Almost everything you believed about Austronesian isn't true

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The Blust/Bellwood paradigm of Austronesian I

- For several decades, Austronesian studies have dominated by what may be called the Blust/Bellwood paradigm,
- Which, broadly speaking, proposes a demographic expansion out of Taiwan, bringing pottery, rice, pigs, dogs and chickens to island SE Asia and thence into the Pacific.
- Murmurs of discontent among archaeologists, geneticists and linguists have now grown to a clamour, as it becomes increasingly clear that this model does not match the archaeology in much of island SE Asia.
- However, the critics have yet to propose an even partway convincing counter-model

The Blust/Bellwood paradigm of Austronesian II

- The paper will review why this model seemed initially so attractive
- □ And the problems with it
- and then make a new proposal to account for the archaeological and genetic profiles of island SE Asia
- And tries to account for the apparent disconnect with linguistic reconstructions
- It also suggests that our understanding of the historical iconography of the Austronesian world is crucial to modelling its diffusion as a language phylum.

Background to the Austronesian paradigm I

Austronesian is first and foremost a linguistic concept taken over by archaeologists

- It dates back to the work of Dempwolff (1938) though connections such as Malagasy and Malay were noticed as far back as the 17th century
- But Dempwolff failed to notice the Taiwan connection, although this had first been remarked on in the 1870s
- Dyen recognised the relationship of Taiwanese languages to Malayo-Polynesian but assumed thy were a backmigration from the core areas of island SE Asia

WHERE AUSTRONESIAN IS SPOKEN TODAY



Background to the Austronesian paradigm II

- The first major linguistic advocate of an origin in Taiwan was Robert Blust who now considers Austronesian to have nine primary branches there
- This view has basically triumphed with the last dissenters giving in (or dying)
- The 'out of Taiwan' hypothesis was then picked up by Peter Bellwood and transformed into a major migration and demographic expansion hypothesis
- Opponents of this view, for example, Solheim and Meacham on the archaeological side and Oppenheimer on the genetic side, have not been very convincing because they fail to account for the linguistic situation

Austronesian warning notice!

- 'Austronesian' has a tendency to be misused by archaeologists to identify pottery, population movements etc.
- This is because the concept has been promoted by a charismatic figure i.e. Peter Bellwood.
- But most of the material actually discussed such as EuraSEAA is relevant to other language families such as Austroasiatic, Sino-Tibetan and Hmong-Mien
- □ We don't hear about them because they haven't been taken up by a major archaeological figure in the same way
- So, don't use 'Austronesian' unless you are prepared to get further into the linguistic literature

Background to the Austronesian paradigm III

- Which is not to say there have not been challenges by archaeologists and to a certain extent linguists
- Many of the challenges by archaeologists have been somewhat local, complaining that the diversity of material culture doesn't fit the demographic expansion model very well (e.g. Bulbeck 2008)
- Although recently Donohue & Denham have mounted a much larger-scale challenge (CA 2010)
- But the problem is that these contrary views don't really explain why the Austronesian hypothesis is so attractive or provide a convincing alternative account
- □ Hence...

Why the Austronesian paradigm seems persuasive I

- The important points about the Austronesian paradigm are as follows;
- Austronesian languages are spoken everywhere in island SE Asia with the sole exception of the Andamans. Only their encounter with the Papuan quasi-phylum presents a significant linguistic alternative
- If Austronesian were the sort of trade language envisaged by Solheim's Nusantao and similar hypotheses it would have completely different characteristics
- There seems to be remarkably little substrate vocabulary in near ISEA, as if resident Pleistocene populations underwent wholesale language shift

Why the Austronesian paradigm seems persuasive II

- Reconstructions of Austronesian vocabulary seem to fit with the proposed demographic expansion remarkably well
- We can apparently reconstruct 'pig, 'dog', chicken' in either PAN or PMP as well as variety of important crops including 'rice', 'yam', 'millet', 'banana', 'sugar-cane' etc.
- At the point where the Austronesians become Polynesians, they are certainly expanding demographically and clearly are agriculturalists
- In areas such as the northern Philippines, an assumed early stopping point, they have elaborate rice agriculture
 Their material culture (*linglingo* etc.) spreads from Taiwan to Aoteroa

However...

- The archaeological record is full of embarrassing lacunae, most notably the absence until much later, of domestic pigs (south of the Northern Philippines), dogs (all apparently recent) chickens (absent) (Phil Piper p.c.)
- Pigs, at least genetically, have been shown to derive from Việt Nam, and the dog, presumably of the same ancestry as the dingo, must have spread to Australia through some currently invisibly southern route
- Despite one find of rice in Borneo (at Gua Sireh) old rice has not shown up on the expected scale. Rice vocabulary in Borneo is resolutely Malay in origin. Is the Bornoe rice a luxury import?
- The vegeculture of Melanesia (taro, yams, bananas, sugarcane, sago, pili-pili nuts and other managed trees) were welldiffused across ISEA prior to the Austronesian expansion

Moreover...

- It has recently become clear that Taiwan was a centre for indigenous domestications and early adoptions of 'foreign' crops esp. cereals but also pseudo cereals such as *Chenopodium* spp.
- The recently identified Spodiopogon is an example of a cereal only grown in Taiwan
- These 'small millets' are characteristic of the montane spine of the island; Ami for example, do not grow most of these cereals (though they do have a surprisingly wide range of other useful plants)

Cereals currently grown in shifting cultivation in Taiwan

People	Village	Species
Atayal	Urai	rice, foxtail millet, maize
	Riyohen	rice, foxtail millet, maize, common millet
	Piyanan	rice, foxtail millet, maize, common millet
Thao	Galawan	rice, foxtail millet, maize, common millet
Bunun	Tahun	foxtail millet, maize, common millet, finger millet, sorghum, coix, <i>Spodiopogon</i>
Rukai	Budai	rice, foxtail millet, maize sorghum, coix, <i>Spodiopogon</i>
Paiwan	Pakuhyo	rice, foxtail millet, sorghum, Spodiopogon

Cultivation and use of millets in Taiwan

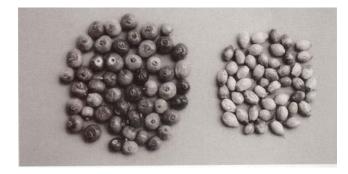
Varieties of millet grown by the Rukai



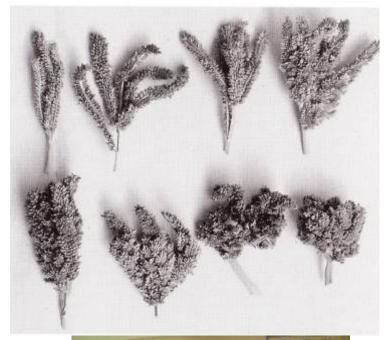
Sorghum and Coix (Rukai and Paiwan)



Two subspecies of *Coix lacryma-jobi* : Left : subspecies *ma-yuen* (edible) Right :subspecies *lacryma-jobi*



Eleusine grown by Bunun





Photograph by Segawa (Yuasa 2010)

Herbarium specimen collected in Japanese occupation period



Upland rice and Spodiopogon (Bunun)



lf so..

- Then what happened on Taiwan was an agricultural revolution that failed
- Almost all the crops domesticated, adapted and adopted by the indigenous Austronesians of Taiwan were seemingly never present or dropped in the Philippines (except scattered Setaria which could be a reintroduction from the mainland)
- This must be because the Austronesians that actually left the island were a very small subset of the population focused on fishing and trading and not the cereal growers
- This points to the Ami or other now disappeared lowland groups

Then..

- This acts to almost exactly invert the Bellwood hypothesis
- Far from agriculture being the engine of demographic growth and demographic spread, it allowed the mountain populations of Taiwan to stay at home and watch television
- Austronesian thus spreads in the hands of small populations who move fast and are flexible and most importantly, appear to have an ideological advantage over the peoples they encounter.

However...

- Bulbeck (2008) and Donohue & Denham (2010) have mapped some of the technological transfers in the pre-Austronesian period which do not fit with the demographic expansion model
- They also propose linguistic features that may derive from substrate languages (although other linguists have argued these are perfectly well explained by standard language evolution processes)
- They do not focus on the present-day distribution of material culture, but many items such as baskets and musical instruments show a characteristic pattern of rapid 'explosive' dispersal rather than slow evolution
- All of which is better characterised by Bulbeck's 'fisherforagers', a culture with sophisticated maritime technology, and an ability to absorb new technologies

But..

□ If the early Malayopolynesians were fisher-foragers this would account for explosive dispersal, but not for the almost complete elimination of competing resident cultures.

- None of this explains the pervasiveness of Austronesian languages which are spoken far inland by remote agricultural communities (except for the Solomons archipelago)
- We have to explain why there are non-Austronesian languages even in remote inland communities
 - and why most ISEA populations look almost completely mongoloid with more obviously mixed communities only found at the Papuan interface On many islands, such as Borneo, there is a conspicuous lack of genetic mixing in contrast to the remnant negrito-like communities in the Philippines
 - There must have been resident mongoloid populations on many islands prior to the Austronesian expansion probably representing a major migration many millennia ago from MSEA

Blust and 'language-leveling'

- Some linguistic proposals seem to intuit this, although I am putting a new interpretation on them. Robert Blust has put forward two separate hypotheses concerning the pattern of languages in two early ISEA regions, the 'Macro-Philippines' (2005) and 'Macro-Borneo' hypothesis (2009)
- In both places he has observed that the languages of these islands/archipelagos are not as diverse as they should be in the light of their antiquity
- He therefore proposes that there has been extensive languagelevelling in the last 2000 years, i.e. that important/prestige languages have spread and eliminated diversity
- But this process may have been even more widespread than Blust proposes and explains the diffusion of Austronesian to even the most remote inland areas
- □ Madagascar is an island where we can virtually see this happening

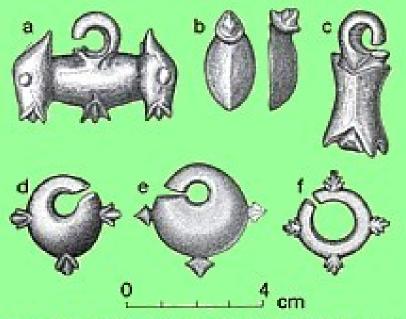
But why?

- This suggests that a high proportion of Austronesian communities are in fact not demographic spread but cultural assimilation and in west ISEA this was pre-existing mongoloid communities
- I have separately presented evidence that Austronesian speakers encounter resident Austroasiatic populations in Borneo
- Evidence for these processes does not explain how this is possible. What was so alluring about Austronesian that wholescale cultural conversion took place?
- Clearly it was not military, so the most persuasive alternative is religion
- The pervasive iconography of the Austronesian world may be evidence for this

Austronesian iconography

- An aspect of Austronesian culture that has received relatively little comment is the persistence of common iconographic elements across it entire range
- Typical imagery is the *bulul* figure, the *linglingo*, the splitcrotch figure with bent knees and many others which show up in multiple media most of which do not survive archaeologically
- In world terms this is highly uncharacteristic of language phyla which tend to show iconographic diversity (cf. African language phyla)
- The following slides present a glimpse of some of these icons

Some ling-ling-o



Mga hikaw na batòng ihada (jade) mula sa mga yungib sa Tabon 2,190 taon ang tanda. Tipong lingling-o ang d, e at f.

> Artefacts from the Tabon Caves: (a-f) ear pendants of jade - (d-f) are of the lingling-o type. From Fox 1970.

Tabon caves



Fengtian jade deposits in Eastern Taiwan (Hung et al. 2007)

However...

- The positive side of *ling-ling-o* is that they regularly appear in archaeological excavations; but this makes us overestimate their importance in jade and underestimate realisations in other materials.
- On the negative side, anything small and easily portable is subject to trade and the evidence for trade in *ling-ling-o* is fairly good. Which means it is always possible to lose the link with an ethnolinguistic grouping or for there to be arguments about its interpretation
- Iconographic elements associated with religious practice occurring in larger, heavier may be more useful as indicators. Compare the spread of images of saints in Catholicism

The Bulul figure I

- The bulul figure is most typically associated with the lfugao people of Northern Luzon
- On the internet this is pretty much its exclusive association
- But related figures occur at least as far as the Aru islands off the south coast of New Guinea





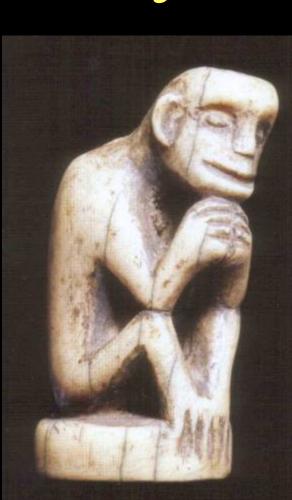
Bulul in Borneo

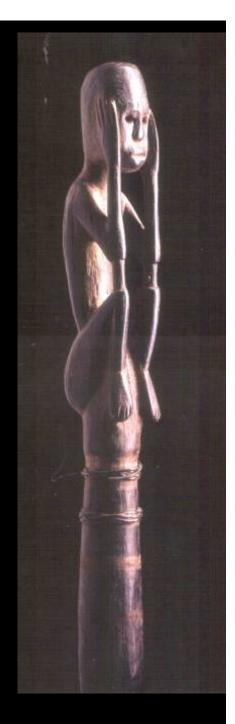
The monkey is an Iban *pentik* figure

To the right is an Iban *tugal*

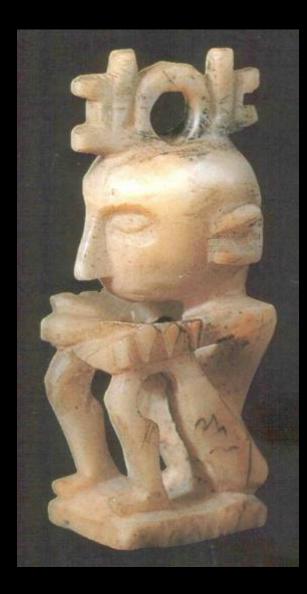
Miscellaneous figures, Muzeum Etnologi, Kuching







The Bulul figure from Leti





Bulul figures from Maluku Tanggara



Bulul figures reinvented in Tanimbar







Bulul figures elsewhere

Korwar figure, Cenderawasih Bay





Giarai ancestor figure, Vietnam

Approximate distribution of *bulul* figures



What can we conclude from this?

- The Austronesians spread far and fast, not typical behaviour for an agricultural expansion (think Nias)
- Although the Austronesians on Taiwan had a vibrant and innovative agriculture, this was *irrelevant* to their expansion
- Instead this was driven by advanced nautical technology and subsistence base on fishing, foraging trade, typical of a highly mobile population
- As a consequence, Austronesian speakers underwent an 'explosive' dispersal spreading very rapidly to numerous islands in SEA, hence the close window of post-Taiwan dates
- It now turns out that the elaborate linguistic hierarchies within Austronesian were simply wrong; the pattern is more like a large number of parallel branches

What can we conclude from this?

- The agriculture and livestock we see today is not an inherited subsistence strategy but was put together from an assortment of techniques developed by resident populations who were already practising vegeculture and arboriculture
- O These strategies originate both from Melanesia and MSEA
- The rice, pigs and chickens systems are relatively recent constructs; Borneo for example, almost certainly switched from sago etc. to rice under Malay influence
- Rice is bound up with nationalist rhetoric and we have been duped by this into overvaluing it
- This therefore implies that many purported PMP reconstructions of livestock and crops are misleading; either they are a complex texture of loanwords or they are just errors

But...

- We also have to account for the ethnolinguistic pattern seen today, i.e. the complete dominance of Austronesian languages; mobile fisher-foraging would not be adequate by itself to account for this
- Hence the intriguing possibility, suggested by pervasive iconography, that the key to Austronesian expansion and assimilation of resident populations was religious
- Certainly religion has similar results for iconography elsewhere in the world (Catholicism, Buddhism)
- We don't tend to think of *adat* as an organised religion because it doesn't have the written scriptures and buildings of more recent world religions but in other ways it works well
- There is a parallel with the expansion of Pama-Nyungan (at just about the same time in Australia) which seems to have spread though its mastery of song-cycles (Evans etc.)

And...

- O Although I'm a linguist, this case history suggests to me that we need to be wary of linguistics as a 'first draft of history'
- What looks at first sight to be a convincing coherence between linguistic reconstruction and archaeological hypothesis turns out to be misleading
- It seems to me each discipline has unconsciously influenced the other and warning signs ignored
- Austronesian is a language family, not an archaeological entity. We certainly need to account for what remains an amazing situation today, but by a nuanced account of the results gained from combining separate disciplines

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