Discussion and Conclusion

Forty years ago when Golson (1959) summarised the archaeological prospects for the Pacific it could be accommodated within 49 pages. Since that time an extraordinary flood of information of increasing complexity and sophistication contained within a myriad of articles and books has radically changed our perceptions of the region. This more recent research into the archaeology of Vanuatu has also gone some way in both modifying earlier assertions and providing further data with which to assess a number of more recent hypotheses. The five research objectives outlined in the introduction to this thesis were as follows: 1) testing for evidence of pre-Lapita settlement in Vanuatu, 2) clarification of pioneering research and the establishment of basic cultural sequences, 3) establish basic outlines of prehistoric subsistence patterns and 4) provisional conclusions regarding settlement pattern and finally 5) an assessment of the evidence for a Melanesia-wide incised and applied relief ceramic tradition. The results of the research and to what level these objectives were achieved are summarised below.

1) Testing for evidence of pre-Lapita settlement
The idea of pre-Lapita settlement in Vanuatu can now be laid to rest. There was no evidence in any of the excavated cave sites on Malekula in the north or Erromango in the south that indicated human settlement prior to 3000 BP. All the earliest dates (3000–2900 BP) thus far for Vanuatu are associated with Lapita sites. Further in support of this assertion is the emerging evidence of faunal
extinctions related to the initial settlement of at least Erromango and Efate, a feature that is widely recognised as being associated with first human arrival in Remote Oceania (Steadman 1995). In the case of Erromango the extinct bird bone was associated with dentate-stamped pottery. On Efate the extinct fauna was identified at the Arapus site, which although it may post-date initial settlement of Efate by up to 100 years (Bedford et al. 2004) it seems likely that it is associated with the earliest settlement of west Efate. Vanuatu’s initial settlement lies firmly within the expansion into Remote Oceania by members of the Lapita Cultural Complex. Dentate-stamped ceramics were associated with the initial settlement phase in Vanuatu but appeared to survive for a relatively short time period of only a few hundred years being replaced by plain and/or a variety of decorated wares. This concurs with a pattern which has now been confirmed for most other regions of Remote Oceania, from New Caledonia to Tonga (Anderson and Clark 1999; Burley et al. 1999; Sand 1997) and one which suggests that whatever connections this homogeneity of Lapita ceramics may have represented they were somewhat short-lived.

2) Clarification of pioneering research and establishment of basic cultural sequences.

The Mangaasi ceramic sequence of Central Vanuatu, as originally outlined by Garanger (1972), has been substantially revised. No longer can it be seen as a lengthy conservative tradition separate from Lapita. Nor is there any evidence to support putative connections with ceramic traditions from New Guinea (Galipaud 1996a; Garanger 1972; Gorecki 1992). Rather the ceramic sequence from Central Vanuatu began with the appearance of Lapita and can be shown to have demonstrated an evolutionary transition to the Early (c. 2800–2500 BP) and Late Erueti (c. 2500–2200 BP) Phases and on to the Early (c. 2200–1600 BP) and Late Mangaasi (c. 1600–1200 BP) Phases and finally terminating at around 1200 BP on current evidence.

The ceramic remains from Erromango parallel those from Efate in a number of aspects, namely the primacy of Lapita and evolutionary nature of the sequence, but that is where the similarities largely begin and end. Lapita connections were short-lived. Rather abruptly the post-Lapita ceramic sequence on Erromango demonstrated a quite independent trajectory to the sequences from Efate. Lapita was superseded on Erromango by the Ponamla Plainware Phase (c. 2800-2600 BP) which in turn transformed into the Early (c. 2600–2400 BP) and Late Ifo Phases, at which point ceramics disappeared from the cultural repertoire.

The archaeology of Northern Vanuatu remains somewhat of an archaeological terra incognita although the combined results of Ward in the Banks Islands (1979), Hedrick on Malo (Hedrick nd) and Galipaud on Santo, Malo and the Torres Islands (Galipaud 1996c, 1998a, 1998b), along with this recent research which probed the archaeology of Malekula, have begun to shed several rays of light. Malekula, and almost certainly the other islands of Northern Vanuatu, can now be securely associated with Lapita expansion in the region. More recent research on Malekula has confirmed this as a number of Lapita sites associated with dentate-stamped ceramics have been investigated (Bedford 2003). The earliest settlement found so far on the main island is on the northwest coast of Malekula at Malua Bay which dates to around 2700 BP and is best identified in the archaeological record by calcareous-tempered sherds associated with plain pots of the proposed Malua Phase (c. 2700–2500 BP). The central part of the Malekula ceramic sequence remains largely uncharted. The surface collected ceramics hint at the possibility of a lengthy ceramic sequence, albeit unevenly distributed across the island, which may or may not demonstrate some parallels with the Central Vanuatu sequence.

The last phase of ceramic production on Malekula is characterised by bullet shaped, coil-made pots which appeared in the sequence no earlier and possibly sometime later than 1000 BP. Research to date suggests that these vessel forms have no apparent antecedents in Vanuatu. Thus far this distinctive Chachara Ware, which has been found across most of Malekula, has been tentatively dated to between 600–200 BP. It is found in association with the frequently recorded nasara or ceremonial structures which were and still are an integral component of the political and
social structure in the north and central north of Vanuatu which is based on a chiefly system that is consolidated through a hierarchy of grades. Clearly these site types and the political activities associated with them have some pedigree in Vanuatu, albeit restricted to the north.

The same Chachara Wares have also been identified as being present on a number of the other northern islands of Vanuatu indicating regular contact and interaction amongst the inhabitants of this region over the last 500 years. Appearing to overlap with these Chachara Wares and clearly developing from them are the Naamboi Wares which are unique to Malekula. These vessel forms which were recorded ethnographically represent the final phase and subsequent demise of ceramics on the island. Their appearance also coincided with a breakdown in the above noted pattern of ceramic similarity in the northern islands. This points to a shrinking sphere of interaction in the region and it seems likely that it is from this period that the extant cultural variability, found both on single islands and between islands, has developed. Increased territoriality and cultural differentiation across Malekula may also date to this period.

Glimpses of the latter part of the cultural sequence on Malekula have indicated that quite substantial social and cultural change occurred over the last 500 or more years on the island and in the region known as Vanuatu’s ‘Oceanic Mediterranean’ (Bonnemaison 1996:208). Green (1999) has argued that these changes can at least partly be explained by influence from further west in the form of sustained contact or even migrations of non-Austronesians, a scenario that fits well with some of the archaeological, biological and linguistic evidence. However, finer resolution of the long history associated with this social and cultural transformation, which defined the ethnographic period and comprises the cultural heritage of much of the present population of Northern Vanuatu, awaits future research.

The wide variety and quantity of non-ceramic artefacts recovered during the excavations have also contributed further insights into the archaeology of Vanuatu. The recovered materials indicate that non-ceramic artefacts were generally not as susceptible to change as were the ceramics. They tended to show greater conservatism for longer periods. Artefacts such as *Tridacna* and *Conus* armrings showed little change in form over at least the first 1000 years of settlement. The same could be seen with the shell adze assemblages which were exclusively made of *Tridacna* shell and were almost always fully ground. The most perceptible change amongst the non-ceramic artefact assemblages during the first 1500 years was an apparent reduction in both quantity and variety. However this apparent trend seems more likely to relate to increasingly dispersed settlement patterns and, related to this, less concentrated midden deposits. Certainly the wealth of non-ceramic artefacts associated with both the earliest and latest periods of the cultural sequence support this scenario. The lack of archaeological research focusing on this middle section (2000-600 BP) of the sequence has clearly contributed to this perceived variability.

While change in non-ceramic artefact forms may have been gradual there is overwhelming evidence at least in the central and southern islands that by 600 BP or earlier it was substantially changed. These changes included a variety of different shells being utilised in the production of adzes (*Lambis* and *Terebra* sp.) and a whole host of ornament forms that had not been previously recorded. Pig tusk and *Trochus* sp. bracelets were also a commonly recorded artefact dating to this later period. While change in some of the artefact forms can be ascribed to Polynesian influence, other artefacts indicate some contact with New Caledonia and/or areas to the north west of Vanuatu. Further focus on the non-ceramic artefact forms dating to this latter period has the potential to provide valuable information into the patterns of interaction and cultural transformation which occurred in the region.

3) Prehistoric subsistence patterns.
The largely absent faunal component of Vanuatu’s archaeological record has now been substantially augmented. There are hints of a ‘blitzkrieg-like’ scenario on initial arrival, although
further excavation of sites dating to this period is required for confirmation. Extinct birds were identified in only the lowest layers of a number of sites on all islands. The remains of an extinct land crocodile have also been identified at the Arapus site, which dates from initial human arrival on Efate. Further to the impact of human arrival on naïve faunas is the dramatic reduction in the size of shellfish at a number of sites. There are even indications that certain species may have been extirpated from particular areas on different islands.

After this short-lived ‘first contact’ phase some stabilisation of subsistence strategies was reached and horticultural produce would have begun to play its role as the major supplier of sustenance. The record indicates a wide range of procurement strategies were employed which targeted a broad range of species, both introduced and indigenous, from all accessible zones of exploitation. Those species which contributed regularly to the diet from first arrival and throughout included fish, shellfish, fruit bats and to a lesser extent wild birds, along with the introduced domesticates, pig and chicken. Two species of rat were also identified amongst the faunal remains namely Rattus exulans and praetor. No dog was identified archaeologically. Turtle appeared more frequently in the earliest layers of sites indicating it was heavily exploited from initial arrival which would have led to a rapid reduction in the breeding population. This is certainly reflected in the archaeological record with turtle bone being much rarer in later layers. Fruit bats also appeared to be heavily exploited during the initial settlement phase but their continued consumption throughout the archaeological record is indicative of their adaptability. Inshore and reef species of fish were targeted from initial arrival and continued to be so throughout the sequence, with no evidence for any change in preference or procurement strategies. The shellfish remains indicated a collection strategy that fitted an optimal foraging model, i.e., efficient gathering of the closest available resources.

All of the faunal data and its relative importance in the strategies of subsistence must of course be assessed against the thus-far largely assumed horticultural component of the diet. If ethnographic evidence is anything to go by, it would have consistently provided the most substantial quota.

4) Settlement pattern
Some consistency in the archaeological record is now beginning to emerge regarding the history of settlement pattern in Vanuatu. The pattern of initial settlement appears to fit a situation where Lapita colonists were moving into an uninhabited landscape and were thus able to select prime locations for habitation. During the initial colonisation phase certain islands and their environs, i.e., Malo, Aore and south Efate, may have acted as some sort of focal point or ‘metropolis’ (Bedford et al. 1999:21, 2004; Green 1978) from which other islands were investigated. Although few excavations in Vanuatu that have focused on Lapita and immediately post-Lapita remains have revealed more than the occasional posthole or hearth feature, the concentrated deposits of midden tend to suggest a pattern of nucleated settlement. The zones targeted for settlement were overwhelmingly coastal, with a preference for areas which included easy canoe access, fringing reefs and/or lagoonal environments and an easily accessible fresh water source (e.g. Ponamla and Ifo on Erromango, Arapus, Mangaasi and Erueti on Efate, Malua Bay on Malekula, the small islands off the northeast coast of Malekula and much of coastal Malo). These factors enabled maximum utilisation of marine and other faunal resources. There is evidence that this phase of settlement was very fluid. Occupation may have been short-lived (e.g. Ponamla on Erromango, Malua Bay and coastal cave sites on Malekula) due to changing environmental factors. Populations still had the option of moving to other pristine areas of the same island or indeed to other islands as resources became depleted. Variability in environmental situations may have been one of the key factors governing the viability of settlements. The environmentally more fragile leeward side of the islands may not have been able to sustain long-term intensive settlement and horticultural practices. On the other
hand the tephra-rich soils found on a number of islands would undoubtedly have been an attractive feature that would have facilitated long-term horticultural production.

The archaeological record indicates that it was only much later that populations spread out from these prime location areas. Exploratory visits into the interior of the larger islands may have been a regular feature (e.g. Navepule C, Malekula dated to c. 2000 BP) but more permanent settlement does not seem to have occurred until the last 1000 years.

5) Assessment of the evidence for a Melanesia-wide incised and applied relief tradition

The establishment of fine grained ceramic sequences from Efate and Erromango have enabled a reassessment of earlier results and conclusions relating to the archaeological history of Vanuatu and the broader region. A widely accepted theory used to explain post-Lapita change across the Southwest Pacific is that it was related to a secondary wave and/or continued contact with Non-Austronesian populations further west, which had the effect of ‘Melanesianising’ the region as far east as Fiji (Bellwood 1979; Golson 1961; Green 1963; Spriggs 1997). It has been argued that evidence for this scenario can be seen in the ceramic record of the region. Some authors maintain that there is evidence for a Pan-Melanesian Incised and Applied Relief tradition which demonstrated synchronous change throughout much of the post-Lapita period (Spriggs 1984, 1993, 1997, 2000), possibly even right up to 800 BP (Wahome 1997, 1999).

A re-appraisal of the ceramic assemblages that have been used to support such an argument suggest that at least in terms of claimed homologous ceramic traits the evidence is less than secure. It is argued that the concept of an Incised and Applied Relief tradition existing across the Southwest Pacific has since its inception been based more on theoretical grounds than empirical data. The term has often simply been used to differentiate ceramics that were neither dentate-stamped nor paddle impressed. Implied ceramic stylistic unity, arranged under the broad Incised and Applied Relief-Mangaasi rubric, has been used to support the concept of a Melanesia-wide inter-connected ceramic tradition. With it has gone a tendency to lump collections together rather than highlight differences. A comparison of common decorative techniques like incision or applique, without regard to vessel form, motif design, or firm chronological control, tends to support scenarios of widespread population migration and diffusion and such is the case with the Incised and Applied Relief tradition. But the act of grouping pottery using common yet ill-defined stylistic criteria does not mean that a close historical relationship need have existed between pottery makers who might have included incised and or applied relief amongst their decorative repertoire (Bedford and Clark 2001).

In the very earliest stages of many ceramic sequences from the Southwest Pacific similar changes can certainly be identified. There is a change from the first dentate stamped decorative wares to an increasing percentage of incised wares and/or plainwares, along with a decrease in the range of vessel forms. A few immediately post-Lapita motifs, decorative methods and vessel forms share a degree of similarity across sequences but these might equally be explained as continuities inherited from the founding ceramic tradition rather than continued inter-archipelago contact.

The relatively homogeneous nature of Lapita ceramics can be seen in part as being the result of frequent interaction over a relatively short time period between a small, widely dispersed and highly mobile colonising population (Graves et al. 1990:228; Summerhayes 2000). But Lapita expansion and colonisation itself was not the result of any monolithic state-sponsored settlement program that was totally homogenous across time and space. When ceramic assemblages begin to show island-specific variation soon after Lapita settlement, as seen in Vanuatu, there are clearly other processes that influenced the form and composition of those sequences. Different islands may have been settled by clan groups that were only distantly related and over a short period rapidly changing population dynamics and environmental conditions may have encouraged
further delineation. This might partly explain the diversification in ceramic styles which began to reflect efforts to produce and maintain geographically based social distinctions (Graves et al. 1990: 228). In other words, the ceramic remains tend to demonstrate the ‘evolutionary primacy of local processes’ (Hunt 1987:330) rather than inter-archipelago connections. In line with this argument is the mounting evidence that ceramic sequences, at least in Remote Oceania, began to follow increasingly independent trajectories soon after initial Lapita settlement and up until at least 1000 BP. From this date there is evidence, at least in the recovered non-ceramic artefacts (see below), for renewed inter-archipelago contacts.

The concept of a Melanesia-wide Incised and Applied Relief tradition was a useful concept during the infancy of archaeological research in the region. But as new evidence has revealed it is no longer supported by the empirical data. The term and its implications have begun to cloud the archaeological picture and has led to some rather simplistic explanations of cultural change. That is not to say that the study of post-Lapita pottery should be abandoned because inter-regional links might not be evidenced in the ceramic record. Rather, the focus now needs to be on tracking patterns of stylistic variation within each archipelago. Pacific archaeologists who deal with ceramics need to stop packaging the post-Lapita period as a devolved and reduced version of Lapita by making connections between island groups on the basis of individual ceramic traits. Also highlighted from this research is that post-Lapita assemblages that comprise a small number of small sherds must be treated cautiously, particularly those that are claimed to cover long time periods with little change.

These arguments do not preclude the possibility that future research may well reveal low levels of inter-archipelago contact in the post-Lapita period and considerably higher rates during the last 1000 or so years. A greater frequency of long-distance contact in the recent past is an emerging result in Vanuatu where some non-ceramic artefact forms point to increased long-distance interaction. These include the presence of Banks Island basaltic glass in Tikopia and Fiji, the widespread occurrence of artefacts such as Terebra shell and lenticular stone adze forms across Vanuatu (and much of the Southwest Pacific), New Caledonian serpentine on Tanna and Polynesian-style ornaments and burial practices in the centre and south of Vanuatu.

**Future Directions**

Great progress has been made in our understanding of the archaeology of the Southwest Pacific region over the last 50 years of investigation. But the state of knowledge varies greatly from region to region and between specific time periods. While the sustained focus on research into Lapita in the region has been essential and justified one of the more recent emerging revelations from that research is that in Remote Oceania, the highly identifiable dentate-stamped ceramic component of that Cultural Complex comprises no more than 10% of any of this region’s prehistory. Archaeologists working in the Pacific often claim that one of their primary objectives is the further elucidation of the origins of the biological, cultural and linguistic variation that is found in the contemporary Pacific. If this is so then we must start focusing on what happened after Lapita and particularly on the archaeology of the last 1000 years. This period remains one of the least well known throughout the entire region but is likely to prove to be the most profitable in terms of detailing more recent episodes of human interaction which have substantially shaped the contemporary human landscape.

Ironically, in Vanuatu it is the post-Lapita period that has been a major of focus of research whilst the archaeology of the Lapita period remains poorly known. This is clearly a significant gap in current knowledge that requires a great deal of archaeological attention. Whilst the post-Lapita period in Vanuatu has been a major focus of research it has been somewhat unevenly concentrated.
Clarification of the archaeology of the central and southern islands is beginning to be achieved, although finer detail particularly of Mangaasi Phase (2200–1200 BP) of the ceramic sequence is still required. Also needed is more research into the period post-dating ceramics, i.e. the last 1200 years. It is as yet a poorly understood period, but as shown by the work of Garanger (1972), it can be seen as a time of substantial change to cultural forms markedly different from what had been seen before. The largest archaeological gap remains Northern Vanuatu and particularly the North Central region, the ‘Oceanic Mediterranean’ comprising Santo, Maewo, Pentecost and Ambae which has been virtually untouched archaeologically. The last 1000 years in this region has also witnessed significant cultural change. It is during this time that we can see differentiation occurring between the islands of the north and centre. It may also have been during this period that increased inter-regional contacts occurred.

Many of the same research questions and gaps in archaeological knowledge pertaining to Vanuatu are also seen in other areas of the Southwest Pacific. Archaeological research in the region needs to focus on the establishment of much more detailed regional sequences which will ultimately provide a platform for more informed theoretical debate.

What is abundantly clear is that the pieces of the archaeological puzzle that comprise Vanuatu’s long durée are far greater in number and present a far more difficult task in their assembly than has appeared to be the case hitherto through the limited archaeological research that has been carried out to date. But this research, building on earlier research, can at least claim to have made some contribution to the on-going process of the construction of the myriad of potential historical plots (Kirch 2000:xix).