Bruguiera* at Nara Inlet 1, *Cycas* at Nara Inlet Art Site and Hill Inlet Rock Shelter 1) and further increases in rates of discard of cultural material (dated at Nara Inlet 1, date inferred for Nara Inlet Art Site and Border Island, date and process inferred for Hill Inlet Rock Shelter 1).

I argue that the system recorded historically may date from about 500 BP. It is further suggested that maritime/coastal inter-regional exchange and interaction may have placed the Whitsunday area on the periphery of wider dynamic systems with links to north-eastern Cape York Peninsula, Torres Strait and Melanesia. These systems appear to be relatively synchronous with the later developments in the Whitsunday region (cf. Rowland 1983). The use in the Whitsunday Islands of a range of material culture items characteristic of northern coastal peoples, such as outrigger canoes, turtle-shell fish-hooks and broad-bladed and decorated canoe paddles, demonstrates these northern coastal links.

It is important that the possible participation of the Whitsunday Aboriginal people in such systems not be viewed as their being passive receivers of a diffusion of ideas and material culture from the north. Rather, their participation should be seen in the context of a greater degree of regional *interaction*, in which the flow of ideas and materials was probably mutual. These 'exchanges', then, took place within the context of a local and regional intensification of socio-cultural interaction linked to earlier socio-demographic factors dating after 3000 BP, as discussed below.

The Whitsunday Islands and models of coastal occupation

A number of researchers in Australia have attempted to use the record of Holocene environmental change as a primary cause for the initial establishment of coastal sites after the marine transgression (e.g. Beaton 1985; Rowland 1983). They invoke either the effects of inundation on marine resources up to the time of stabilisation around 7000 years ago, a subsequent high sea-level stand or the increased aridity of the past few thousand years to explain the late-Holocene coastal archaeological pattern. These factors, however, do not appear to have had a significant effect on coastal use in the Whitsunday area. For example, the data show that major environmental changes in precipitation and temperature, on a scale great enough to transform entire ecosystems (vegetation and, therefore, the biomass it supports), occurred in the early to mid-Holocene, that is, *prior* to the period of marked change in the archaeological record from the Whitsunday region, which takes place after 3000 BP.

In general, evidence from the Whitsunday region demonstrates that even the quite significant environmental changes that occurred in the early to mid-Holocene were never of

an order of magnitude after about 7000 BP to significantly alter the range of resources available to coastal peoples. Nor did these changes affect people's ability to cope with long- or short-term environmental fluctuations. Rises in sea level up to about 7000 years ago and any coastal changes after this date also appear to have had little effect on resource availability and general coastal occupation. In the Whitsunday Islands, which are steeply rising offshore continental islands with a rocky coast, rock-platform gastropods and bivalves are the predominant shellfish species. These, along with fish, marine turtles and marine mammals, are less likely to be affected by rising sea levels, due to their mobility, than relatively sedentary, sediment-based bivalve or crustacean fauna. There also appears to be no case to be made for a general rise in bioproductivity in the area in the past 3000 years.

It has been argued also that late-Holocene archaeological patterns in Australia can be explained by an increase in population numbers (Beaton 1990; Hall and Hiscock 1988; Hughes and Lampert 1982). As I have discussed elsewhere (Chapter 2), I consider that population dynamics are closely controlled by human groups and that what needs to be explained in this context is *why* increases occurred when it is proposed that they did. If population increase is a purely biological phenomenon, linked to carrying capacity and inherent in all biological populations (see Beaton 1990; Hall and Hiscock 1988), this increase should be reflected in the archaeological record. An archaeological pattern of slow population increase similar to that outlined by Lourandos (1983), for example, should be evident from at least the terminal Pleistocene and certainly throughout the early Holocene, when conditions were even more favourable to human expansion than those in the late Holocene. But no archaeological evidence for such an increase exists. A case could be made, however, for population increase in the late Holocene, after 3000 BP, based on the archaeological data. I consider that if and when population increase did occur, as it may have in the late Holocene, it was more likely to have been the result of a range of decisions or choices related to socio-political factors, in which the controls governing population were relaxed (cf. Early and Peters 1990).

Therefore, as extrinsic 'prime-mover' models, environmental and population explanations for the late-Holocene pattern of coastal occupation need to be reconsidered in the light of the archaeological evidence from the Whitsunday Islands. Also in need of reconsideration are explanations that incorporate such considerations as site destruction processes or the need to await technological innovation, as discussed in Chapter 2. I feel that future research on coasts and islands needs to take into account factors such as the resilience and sheer ubiquity of much of the marine resource base in the face of marked environmental change, the effects of which have been overstated in many archaeological explanations relating to coastal occupation. More important, however, is the need to give consideration to how coastal Aboriginal society might have viewed such changes and thus reacted to them.

It is likely that individuals or groups may have seen opportunities unfold as conditions changed. Whether they chose to act on them, and the timing and direction of that action, would all depend, I would argue, on a range of factors which might involve personal and group goals, political aims, degrees of conflict, perceived quality of life and other socio-political considerations. The point is that when environments change or new technologies are introduced, human society does not necessarily need to change, too. Such changes may provide new opportunities; however, decisions on how, when and why to act on them are inextricably bound up with social processes.

In the Whitsunday Islands, there is evidence to suggest that the full range of marine resources, including turtle and dugong, were available to coastal populations from at least the mid-Holocene, together with watercraft. However, the opportunity to exploit the greater productivity of these resources was not widely acted upon until several thousands of years later. I would argue, therefore, that the catalyst for change was not directly linked to these natural phenomena, but to changes in the structure of society.

A model for change in the Whitsunday Islands

The following explanatory model is offered for the occupation and use of the Whitsunday Islands. Archaeological evidence for demographic restructuring can be seen in the different uses of the coast and islands before and after about 3000 BP. Between 9000 BP and 3000 BP (Phase 1), coastal and island occupation appears to have been somewhat ephemeral and probably also included tracts of coastal hinterland. After about 3000 BP (Phase 2), however, there is a relatively sudden intensification of island use, a trend which continues right up until the period of European invasion of the region in the 1860s. The socio-demographic structure of Aboriginal populations during the earlier, pre-3000 BP and more recent, post-3000 BP phases can be characterised in the following way.

Between about 9000 BP and 3000 BP, social and cultural circumstances in the Whitsunday region may have consisted of a largely 'open', relatively 'generalised' coastal-hinterland system, where boundaries, cultural demarcation and access to resources were not rigidly structured (Barker 1991a). After about 3000 BP, however, a more 'bounded' system may have emerged, in which territorial demarcation became more clearly defined and access to resource areas controlled or restricted. This is not to imply a total 'closure' of the system as such. As Barth (1969:9) says:

it is clear that boundaries persist despite a flow of personnel across them, categorical distinctions do not depend on an absence of mobility, contact and information, but do entail social processes of exclusion and incorporation whereby discrete categories are maintained despite changing participation and membership.

The boundedness of these systems intensified regional social interactions by formalising them. This can be viewed in terms of an increasing 'complexity' of socio-cultural relationships and as the outcome of a possible population increase. Examples of this process come from studies of various coastal groups in the tropical north of Australia. These studies all highlight the differences, and in many cases the 'separateness', of coastal/island peoples from those of the hinterland regions. It is clear also that complex and relatively clearly demarcated 'culture' areas were defined socially in such situations (Chase and Sutton 1987; Hale and Tindale 1933; Thomson 1934; Trigger 1986).

The ethnographers emphasise the importance of inter-regional social relations as defining group identity and territoriality. Chase and Sutton (1987), for example, state that coastal peoples formed a chain of local groups for a distance of 200km along the east coast of Cape York Peninsula. Representing five different dialect areas, they classified themselves as 'sand-beach people' (*pama malnkana*) or 'east-side people' (*pama kaawaty*). These coastal peoples distinguished themselves from those who lived in the inland regions (westward) and from those in the nearby coastal ranges. The former were referred to as 'on-top people' (*pama kanityi*) or 'west-side people' (*pama iityulityi*). As an indication of social separateness, coastal peoples to the south, and particularly inland peoples to the west, were viewed as potentially dangerous, partly human and 'eaters of human flesh'. In contrast, the inland *Kaantju* speakers (a closely related dialect to the five included in *pama malnkana*), who lived directly adjacent to the coastal fringe, were not viewed in this way. This relationship was reflected in intermittent marriages, trading relationships and occasional ceremonial participation between some of the coastal and hinterland groups. It is worth noting also that the country of *Kaantju* speakers, in which occasional interaction with other groups was noted, was about only 4–5 km inland, while that of the *pama malnkana* was divided into seven patrilineal territories ranging from about 25km² to 70km² in area. Chase and Sutton (1987:69) state that local bands may have consisted of 15 to 30 people, with a total population of approximately 150 people. In other

words, quite an extensive complex of social entities was packed into a relatively small coastal and hinterland region.

Similar concepts of 'open' and 'closed' systems have been posited elsewhere archaeologically. For example, David and Cole (1990) see rich environments as requiring little in the way of 'risk-minimising' survival strategies, such as 'flexibility in local organisation, maximum mobility, and the linking of large numbers of individuals in vast interaction networks' (David and Cole 1990:789). Risk-minimising activities are seen as essential 'adaptive' mechanisms for survival in arid marginal environments (cf. Meggitt 1962:30; Myers 1986:93; Yengoyan 1976:128). In contrast, according to David and Cole:

[i]n the non-risky environment of Cape York Peninsula, it is argued that strategies to minimise resource-shortages lost significance, but that population increases, dispute management and territorial concerns gained importance and resulted in the development of a distinctly regional socio-cultural system (1990:789).

They also say that in Queensland widespread interactions involving small populations were a feature of much of prehistory (open systems), but that from about 3000 BP a fragmentation of socio-cultural units and a breakdown of wider alliances resulted in a much greater degree of cultural regionalisation (closed systems). It could be argued that the Whitsunday Islands sequence of events as outlined here conforms roughly to this general pattern. I have, however, also argued that the Whitsunday region throughout the Holocene was relatively rich in resources, with no demonstrable major change occurring in resource structure throughout this period.

Conclusion

Research on the east coast of Cape York Peninsula (Chase and Sutton 1987; Dixon 1976; Hale and Tindale 1933; Thomson 1934) has documented that the coastal Aboriginal peoples there had clearly demarcated social, cultural and physical boundaries, small territories with correspondingly high population densities, a marked social segmentation, marked linguistic diversity and a high degree of technological specialisation and economic diversity. I would argue from the ethnohistorical and archaeological evidence that a broadly similar pattern can be seen in the Whitsunday Islands. These patterns cannot be viewed *solely* as the product of high regional environmental productivity (biomass) or rising population densities.

Rather, I suggest that changes in inter-regional social relations in the Whitsundays and related areas brought about demographic restructuring and subsequent changes identified in the archaeological record after 3000 BP. Lourandos (1983, 1985b) has argued for reorganisation of social affiliations occurring generally during the mid- to late Holocene on the Australian mainland. I would propose that the post-3000 BP period marks the *beginning* of the process leading to the socio-cultural system described historically, in which the peoples of the Whitsunday Islands eventually became identified as the Ngaro, a 'tribal' entity described as the 'sea people', who were clearly distinguished from mainland populations.

Finally, a number of directions for future research are indicated by the present investigation. These include: further examination of the indices of change in the archaeological record; further examination of the archaeological correlates of social change; refining of the chronologies through more extensive, finer-grained radiocarbon dating; examination of the archaeological signature of the mainland coast; and examination of the possible links to systems of change occurring on the tip of Cape York Peninsula, at Torres Strait and in Melanesia.

In summary, this research has demonstrated a clear pattern of late-Holocene change which does not correlate well with changes in the environment and appears to be largely independent of other external processes. It is clear from the archaeological data that many of the models for late-Holocene coastal change outlined in Chapter 2 require revising in the light of this evidence and that future explanatory frameworks for change need to incorporate a more holistic approach, moving away from simplistic, single-factor, 'prime-mover' models and recognising the complex nature of change.