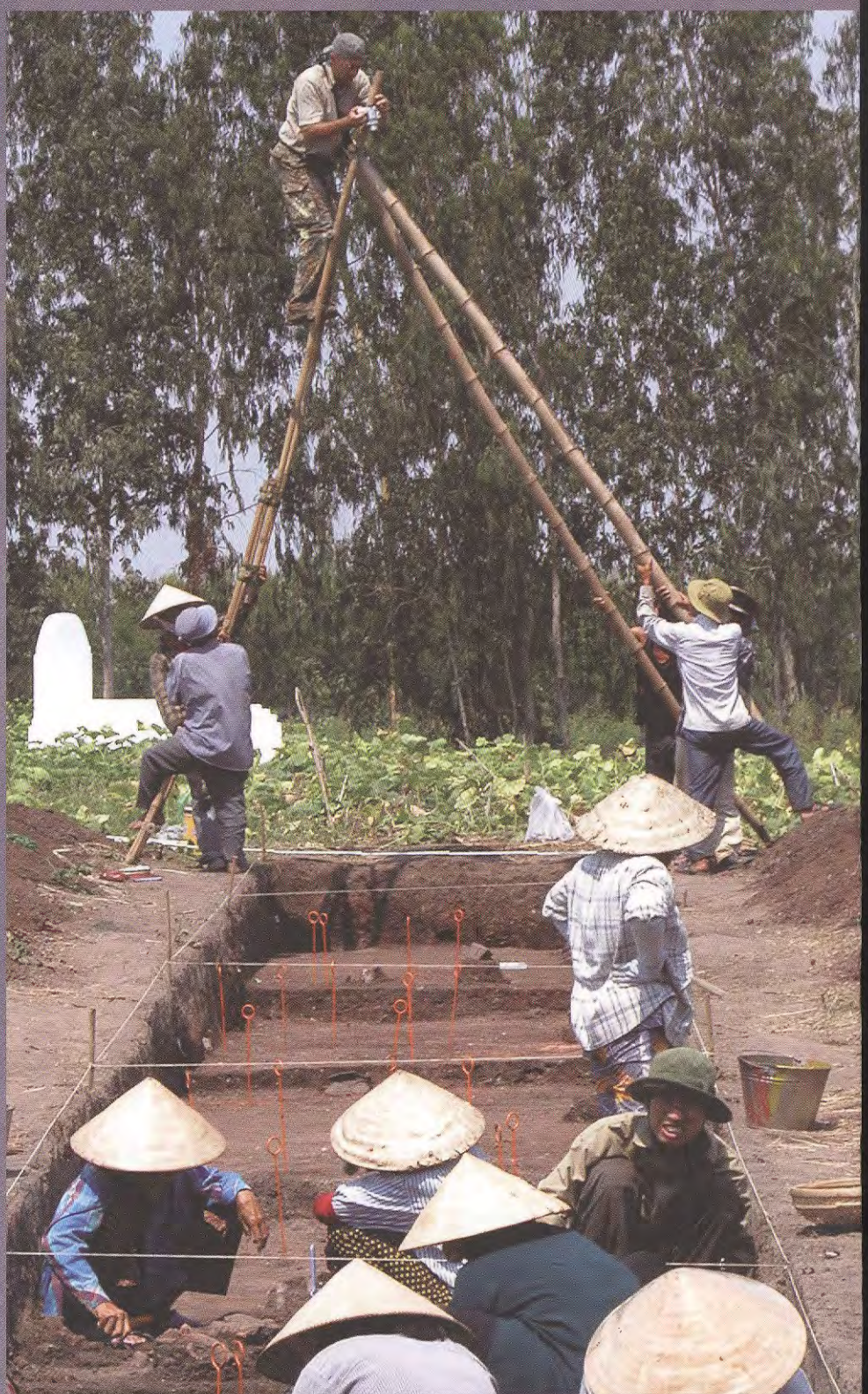
Crossing Borders

Selected Papers from the 13th International Conference of the European Association of Southeast Asian Archaeologists, Volume 1



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Back cover image: Excavation by the Mission Préhistorique Franco-Cambodgienne at Laang Spean cave, Cambodia, December 2010 (Photo: A. Reinecke).

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Chapter 11

Almost Everything You Believed about the Austronesians Isn't True

Roger Blench

Abstract

One of the most persuasive narratives in recent prehistory has been that of the Austronesian expansion, the notion that a migration out of Taiwan some 4,000 years ago was responsible for the spread of Austronesian languages from the Philippines to Remote Oceania. Although strongly supported by archaeologists such as Peter Bellwood, many others find the pattern of material culture too diverse to support a demic expansion model. Nonetheless, archaeology has signally failed to establish an alternative model to account for the dominance of Austronesian languages throughout this region. The paper puts forward a hypothesis to account for this. It argues that:

(a) Vegeculture existed in much of island Southeast Asia prior to the Austronesian expansion,
(b) That the Austronesians, far from being agriculturalists, were fisher-foragers,
(c) That the dogs, pigs and chickens supposedly characteristic of this expansion reached island Southeast Asia through alternative routes,
(d) That the linguistic reconstructions that appeared to support this model are in fact mosaics of loanwords,
(e) That the spread of Austronesian languages was due to a powerful religious / lifestyle ideology which assimilated indigenous speech communities and that this can be detected from material culture.

Introduction

A debate in practice of archaeology that seems somewhat idiosyncratic to outsiders is the extent to which archaeology should be a self-contained discipline. Identified with processualism and with "scientific" archaeologists such as Grahame Clark, the underlying idea is that what is excavated is somehow self-contained and that we should not seek to link its findings with other disciplines, such as linguistics, synchronic material culture and more recently, genetics. A classic formulation of this view is that "pots speak no languages", a formulation now urged by Colin Renfrew (2005) in a reversal of his previously expressed views.

This seems odd outside the seminar room, since presumably the only way we can seek to interpret the material traces of the past is to draw on our understanding of the present, whether through synchronic or diachronic processes. The innocent observer imagines the larger enterprise is the reconstruction of human history, or, in a more controversial formulation, prehistory. This is not to say that individual disciplines should not pursue their own career paths; indeed overly close cohabitation will almost certainly produce circular results. However, the larger picture can be drawn by comparing the results of each discipline and establishing how far they complement or contradict one another. If, for example, linguists claim that "dog" can be reconstructed to a proto-language and archaeology signally fails to produce any examples of dogs in the presumed homeland, this constitutes a puzzle to be explained, not bypassed. If geneticists claim that the Polynesians originated in Java some 17 kya (Oppenheimer and Richards 2001), and archaeology

points to Fiji / Samoa around 3000 years ago (Kirch 2000), one or the other or both are wrong, or are using non-congruent definitions of "Polynesian". Simply to ignore the problem is a failure of nerve.

One of the most persuasive narratives in recent prehistory has been that of the Austronesian expansion. Deriving from the original hypothesis of the kinship of over a thousand languages in Southeast Asia and the Pacific, it was first established using modern linguistic methods by Otto Dempwolff (1920, 1934–8) although Wilhelm Schmidt (1899) had previously grouped these languages into categories still used today (Polynesian, Micronesian, Melanesian etc.) using lexical resemblances. Dempwolff did not clearly identify and situate the languages of the Taiwanese Austronesian peoples, an omission rectified by the second major figure in Austronesian studies, Isidore Dyen (1965). Robert Blust (1984–5, 1999) may have been the first author to clearly establish that the diversity of Formosan languages required that they be ancestral to all others and constitute a primary branching.[1] This hypothesis is first advanced in Richard Shutler and Jeff Marck (1975) and was adopted by Bellwood (1979) to account for the archaeological evidence, whence emerged a story about ancestors of Austronesian horticulturalists leaving Taiwan by means of developed sailing technology and reaching the furthest shores of the Pacific as well as the East African coast. A Neolithic package was deemed to accompany these ocean navigators, consisting of pigs, dogs and chickens, rice, pottery and stone adzes, as well as distinctive types of jewellery. Various sub-narratives such as the "out of Taiwan" reached high-profile journals (Diamond and Bellwood 2003; Bellwood 2008). Blust's (1993) hierarchy of nodes branching from the Austronesian tree until Oceanic, the branch identified with the Lapita potters and ultimately giving rise to Polynesian, seemed to reflect what was known about this early expansion.

The Austronesian expansion has further developed into a more general narrative about migration and demographic growth in prehistory which has it that the dispersal of many of the world's language phyla were driven by agriculture (Bellwood and Renfrew 2002; Bellwood 2002, 2005). The version of prehistory has been enormously influential, and is paid obligatory obeisance in the prefaces to hundreds of graduate dissertations. Moreover, it continues to be vigorously defended by its two main originators, Bellwood and Renfrew, who support it with fieldwork and publication.

In the case of island Southeast Asia (ISEA) and the Pacific, the "Austronesian hypothesis" has long had its detractors, notably Wilhelm G. Solheim II (1964a, 1984–5) and William Meacham (1984–5). In recent years there has been a rising chorus of discontent from archaeologists who are increasingly claiming that the data does not fit the simple demographic expansion model (Terrell *et al*. 2001, Oppenheimer and Richards 2001, Oppenheimer 2004, Szabó and O'Connor 2004, Terrell 2004, Spriggs 2007, Lewis *et al*. 2008, Bulbeck 2008). The claim, put simply, is that assemblages seem to be rather diverse and complex and do not correspond to a simple model of incoming Neolithic farmers replacing foragers. Rather the patterns of material culture in prehistory seem to point to earlier and more complex inter-island interactions than the Austronesian expansion model would seem to imply. However, their failure to engage with the linguistic evidence has meant their arguments lack a key element. Roger Blench (2011b) evaluates the linguistic arguments for the language phyla of Southeast Asia in some detail. Peter Bellwood and Jared Diamond (2005) have responded to some of the more outré claims by Stephen Oppenheimer and his collaborators (e.g. Oppenheimer and Richards 2001). Moreover, in some areas, notably Remote Oceania and Polynesia, it would be hard to deny such a demographic expansion, since this was the colonization of previously unoccupied territory. But Polynesia has never really been the problem; it is the large complex islands and archipelagos such as the Philippines, Borneo and Sulawesi that have to be explained. Linguists have been less vocal, but then the number of linguists who are really interested in big-picture Austronesian is quite restricted. But with Blench (2005, 2008) and others (Donohue and Grimes 2008[2]; Denham and Donohue 2009; Donohue and Denham 2010) the background noise is now rather loud.

None of the detractors deny there is a large phylum of interrelated languages spoken from Taiwan to Polynesia; the question is how this can be modeled in prehistory. The hypothesis of demographic expansion superficially matches the language situation rather neatly and is clearly true for remote Oceania and Polynesia. The notion of a trade language simply does not fit with the linguistic data. But the evidence for demographic expansion and its association with agriculture no longer seems to match the archaeology. In particular, a simple replacement of foragers is almost certainly false. However, the detractors tend not

to put forward an alternative model which can effectively explain the synchronic facts about Austronesian languages. This paper[3] is intended to survey the contradictions in existing models and to suggest how we can move from the past to the present using what might be called palaeosociolinguistics, modeling social and linguistic change according to credible parameters.

Foragers versus Vegeculturalists

Most of ISEA has long been inhabited. Redating the Tabon cave skull on Palawan produced a date of 47,000 BP (Dizon *et al*. 2002) and Niah cave skull is nearly as old (Barker *et al*. 2007). It has generally been assumed that the inhabitants prior to the Austronesians were exclusively foragers. Encapsulated modern populations such as the Andamanese, the Orang Asli in the Malay Peninsula and the remnant negrito populations in the Philippines seem to point in this direction. There are also foragers on other islands, such as the Penan of Borneo (Puri 2005), who are clearly not Austromelanesian; whether these are genuine survivors of a pre-Austronesian population or simply farmers who went back to the forest, like the Tasaday, has not been resolved.

Logically there is the possibility that there were prior agricultural populations on some of the islands and that the evidence of their subsistence systems is difficult to find. There may be two reasons for this, either because they were based around vegeculture and arboriculture or because the number of open-air sites in ISEA is still very low. If there were such populations who switched from other languages to Austronesian, they would have been all but submerged. Roy Ellen (1988) describes this type of mixed vegeculture and arboriculture, a sedentary lifestyle based around sago extraction, for Seram in Eastern Indonesia. K.J. Stark (1996) touches on this hypothesis in a discussion of the archaeology of Eastern Indonesia, and Kyle Latinis (2000) discusses the broader role of arboriculture in early subsistence in ISEA. Chris Hunt and Geoffrey Rushworth (2005) report evidence for disturbance in the tropical lowland forest at Niah, Sarawak, Malaysian Borneo at 6000 BP which they attribute to cultivation. Huw Barton (pers. comm., June 2011) has evidence from starch on stone pounders in the Kelabit highlands for palm granules earlier than 6500 BP.

One interesting indicator of this possibility is the Melanesian origin of many key starchy cultigens (Lebot 1999). It seems likely that bananas, taro, sugar-cane and some of the yams were all first domesticated in New Guinea. In addition, various species of tree were either domesticated or were apparently translocated from island to island westwards in the pre-Austronesian period (Blench 2005). A partial list is given in Table 11.1.

All of these are cultivated throughout ISEA and indeed on the mainland; all appear to show old reconstructions in Austronesian and yet their locus of domestication is in entirely the wrong place. Either they were present in the agricultural repertoire of the Austronesians when they began their expansion in which case there is no vector for the crops to travel *from* New Guinea, or else they were absent in which

Table 11.1: Melanesian cultigens in the Austronesian island world

Species	Latin	Reference
Staples		
Bananas	*Musa spp*.	Carreel *et al*. (2002)
Taro	*Colocasia esculenta*	Lebot *et al*. (2004)
Sugar-cane	*Saccharum officinarum*	Grivet *et al*. (2004)
Greater yam	*Dioscorea alata*	Malapa *et al*. (2005)
Trees		
Pili nut	*Canarium spp*.	Yen (1994)
Sago	*Metroxylon sagu*	Kjær *et al*. (2004)

case they would presumably have to spread westwards from New Guinea after contact. Such a spread ought to leave very marked linguistic and archaeological traces, which are conspicuous by their absence. Yams are cultivated sporadically throughout ISEA, and there is growing evidence that they were cultivated well before the Austronesian expansion. Ille Cave, on the island of Palawan, (which would have been connected to Borneo by land prior to the rise in sea level), has provided crucial evidence for cultivation prior to 8000 BP. Graham Barker *et al*. (2011: 6) say:

> The presence of parenchyma identical to those of the modern domesticated yam at Ille Cave in secure stratigraphic contexts provides extremely strong evidence that it was being intensively exploited by people in Palawan thousands of years before the supposed Austronesian expansion.

One obvious way out of this dilemma would be to assume the exclusive forager model was simply not true, that there were vegeculturalists in ISEA prior to the coming of the Austronesians. Austronesian speakers simply assimilated them, and largely adopted their agricultural system. In this version of prehistory, early ISEA would have occupied by multiple distinct groups, including scattered foragers, settlers from the mainland in the west and "Papuans" in the more eastern regions.

This looks attractive from the point of view of archaeology, but the problem is then how to explain the linguistics. The fact is that Austronesian is completely dominant up to Timor and Halmahera, with no language of any other phylum spoken. It is for this reason that the Austronesian migration narrative looks so attractive. Austronesian farmers with their rice and pigs simply overwhelm the foragers demographically, hence no other languages are spoken today. If we are to put forward an alternative interpretation it has to explain this situation, and the archaeological literature tends not to address the linguistic issue. Hence the title of this paper, which asks how we can decide between genuine demographic expansion and the cultural assimilation of pre-existing agricultural populations. What type of sociolinguistic model could account for such a wholesale elimination of linguistic diversity?

Language Leveling and Evidence for Substrates

Austronesianists have not given much time to the identification of substrate lexicon, although this would provide pointers to the affiliations of prior populations. Bernd Nothofer (1986) analyzed the lexicon of the "Barrier Islands" of Sumatra and proposed that there is a common lexicon which does not go back to Malayo-Polynesian. Laurie Reid (1994) has established that residual non-Austronesian lexicon in Negrito languages of the Philippines is cognate between now geographically separated groups, pointing to an earlier common lexicon. Sander Adelaar (1995) and Blench (2011a) show that there is at least some evidence for Austroasiatic substrate lexicon in Borneo. Mark Donohue and Tim Denham (2010) identify typological traits in ISEA languages which may be indicative of substrates. Nonetheless, this is a limited testament to what must have been an extensive process.

However, there is another possibility that we have actually been wrong in our identification of languages as Austronesian. Alexandre François (2009) discusses the languages of the Vanikoro and Utupua island groups in the southern Solomons. There are some six languages in this group, some nearly extinct, which are usually classified as a subgroup of Oceanic (Tryon 1994: 635). François points out that these languages are extremely different one from another and that actual cognates with proto-Oceanic are few and indeed often doubtful, requiring *ad hoc* sound shifts to explain their forms. In other words, it is just as reasonable to analyze them as non-Austronesian (NAN) with Austronesian borrowings. There is no evidence for the occupation of these islands prior to the Lapita-era expansion; but it is possible that the expansion currently identified with Oceanic languages was in fact multi-ethnic and included an NAN component deriving from the already highly diverse populations in the northern Solomons. This would explain some of the other puzzling languages in the Oceanic area. Blust (2009a: 686) has pointed to the highly divergent lexicon of some of the Austronesian languages in Melanesia, for example Kokota in the Solomons, Kaulong of New Britain[4] or Nengone and Drehu of the Loyalty Islands. This model would have the virtue of explaining what is otherwise a ripple in the relatively smooth sea of Austronesian languages.

However, more crucial to this process may be language leveling, which is a process on a much larger scale. Language leveling is when the spread of a major language, usually among languages which are already related, causes lexical and grammatical convergence. This is often the consequence of centralized political authority. For example, the spread of Khalkh Mongol following the military expansion of the Mongols in the thirteenth century has eliminated much of the diversity of Mongolic, leaving only divergent dialects at the periphery (Janhunen 2003).

Similar processes have been at work across ISEA. Blust (2005, 2009b) observes that the lexical diversity of languages in both the Philippines and Borneo is too low to be reflect the length of time these languages have had to diversify. In the case of the Philippines, he calls this the "Macro-Philippines" hypothesis and for Borneo the "Greater North Borneo" subgroup. It is certainly the case that the languages, at least of these islands, are surprisingly similar to one another, if their languages have indeed been diversifying *in situ* for more than 3500 years. To this list can certainly be added Malagasy, which is again very similar across the island, despite a depth of occupation of at least 1500 years. The island of Nias shows astonishing genetic and linguistic uniformity, despite its very early settlement, which may be attributable to a language-leveling event as little as 600 years ago (Kennerknecht *et al*. in this volume). Java, Sumatra and the Malay Peninsula have also reduced language diversity in historical times through known political processes. Language leveling may be the result of a wide variety of sociolinguistic processes, but the result is the same: the gradual elimination of diversity following the spread from some central source of a persuasive and characteristic lexicon. Comparable changes today with Malay, Indonesian and Tagalog are being induced by the nation state, education and television. Such processes need not necessarily involve a top-down imposition of a language policy, they can be political or cultural.

If there is evidence for extensive language leveling in islands where there is no clear evidence for the sort of political process that reduced Java to a single language, it is sending a signal. The limited vision introduced by the Austronesian expansion hypothesis, however, has made it difficult to interpret such a signal. Language leveling points to the Austronesianisation of ISEA— the process whereby Austroasiatic, Papuan and other unknown languages and cultures were brought into the Austronesian fold.

This should not be taken as support for hypotheses deriving from Solheim's "Nusantao", which asserts that Austronesian is a trade language (Solheim II 1984–5). The characteristics of trade languages are fairly well established; indeed the diverse dialects of Malay do resemble a commercial diaspora. Trade languages are dispersed, and have simplified lexicon and grammar, as well as poorly developed ethnoscience lexicon and a lack of poetic and hierarchical registers. Austronesian looks nothing like this; its dense cultural networks, rich syntax and morphology point to something quite different.

The Archaeological Evidence

Linguistics shows that there can be multiple ways of analyzing the pattern of Austronesian languages. What are the features of the archaeology that should make us reconsider the demographic model in the light of this? One part of the Austronesian hypothesis cannot be discarded, which is the contrast between the settlement of occupied versus empty islands. All of Polynesia and Micronesia, the southern Solomons, Vanuatu and New Caledonia and some of the smaller offshore New Guinea islands were devoid of human settlement prior to the arrival of Austronesians. Populations speaking Austronesian languages occupied these islands and did not replace resident foragers or vegeculturalists.

However, most of the islands of Indonesia and the Philippines have clearly been occupied since the Pleistocene. Typical references are Meacham (1984–5), Solheim II (1984–5), Szabó and O'Connor (2004), Spriggs (2007), Lewis *et al*. (2008), Denham and Donohue (2009) and Donohue and Denham (2010). The claim is that:

(a) there is evidence for a highly diverse material culture, apparently going back before the proposed Austronesian horizon;
(b) an absence of clear indications of incoming agricultural populations, particularly with respect to rice and domestic animals. Some sites seem to show continuity across the period supposed to be characterized by incoming Austronesians.

David Bulbeck (2008), in a wide-ranging overview, documents transfers of material culture around ISEA either prior to the Austronesian era or in contrary directions to its apparent flow. Not all archaeologists agree with the specific connections made by Bulbeck (see critique in Spriggs 2011) but it is only necessary to accept that this was a rich, complex interaction sphere prior to the Austronesian expansion. Bellwood (1997: 237–8), generally a supporter of the Austronesian migrations, accepts that there may have been prior Austroasiatic presence in Borneo.

The evidence for rice and livestock that supposedly characterizes the Neolithic package is less than wholly convincing. Apart from Gua Sireh in Borneo (Bellwood *et al*. 1992), early rice in securely dated contexts in ISEA is limited, mainly confined to Sarawak with individual records on Luzon and Negros (Paz 2002). In the case of livestock, the absences are particularly striking;

(a) Wild and domestic pigs are found in the northern Philippines (Nagsabaran, etc.) at or before 3500 BP (Piper *et al*. 2009). No other finds of pigs in ISEA are certainly domestic until the records from New Guinea.
(b) The earliest find of dogs in ISEA are dog burials in Timor ca. 3000 BP and at Nagsabaran ca. 2500 BP.
(c) There are no certain finds of domestic chicken bones in the region until their appearance in Lapita sites.

It has been shown that the majority of pigs in ISEA and the Pacific originate not from Taiwan, but from the mainland, probably Vietnam (Hongo *et al*. 2002, Larson *et al*. 2007, Dobney *et al*. 2008). Gregor Larson *et al*. (2010) trace the "Pacific clade" (their MC2) to Laos, Yunnan and far Northwest Vietnam. In ISEA, this clade occurs in Sumatra, Java, eastern Indonesia and New Guinea. Exactly what route this implies is as yet unclear, without more records from coastal mainland Southeast Asia (MSEA). There is a small pocket of domestic pig in assemblages in Taiwan, and the extreme northern Philippines (Piper *et al*. 2009), but this does not appear to spread southwards into the main body of the archipelago. There has apparently been an independent domestication of a highly local race on Lanyu (Orchid island) which may account for these finds (Wu *et al*. 2007). Unambiguously domesticated pigs are conspicuously absent from the archaeological record in the main islands until significantly later than the Austronesian expansion, although this might be an artifact of the low number of open-air sites in ISEA. This suggests that they spread along the southern chain of islands to New Guinea, which must also be the case for the dog, as the dingo appears in the Australian archaeological record by ca. 3500 BP (Savolainen *et al*. 2004). How chickens reached the Oceanic-speaking area remains unclear; their absence in assemblages in ISEA again points to a rapid movement along a corridor with low archaeological visibility.

The redating of the Neolithic of ISEA also argues strongly against demographic expansion. Matthew Spriggs (2007, 2011) points out that the narrow range of dates in the northern Philippines and elsewhere in ISEA and the Pacific, points to a very rapid dispersal within a window of a few hundred years. This is hardly a pattern characteristic of farmers. The appearance of early sites in the Marianas can only be the result of a striking advance in maritime technology, possibly the sail. Bulbeck (2008) proposed the term "fisher-foragers", but in a later period there is a military aspect, so "raiders and traders" might also capture the character of this dispersal. Their relationship with agriculture would have been opportunistic; trading for staples and tree products with resident farmers and learning production techniques in particular times and places. In more recent times, there are similarities with sea nomads such as the *Orang Laut* in western ISEA and the Bajaw, who were nomadic between Borneo and the southern Philippines. Strikingly, there is evidence for the Bajaw, who speak Samalic languages, resettling on land, turning to agriculture and dropping their maritime lifeways (Blust 2005).

In this interpretation, the Austronesian expansion over much of ISEA is actually a process of Austronesianisation. Pre-existing populations, who would have practised vegeculture and arboriculture, were culturally assimilated by mobile fisher-foragers bringing prestigious trade goods and innovative religious ideas. Simon Best (2002), discussing the reasons for Lapital, touches on the relationship with spiritual patterns characteristic of ISEA, and notes that Bellwood (1995: 103) also mentions "a culturally sanctioned desire to found new settlements in order to become a revered or even deified founder ancestor in the genealogies of future generations".

These incomers were clearly very adept at reinventing themselves, and incorporating regional innovations into their cultural repertoire. Apart from their own distinctive pottery, they must have quickly seized on other early trade possibilities, obsidian, stone axes, woven goods and baskets. Although the long-distance trade in the exotic pottery identified by Solheim II (1964b) as the Kalanay connection is somewhat later it can serve as an exemplar of this type of movement of prestige goods. Most importantly, they would have adopted dogs, pigs and chickens from MSEA, and then carried them eastwards to Melanesia and Oceania. By the time they begin to hit uninhabited islands they have *invented* Austronesian culture out of fragmentary elements adopted from a wide range of sources. A connoisseur of irony might enjoy the fact that the Austronesians constructed their culture in a sufficiently convincing way as to bemuse 20th-century researchers into imagining that it constituted a coherent whole from the beginning. So books such as "The Austronesians" (Bellwood *et al*. 1995) become part of an unconscious conspiracy with their unnamed forebears to retrospectively integrate what was historically an array of fragments.

The Role of Religion in Austronesianisation

In contrast to the material culture that typifies the archaeological record, there is a feature of the Austronesian world which is very pervasive, its iconography. A highly distinctive set of iconographic elements in figurative art is widely spread across the Austronesian-speaking area. Typical are the *linglingo*, the jade / nephrite earpieces which occur from Taiwan to New Zealand,[5] but several others can also be observed. One of the most well-known is the *bulul*, a seated figure with either the arms crossed or held up to the chin, and generally with a serious demeanor [Fig. 11.1].

Figs. 11.1a, b: The *bulul* figures left to right: ivory shrine figure, Tanimbar, carved lime-jar stopper, Batak, Sumatra, ht. 7.5cm; seated figure on cover of food serving bowl, Luzon, Philippines, ht. 6.5cm (All objects in the author's collection).

Fig. 11.2: Split figure on carved drum, Austral Islands, ht. 6cm, Musée nationale des arts d'Afrique et d'Oceanie. MNAAO.84.367 (Photo: R. Blench).

The northernmost occurrence of the *bulul* figure is in the northern Philippines and it is recorded widely across the Austronesian world in very similar form (Anderson 2010). It reaches Vietnam, eastern Indonesia and western Melanesia and then appears to die out, apparently unknown to the Lapita peoples. Its strongly religious associations suggest it was of key importance in the early Austronesian spiritual world. Another iconographic element is even more pervasive, the seated figure with splayed legs bent at the knee [Fig. 11.2]. This is found from the Philippines to the Austral Islands and also in Vietnam.

The very close correlation with the geographic distribution of the Austronesians and the centrality of these images to religion suggests that these are not subsequent diffusion dating from the age of metals, especially for forms attested to in Polynesia. If this were the case we would expect a more patchy distribution and equal occurrence among non-Austronesian peoples.

More could be cited, but the point underlined here is that it is extremely rare for iconographic elements to be conserved over such an extensive geographic and temporal range. Despite the importance of figurative art in Africa, there is nothing comparable which can be associated with African language phyla, with Austroasiatic or the other phyla within MSEA. The parallel that does come to mind, however, is the iconography of a global religion such as Catholicism. Images of the saints conceived in European cultural traditions, have been carried all over the world and carvers in the Andes, in Vietnam, in Nigeria all continue to reproduce the same basic iconography. Despite a slight trend towards local features, the core images are essentially the same all over the world. If the Austronesian situation is comparable then this pervasive imagery is a manifestation of *adat*, the traditional religion of ISEA prior to the spread of world religions.

One objection to this might be that, as with Catholicism, and indeed other world religions such as Buddhism and Islam, the iconography might have diffused subsequently. But this would actually be difficult to sustain, especially in the case of the icons that are present in Polynesia. For the same

demonstrably analogous image to be present in New Zealand, the Austral Islands and Vietnam and yet be a later diffusion, it would have to be moved around by some vast trade or religious enterprise which is completely unattested historically or archaeologically. These icons are just as prominent in remote inland areas as they are along sea-coasts, as the *bulul* figures of the Philippines highlands or the megalithic rocks carved with split figures in the interior of Borneo demonstrate. To suppose there was a far invisible prehistoric process that could account for these which was not the primary spread of Austronesian culture would be, at the very least, a highly uneconomical explanation.

This is a highly divergent interpretation of the Austronesian expansion in comparison to traditional models and it is reasonable to ask if it is sociolinguistically credible. Are there comparable examples of large-scale assimilation of existing populations attributable to religion or cultural prestige rather than military conquest? A striking parallel is with the Pama-Nyungan expansion in Australia. Despite the extreme linguistic diversity of Australia in the extreme North, most of the country was inhabited by speakers of a relatively homogenous phylum, Pama-Nyungan, which may have begun to spread some 5,000 years ago (McConvell and Evans 1998). The Pama-Nyungans are associated with a new type of stone blade technology, but most importantly with a type of clan organization and with a pattern of singing. Given that the settlement of Australia is around 50,000 years old, a myriad of diverse languages would have been assimilated to produce the present-day situation. Elsewhere in the world, the Arawakan expansion in South America, of approximately the same date (4–5000 BP), has been associated with the widespread "Timehri" petroglyphs in the Amazon basin (Williams 2003). The Arawakans, like the Austronesians, were aquatic specialists, experienced in trading long distances on the rivers, but also sometimes giving up their canoes and returning to forest subsistence. Given these parallels in other regions of the world, there is nothing inherently improbable about this view of the Austronesian expansion.

The Strange Case of Nias

Archaeological evidence, such as it is, suggests that Nias and the other Barrier islands off Sumatra, may have been occupied for a long period (Rumbi Mulia 1981, Forestier *et al*. 2005). Nias is today wholly-Austronesian speaking and indeed is only marginally dialectally diverse (Brown 2005). Within Austronesian, the classification of the Nias language is disputed, and Nothofer (1994) argued for a connection with eastern Indonesia and the Philippines. A recent genetic study of the Y chromosomes in the populations of Nias has turned up the surprising result that the whole island is astonishingly genetically uniform and that the key haplogroups, NRY O-M110 and O-M119, are strongly reflected in the aboriginal populations of Taiwan but virtually absent in many Indonesian islands, including Sumatra (Oven *et al*. 2011). The authors note that O-M110 also occurs in significantly high frequencies in Near Oceania, notably in the Admiralties and the Trobriands. This pattern indicates an extremely strong founder effect, with Nias apparently settled by a small number of genetically uniform males from the Taiwan Straits area. The absence of genetic diversity argues strongly that the prior inhabitants of Nias must have been eliminated by the incomers, who spread out over the island. Whether this was through intentional genocide or simply the destruction of foraging habitats is not possible to establish at present. The lack of distinct languages in a relatively large island, compared with elsewhere in the Austronesian world, indicates language leveling on a significant scale, which is undoubtedly connected to the elaborate political hierarchies which characterized its social structure.

The case of Nias is important for several reasons. It illustrates that migration certainly occurs, and that sometimes, resident populations with a demonstrable archaeological horizon can be eliminated so effectively that no trace remains in the current inhabitants. However, the apparently direct jump from the Taiwan straits also illustrates the opportunistic nature of Austronesian voyaging in the early period; Taiwan to Nias is hardly an obvious path, and difficult to account for by a rational colonizing strategy. But if we imagine boats spread widely over a sea which is not visualized through a map, seeking resources, then the early Austronesians may well have reached Nias and the other Barrier islands without settling Sumatra. Finally, the linguistic uniformity of Nias illustrates the way language diversification can be frozen or reversed by established sociolinguistic processes.

What about those Reconstructions?

One of the building blocks of the Austronesian expansion hypothesis was the apparent reconstructibility of key economic terms, both for domestic animals and crops. If the findings (or absences) in the archaeological record are to be taken at face value, then there are problems with these reconstructions. They cannot be apical forms which gradually diversify through the Austronesian world, but represent either semantic shifts or widespread loanwords. Clearly there is a dichotomy between animals and plants, since the model suggests that vegeculture may have carried domestic species across what was to become the Austronesian world prior to any expansion from Taiwan, whereas this cannot be the case for animals attested in the archaeozoological record. Blust (2002) conveniently summarizes the linguistic evidence for faunal terms in Austronesian. His proposals are shown in Table 11.2.

Table 11.2: Domestic animal reconstructions in Austronesian

Species	Level	Proto-form
chicken	PMP	*manuk
cock	PMP	*laluŋ
dog	PAN	*asu/wasu
puppy	PAN	*titu
domestic pig	PAN	*beRek
? wild pig	PAN	*babuy

Note: PMP = Proto-Malyayopolynesian, i.e. languages outside Taiwan; PAN = Proto-Austronesian, i.e. all Austronesian languages including those of Taiwan.

In the case of chickens and dogs this seems to contradict the archaeological evidence; they seem to be absent at this period. If so, how do we explain the reconstructions? In the case of chicken, **manuk* alternates with reduplicated forms which mean "bird" and indeed in the putative branch of Austronesian represented by Tai-Kadai this is what it does mean (Benedict 1942; Ostapirat 2005; Blench, in press [b]). Blust (2002) assumes that "bird" is the secondary meaning, but it is more likely that this was the original meaning and it has shifted to chicken with the subsequent spread of the animal. The exact evidence for **laluŋ* is lacking but it occurs in the northern Philippines and in the Lesser Sundas and is presumably either a widespread loanword or a semantic shift.

The case of words for "dog" is more perplexing, since this is well-attested in Taiwanese languages and ISEA, but has no reconstruction in proto-Oceanic (see discussion in Ross *et al*. 2011). In addition, the same root occurs virtually all across Austroasiatic. Yet dogs are again conspicuous by their absence in the early archaeology of ISEA, except for Timor. Dogs were probably domesticated from the Asiatic wolf and appear to be found in early sites in China. Could all occurrences of the **asu* root represent a semantic shift or borrowing? At first sight it seems unlikely. Tai-Kadai languages, despite their evident reflection of PMP in terms of basic numerals, do not have the **asu* term for dog, indeed, it appears that the proto-form in Tai-Kadai (something like **hma*) is a borrowing from Hmong-Mien [Table 11.3]. If so, then this term may have been absent in PMP and all those occurrences of #*asu*[6] are in fact loanwords, reflecting early contact with Austroasiatic speakers (and the subsequent spread of the term once borrowed). Although this contradicts established wisdom in Austronesian scholarship, it shows greater congruence with the archaeological record.

Finally, the pig. According to Blust (2002: 93) reflexes of **beRek* occur in Puyuma, Tsouic, the northern Philippines and some Borneo languages with the meaning "domestic pig". This is realized in Oceanic as **boRok* as a general term for "pig". As with "dog" there is a widespread term in Austroasiatic which is apparently cognate either **C-liik* or **C-lek* [Table 11.4].

Table 11.3: Reflexes of *#hma* "dog" in SE Asian languages

Phylum	Branch	Language	Attestation	Gloss
Sino-Tibetan	Loloish	Sida	mɑ^{55} khɯ^{11}	
Sino-Tibetan	Loloish	Lisu	a^{1} na^{5}	
Austroasiatic	Nicobarese	Car	am	
Hmong-Mien		PHM	*hmaŋ^{C}	wild dog
Daic	Hlai	Proto-Hlai	*hma:	
Daic	Be-Tai	Be	ma^{1}	
Daic	Tai	Maonan	ma^{1}	
Daic	Tai	Mulao	^{h}ŋwa^{1}	
Daic	Tai	Dong	ŋwa^{1}	
Daic	Tai	Zhuang	ma^{1} 獁	
Daic	Tai	Lu	ma^{55}	
Daic	Tai	Thai	măa หมา	
Daic	Tai	Lao	hmaa H1	
Daic	Tai	Shan	maa^{1} ᦙᦱ	
Daic	Tai	Aiton	maa^{1}	
Unclassified		Kenaboi I	âmun	

Table 11.4: Reflexes of *#C-liik*, "pig" in SE Asian languages

Phylum	Branch	Language	Attestation	Gloss
Sino-Tibetan	Sinitic	OCM	lheʔ, lhaiʔ	
Sino-Tibetan	Tani	Galo	rə́k	
Sino-Tibetan	Mishmi	Idu	ili	
Austroasiatic	Monic	Proto-Monic	*cliik	
Austroasiatic	Monic	Mon	kloik ကွိုက်	
Austroasiatic	Monic	Nyah Kur	khl̥ic	
Austroasiatic	Pearic	Pear	sru:k	
Austroasiatic	Pearic	Chong	krọk	
Austroasiatic	Pearic	Pear	tʃrŭk	
Austroasiatic	Khmeric	Khmer	crùùk	
Austroasiatic	Aslian	Temiar	kalʌh	
Austroasiatic	Katuic	Kuy	ʔaalìiʔ	
Austroasiatic	Katuic	Katu	alic	
Austroasiatic	Katuic	Souei	ʔaliʔ	
Austroasiatic	Katuic	Pacoh	ʔali:k	
Austroasiatic	Katuic	Ngeq	ʔiik	
Austroasiatic	Khmuic	Khabit	tɕ(ə)lek	
Austroasiatic	Khmuic	Khang	ʔbu.ʔɛk^{33}	
Austroasiatic	Khmuic	Bumang	ɛk^{24}	
Austroasiatic	Palaungic	Palaung	leʔ	
Austroasiatic	Palaungic	Proto-Wa	*lik	
Austroasiatic	Palaungic	Lawa	ləc	
Austroasiatic	Palaungic	Praok	lik	
Austronesian		PAN	*beRek	domestic pig
Austronesian	Formosan	Tsou	frəʔə	domestic pig
Austronesian	Formosan	Puyuma	verek	domestic pig
Austronesian	Oceanic	Proto-Oceanic	*boRok	pig

The fricatives in Taiwanese may well be cognate with forms such as Pear *sru:k*. In this case, the Taiwanese domestic pigs probably came from the mainland of East Asia and the same source also donated the pig to Austroasiatic speakers, hence the cognacy between these terms. However, Austronesian has another well-attested form for "pig", **babuy*. This term often applies to wild pigs, but Blust (2002: 93) notes the meaning of "domestic pig" is also widespread. In this case, it is possible that the original referent was the Lanyu pig (Wu *et al*. 2007) and there were competing terms in early Austronesian because there were actually two domesticates. Since pigs in the archaeologial record of ISEA are not demonstrably domestic until a later period, we have to assume the term devolved to the wild pig and was sporadically shifted back to the domestic pig as it spread.

Apart from the domestic animals, there are also troubling names for cultigens. Table 11.5 lists three crops with apparent high-level reconstructible forms in Austronesian which would appear to go against the genetic evidence summarized in Table 11.1. Archaeological evidence is far more problematic, since the dates and species level certainty that can be attached to archaeozoological material for vegetative crops are rarely available.

Table 11.5: Crop / tree reconstructions in Austronesian

Species	Latin	Level	Proto-Form
Bananas	*Musa spp*.	PMP	**punti*
Taro	*Colocasia esculenta*	PAN	**tales*
Sugar-cane	*Saccharum officinarum*	PAN	*#təbuS*

In the case of the bananas, the genetic and distributional evidence has been reviewed by Jean Kennedy (2008) and the linguistic evidence by Denham and Donohue (2009). The proposed reconstruction for "banana" in the Austronesian literature originates with Blust (1984–5) but it seems highly unlikely this can actually be reconstructed to PMP level as it has only a few scattered occurrences in the Philippines and is almost absent from Java and Sumatra. As the Denham and Donohue suggest, it is much more credibly an eastern term which has spread west.

The case of sugar-cane (*Saccharum officinarum*) is more striking, since Veronique Arnaud *et al*. (1997), Waruno Mahdi (1998) and Malcolm Ross *et al*. (2008) have compiled extensive evidence for the reconstruction of a root *#təbuS* which shows clearly that it must be reconstructed to PAN [Table 11.6]. In this case, reflexes of **təbuS* "sugarcane" occur widely in Taiwan (Li 1994: #8). E.W. Brandes (1958) argued that *S. officinarum* was domesticated in New Guinea from *S. robustum* Brandes & Jeswiet which grows wild there, a view which is still generally accepted (Grivet *et al*. 2005). Controversy has arisen principally over the canes of North India and China, which were traditionally used to make sugar. From here it was brought to northeastern India and southeastern China where local natural hybridization with *S. spontaneum* L. resulted in *S. barberi* Jeswiet and *S. sinense* Roxb. respectively. The original cultivated sugarcane may not have been *S. officinarum*, but *S. sinense*, and this was the species transported by Austronesians (Daniels and Daniels 1993). This suggests that the sugar-cane spread by the Austronesians was the separately domesticated *S. sinense* and not *S. officinarum*, which has now replaced it over all its range.

Taro is probably the most complicated story. There are two main complexes of terms reconstructed for Austronesian **talef* and **ma*. In Southeast Asia there is a widespread term, *#trawʔ* which has reflexes throughout Austroasiatic [Table 11.7]. This is the origin of the English term "taro", although this was from Austronesian, where it is also broadly diffused.

This suggests that taro played an important role in the early expansion of Austroasiatic. Although Dempwolff (1938: 128–9) reconstructed **talə(s)* for proto-Austronesian, his evidence did not include either Taiwan or any languages near Formosa. Gerard Diffloth (2005) has pointed out the strong correlation between subgroups of Austroasiatic and river valleys. This suggests that Austroasiatic speakers

Table 11.6: The *#təbuS* root for "sugarcane" in Southeast Asian languages

Phylum	Branch	Language	Attestation
Austronesian	Formosan	Saisiat	ka-tbuʃ
Austronesian	Formosan	Kanakanabu	təvə́sə
Austronesian	Formosan	Amis	təvuc
Austronesian	Formosan	Rukai	cubúsə
Austronesian	Formosan	Paiwan	ʧevus
Austronesian		PMP	*tebuh
Austronesian	Philippines	Tagalog	tubo
Austronesian	Philippines	Cebuano	tubu
Austronesian	Philippines	West Bukidnon	təvu
Austronesian		Ngaju	tɛwu
Austronesian		proto-Chamic	*təbɔw
Austronesian		Nias	tovu
Austronesian	Malayic	Malay	təbu
Austronesian	Malayic	Old Javanese	təbū
Austronesian		Bintulu	tebau
Austronesian		Sundanese	tiwuʔ
Austronesian		Uma	towu
Austronesian		Buginese	təbbu
Austronesian	Oceanic	P-Oceanic	*topu
Austronesian	Micronesian	Chamorro	tupu
Austronesian	Micronesian	Kusaie	tuh
Austronesian		Sikka	tewwu
Austronesian		Roti	tefu
Austronesian		Soboyo	tofu
Austronesian		Kisar	keu
Austronesian		Kai	tɛv
Austronesian		Yamdena	tɛfu
Austronesian		Arguni	tof
Austronesian		Onin	tepi
Austronesian		Minyaifuin	top
Austronesian		Kaniets	tof
Austronesian		Kaiwa	tov
Austronesian		Yabem	te
Austronesian		Kove	tou
Austronesian		Nakanai	tobu
Austronesian		Kiriwina	tou
Austronesian		Sinaugoro	tobo
Austronesian		Dobu	tou
Austronesian		Motu	tohu
Austronesian		Nggela	tovu
Austronesian		Arosi	ohu
Austronesian		Iapa	tou
Austronesian		Ulawa	ohu
Austronesian		Aulua	tif
Austronesian		Uripiv	top
Austronesian		Mota	tou
Austronesian		Way	tovu
Austronesian		Valpei	tobu
Austronesian	Fijian	Mbau	ndovu

Table 11.7: Reflexes of *#traw?*, "taro" in Southeast Asian languages

Phylum	Branch	Language	Attestation	Gloss
Sino-Tibetan	Naga	Garo	tariŋ	arum
Austroasiatic		Proto-Mon-Khmer	*$t_2$raw?	
Austroasiatic	Monic	Mon	krao	
Austroasiatic	Monic	Nyah Kur	traw	
Austroasiatic	Vietic	Thavung	t^hoo^3	
Austroasiatic	Vietic	Vietnamese	sọ	
Austroasiatic	Vietic	Proto-Vietic	*sro^ʔ	
Austroasiatic	Khmeric	Old Khmer	trav	
Austroasiatic	Khmeric	Khmer	tra:v	
Austroasiatic	Khmuic	Khmu	sroʔ	
Austroasiatic	Pearic	Chong	k^hre:^{A}	
Austroasiatic	Bahnaric	PSB	*təraw	
Austroasiatic	Bahnaric	East Bahnar	trɔɔu	amaranth
Austroasiatic	Katuic	PK	*craw	
Austroasiatic	Katuic	Bru	ʔarạw	
Austroasiatic	Katuic	Kuy	ʔaaràaw	
Austroasiatic	Katuic	Sre	traw	
Austroasiatic	Katuic	Mlabri	kwaaj	
Austroasiatic	Katuic	Ong	raw	
Austroasiatic	Palaungic	Riang	sroʔ	
Austroasiatic	Palaungic	Palaung	tɔh	
Austroasiatic	Palaungic	Danaw	kăro^1	
Austroasiatic	Palaungic	Proto-Wa	kroʔ	
Austroasiatic	Palaungic	Lamet	ruəʔ	
Austroasiatic	Palaungic	Khang	hɔ	
Austroasiatic	Khasian	Khasi	shriew	arum
Austroasiatic	Muṇḍā	Sora	ʻsaro	*Caladium esculentum*
Austroasiatic	Muṇḍā	Mundari	saɽu	edible root
Austroasiatic	Muṇḍā	Santal	saru	
Austronesian		PMP	*tales	taro
Austronesian	Philippines	Palawan	talas	taro
Austronesian	Barito	Dusun	tadis	kaladi
Austronesian	Malayic	Indonesian	talas	taro
Austronesian	Oceanic	P-Oceanic	*talo(s)	taro

were the original domesticators of taro and that Austronesian speakers borrowed it during an early phase of contact, with the southern Philippines / Borneo being the most likely zone for such contact (Blench, in press [a]). Taro and other vegeculture had spread east from the mainland, and the expanding Austronesian speakers adopted it from the Austroasiatic speakers whom they subsequently assimilated, but not before borrowing their term for the plant. The difficulty with this etymological link is the presence of the final fricative /s/ in Austronesian forms. The Austroasiatic root clearly had a final consonant, today generally reflected in the semi-vowel /w/ or the glottal stop /ʔ/. However, the Khmer forms point to the identity of this consonant as the labiodental fricative /v/ so a shift to the alveolar fricative /s/ would be phonetically plausible, although it would be more convincing if an intermediate consonant were to occur. The consistent /r→l/ shift between Austroasiatic and Austronesian is not problematic in a region where these two sounds are frequently allophones.

The most puzzling aspect of the distribution of **tales* roots within Austronesian is the gap between the western and eastern occurrences. Both Kitsukawa Ritsuko (2000) and Ross *et al*. (2008: 266), who have considered this, have no solution to the absence of reflexes in the intermediate zone. Ross *et al*. (2008) also point out that **talo(s)* is more solidly attested in Eastern Oceanic languages and that Western Oceanic reflexes in, for example Motu, Manam and Roviana may well be borrowings via Pidgin. Additionally, although this term is usually considered proto-Polynesian, the reflexes in Karl Rensch and Arthur Whistler (2009) do not include Tongan and Samoan, but seem to be largely in eastern Polynesia. This mosaic of reflexes suggests that taro was being moved around at an unknown period and may not have been part of either the original Oceanic or Polynesian subsistence repertoire.

The other common root for taro is attested in Oceanic languages and has been reconstructed as **m*^{w}*apo(q)* (Ross *et al*. 2008). A similar term, usually, *ma*, appears to be strongly co-associated with the distribution of Trans-New Guinea languages. Taro is naturally a lowland plant but Denham (2004) has argued that it would have spread to the New Guinea Highlands at this period, hence its identification at Kuk swamp, which is sufficiently old. It seems credible that the earliest cultivated taros spread with speakers of the TNG. *mV*-, However, there is no evidence for the *mV*- root for taro west of Timor. The actual reflexes in Austronesian languages are extremely similar to the Papuan terms. For example;

Lou	m^{w}a
Titan	Ma
Mangseng	m^{w}a
Dawawa	Mavu
Arosi	m^{w}a

The Papuan and Austronesian terms must be related, and following this interpretation, as Austronesians spread westwards, they encountered taro in the hands of the now assimilated Papuans and incorporated it into their agriculture.

The conclusion from this complex story is that we need to be wary of claimed reconstructions of subsistence terms. Where a lexical term shows wide similarities over a large area, it is easy to detect a recently borrowed item such as “mango” or “tobacco”. Where something has been borrowed in prehistory and has had time to develop phonological and morphological diversity, it is much more difficult to distinguish between ancient loanwords and true reconstructions. When it was supposed that Austronesian was a gradual demographic expansion, it was inevitable that these subsistence terms were seen as “true” reconstructions; with our current perspective on dispersal, they must now be seen as interesting fakes. Archaeology and genetics can both help to establish the geography and chronology of plants and animals that play a part in subsistence and unpick narratives that seem to be coherent at first sight.

Possible Objections

Even with the doubts now in the air about the classic Austronesian demographic expansion model, this interpretation is likely to be received with scepticism. This section tries to answer some anticipated objections to the model. These are:

(a) Why don’t we find archaeological sites showing the assimilation of one farming society by another?
(b) Why is there not more evidence of linguistic substrates?
(c) Why do Austronesian populations generally look phenotypically Mongoloid?

(a) Non-pottery using vegeculturalists still practicing a degree of foraging can be very hard to detect in the archaeological record, especially if you are not looking for them. Related to this is the very small number of open-air sites in ISEA. The emphasis on caves and rock-shelters has meant that the likelihood of encountering such sites is reduced. If the Austronesians were the type of society depicted, then far from bringing a coherent agricultural culture package they brought almost nothing to the party, no crops or livestock. Hence we would not expect the discontinuities in sites that the demographic model predicts.

(b) If Austronesian languages replaced Austroasiatic, Papuan and other unknown language phyla as this model proposes then surely, since this was an assimilation process, we should find more evidence of linguistic substrates in ISEA? There are two possible responses:

1. Linguistic replacement can take place while leaving very few traces of the previous languages; if a process of cultural conversion occurs, then people take over the new culture and its language wholesale. English in the British Isles is a good example; we know that Celtic and Pictish languages were spoken all over Britain in the pre-Roman period, yet they have left only a handful of actual lexical items in the Germanic English. Similarly, with Hausa in West Africa:its linguistic geography shows that it must have assimilated perhaps hundreds of languages in recent centuries, yet the lexical and grammatical traces of this process are very slight, presumably because Hausaisation was buying into a whole cultural religious package, not just a slow assimilation through gradually increasing bilingualism.
2. There is in fact more evidence of substrate vocabulary, but its identification has been obscured by confused models of linguistic affiliation. In the case of Austroasiatic, linguists have long noticed similar lexical items in both Austroasiatic and Austronesian; Harry Shorto (2006) identifies hundreds of them. These have a long history of being debated as possible evidence for an Austric phylum, i.e. a macrophylum uniting Austronesian and Austroasiatic (Reid 2005). Without entering this debate it is safe to assert that the great majority of these similarities are loans reflecting contact between the two phyla.

(c) Phenotypic questions do not much occupy anthropologists these days, but still, if it is true that Papuan type populations occupied eastern ISEA prior to the expansion of Austronesian, surely the resulting populations would appear mixed, rather like the Fijians or New Caledonians? There are two possible explanations. One is based on the co-existence of Mongoloid and Papuan populations in the Malay Peninsula and the Philippines. The Agta and similar populations are clearly Austromelanesian in phenotype, yet Austronesian-speaking agriculturalists in the Philippines show few mixed characteristics. Similarly the Orang Asli of the Malay Peninsula have retained their Austromelanesian appearance. This suggests that populations with quite different phenotypes can co-exist over long periods. On islands such as Borneo and Sulawesi, despite the presence of foragers, there is no trace of the negrito phenotype. The most likely explanation is that such populations were long gone, that pre-Austronesian mongoloids had come in much earlier from MSEA and established themselves as the dominant population. When the Austronesian speakers arrived with their powerful and innovative religious ideology and transformed these societies, this conspired to give the impression of demographic expansion.

This latter hypothesis would be hard to demonstrate unequivocally; skin and hair type by and large cannot be known from archaeology. Skeletons, of which there are few, have a habit of not producing predictable results. Analysis of the skeletons at Te Ouma, the striking cemetery on Vanuatu, apparently contemporaneous with the first settlement of the archipelago, shows a very mixed profile, with some "Polynesian" skeletons and others of types not clearly identifiable (Matthew Spriggs, pers. comm., July 2011). However, the main issue is that the modern-day situation cannot be left unexplained, we must have a credible model that is not actually at odds with the archaeology. However, the model must also incorporate a believable sociolinguistics based on situations described elsewhere in the world.

Conserving Linguistic Insights; A Model and a Warning

Conflicting models of Austronesian prehistory depict a demographic and linguistic expansion model and a diverse archaeology which does not appear to support such an interpretation. A new proposal offers a version of prehistory that attempts to reconcile the archaeology and the synchronic linguistic situation, a consilience sorely lacking in most of this material. This summary clarifies the sense in which this proposal conserves past insights and the extent to which they are rejected.

(a) It accepts a structure for Austronesian which has Taiwanese languages as an array of primary branches and the remainder, i.e. Malayo-Polynesian, as constituting the remainder.

(b) These populations, the Malayo-Polynesians, were fisher-forager-traders with a powerful religious ideology and access to innovative maritime technology.
(c) They moved around ISEA and into near Oceania encountering resident populations of different linguistic and cultural affiliations, practising both foraging, arboriculture and vegeculture.
(d) Given the redating of the ISEA Neolithic, an "explosive dispersal" is a more credible model, hence the linguistic hierarchy supposedly dividing PMP and Oceanic must be discarded.
(e) Furthermore, on many islands with *in situ* residents, Austronesian languages must have become dominant by wholesale language shift rather than demographic spread, which is why the evidence for non-Austronesian substrates is limited.
(f) Nonetheless, it may be that we have too hastily classified some languages as Austronesian and that the Oceanic expansion incorporated other ethnolinguistic groupings and that some "fringe-Austronesian" languages will need to be reclassified.
(g) It further proposes that religion and lifestyle were the primary engine of cultural conversion. Austronesians had a pervasive religious iconography which continues to be reflected in figurative arts, and was intellectually powerful enough to persuade scattered vegeculturalists away from their existing practices.
(h) Evidence for subsequent language leveling in many islands has given Austronesian a more homogeneous appearance than natural processes of diversification might suggest. In Melanesia, these processes broke down, hence both the phenotypic switch of Austronesians to Papuan physiognomy and the occurrence of a range of languages showing complex mixtures of features.
(i) The material culture package supposedly typical of Austronesians was constructed from elements picked up along the way, and only when the fisher-foragers began to reach the Bismarcks and Remote Oceania do they propagate this package unaided.
(j) Many of the reconstructions for subsistence-related terms in Austronesian hitherto considered solid must instead be considered mosaics of ancient loanwords, spreading either east from MSEA or west from Melanesia.

A lesson can be drawn from this: Austronesian (and other language groupings such as Indo-European or Bantu) are linguistic constructs and we must resist the tendency to reify them, to turn them into people, cultures and archaeological horizons. There are no "Austronesian" pots, only pots moved around by Austronesian speakers. "Austronesians" don't migrate or expand, people speaking Austronesian languages do. This is not to arbitrate the migration versus diffusion and cultural assimilation debate unequivocally for one side or another. In the real world both strategies occur, usually in complex mosaics. But it is increasingly clear that ISEA was not some blank slate on which Austronesian navigators inscribed a highly distinctive image. Rather it was a palimpsest upon which a whole range of mobile populations imprinted and then partly erased their legacy over time.

Notes

1. Although this idea had an interesting precursor in the 19th century with the work of Terrien de Lacouperie (1887).
2. Though see the robust reply in Blust (2009a).
3. This paper owes much to discussions with many people. I would particularly like to thank Phil Piper, Peter Bellwood, Huw Barton for their observations. Matthew Spriggs kindly went through the paper in detail and is responsible for the sharpening up of the argument in many places.
4. Curiously, part of small group known as the "Whiteman languages".
5. At least in form, though they are realized in different materials and are not always attested archaeologically.
6. # is a linguistic convention used here to indicate a quasi-reconstruction, a form derived from rapid inspection of cognates.

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