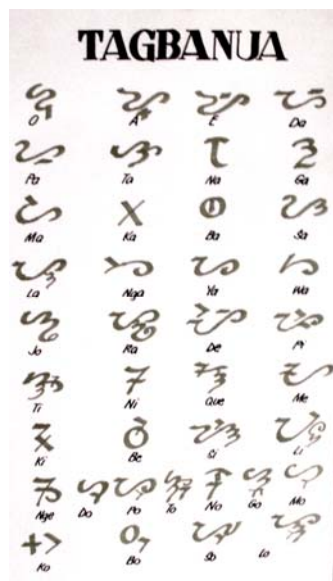


Origins of Ethnolinguistic Identity in Southeast Asia



FINAL FOR SUBMISSION

Chapter in the *Handbook of East and Southeast Asian Archaeology* to be published by Springer in the U.S. in 2015. Editors: Junko Habu (UC, Berkeley), Peter Lape (Washington), and John Olsen (Arizona).

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ABSTRACT

There are five major language phyla in mainland Southeast Asia: Austroasiatic, Austronesian, Daic, Sino-Tibetan and Hmong-Mien, but no true isolates except on offshore islands. Despite a considerable expansion of research in recent years, models for the dates, homelands and engines of expansion of these phyla are scarce in the literature, as are convincing correlations with archaeological and genetic research. A proposal that has been extended to the language phyla of the world and has been influential far out of proportion to its evidential base is the idea that phylic expansions are driven by agriculture. Although this is clearly true in a small number of cases, its explanatory value has been undermined by the difficulties of validating it in many situations. The chapter will consider the proposals that have been advanced for the phyla of Mainland SE Asia (MSEA), their credibility, and will put forward some new hypotheses, particularly with respect to their chronology and geographical interleaving.

ACRONYMS AND CONVENTIONS

- # quasi-reconstruction, form based on rapid inspection of cognates rather than in-depth historical reconstruction
- * reconstructed form based on in-depth historical reconstruction
- ISEA Island SE Asia
- MSEA Mainland SE Asia
- mtDNA mitochondrial DNA

1. Introduction

The ethnolinguistic composition of the SE Asian region is unique in global terms, consisting of five major phyla and of isolates confined to offshore islands. These phyla are highly coherent, and appear to be of a relatively recent origin compared with other continents. Moreover, they share many common linguistic features, which points to millennia of intense interaction, including bilingualism and cultural exchange. The emergence of mainland SE Asian nations from decades of war has created a new focus on the region and the availability of data on previously undescribed languages has made possible a new synthesis (Enfield 2011). The demographic pattern of Southeast Asia presents an intriguing mix, combining numerous diverse and generally small groups with large populations, such as the Thai, Burmese, Lao, Khmer, Vietnamese and Malay, who cover significant swathes of territory and are politically dominant (Blench 2005).

Although SE Asia is linguistically diverse, one phylum, Austroasiatic, can be said to dominate the mainland, both geographically and numerically, while Austronesian includes all of Island SE Asia west of Melanesia. Table 1 shows the main language phyla represented in SE Asia;

Table 1. Language Phyla of SE Asia

| Phylum | Examples |
|-------------------------------------|----------------------------|
| Altaic (Turkic, Mongolic, Tungusic) | Manghuer |
| Andamanese | Onge, Jarawa |
| Austroasiatic | Vietnamese, Khmer, Khasi |
| Austronesian | Chamic, Moken, Malay |
| Daic=Tai-Kadai=Kra-Dai | Thai |
| Hmong-Mien=Miao-Yao | Ho Te, Hmong, Pa Hng |
| Sino-Tibetan/ Tibeto-Burman | Chinese, Naxi, Tujia, Naga |
| Unclassified | Sentinelese, Kenaboi (†) |

Those shaded represent the dominant language phyla. Andamanese is numerically very small, although they may be important for reconstructing the prehistory of the region. Altaic languages are mostly north of the region, although there are Mongolic speakers in Yunnan. Indo-Aryan languages are not represented in rural communities today, but were formerly highly influential. Traders and colonists from India were active as early as the second century BC, transforming political organization, religion, music and art and introducing artisanal skills and agricultural products. These merchants and soldiers would have spoken a variety of Indic languages, not all of which have been clearly identified. Most of these were Indo-Aryan, particularly Sanskrit/Pali, but there is also evidence for Dravidian. The earliest inscriptional materials in SE Asia are all in Indic languages.

Due to long periods of interaction and extensive multilingualism, Mainland SE Asia (MSEA) language phyla have developed many convergent characteristics, as well as being heavily relexified from dominant or contact languages (Enfield 2003). As a consequence, there have been numerous macrophyla proposals, the claim that two more phyla are genetically linked. Notable examples are Austric (Reid 2005 and references therein), Daic/Austronesian (Schlegel 1901), Austro-Thai (Benedict 1975), Sino-Tibetan-Austronesian (Sagart 2005a) and ‘Proto-East Asian’ (Starosta 2005). It is assumed here these are not genetic units, with the exception of Daic/Austronesian.

This chapter summarizes the main issues relating to ethnogenesis, the origin and classification of the language phyla, and outlines possible historical and archaeological models to account for their expansion. It should be emphasized that there is far from a scholarly consensus in this area and fragmentary archaeological coverage makes correlations speculative at best.

2. Ethnogenesis: what causes language groups to spread and diversify?

One of the most persuasive narratives on recent prehistory, promoted energetically by Peter Bellwood (1984/5; 2005, 2013), 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 identifies agriculture as

playing a key role in driving demographic growth and linguistic diversification. Given an archaeological characterization as ‘demic’ diffusion, it proposes that population expansion drives the migration into and colonization of new territories, often at the expense of low-density foragers. This is undoubtedly true in Polynesia and Remote Oceania, where islands were actually uninhabited prior to the Austronesian expansion, but its relevance for the expansion of other language phyla is more questionable. For example, we know that Pama-Nyungan expanded to cover 90% of the area of Australia and that agriculture was manifestly not responsible; stone tool technology and innovative religious practice have been proposed as drivers (McConvell & Evans 1998). At the other end of the spectrum, individual languages in SE Asia have spread as a result of political and military conquest, as the present status of Thai, Khmer, Burmese and Kin Viet suggests (Blench 2005). So it seems unlikely that expansions have any single cause, but their trajectory is more like punctuated equilibrium, stopping and starting in response to access to resources, social and economic pressures and the introduction of new technology. Moreover, it is increasingly clear that demographic growth almost never occurs in a simple fashion; resident populations are assimilated and switch identities, a process that leaves marked traces in language. The modern Thai language illustrates this process neatly; Indo-Aryan, Sinitic, Khmer and Mon borrowings all testify to contact, interaction and language switch in the course of its expansion. It is probably also useful to distinguish migration from movement. Migration is a one-way movement to explore and take possession of new territory; ‘movement’ covers processes such as trade and military conquest, where the actors envisage the possibility of return or further movement.

Palaeosociolinguistics, the modelling of past processes of language change and diversification, is still poorly developed for the SE Asian region (Blench 2014b). Given this, the language situation in SE Asia warrants an explanation which is congruent with the known archaeology and ethnography of the region. A list of possible drivers of expansion might look like this;

Table 2. Underlying drivers of language expansion

| Category | In search of | Likely groups | Example |
|-----------------|---|-----------------------------------|---|
| Migration | scarce wild resources | Foragers, fishermen, pastoralists | Austronesian expansion |
| Movement | new farmland | Agriculturalists | First phase Daic expansion |
| | new trade-goods, trading partners | Any | Sinitic, Indic, Arab traders |
| | scarce non-food resources [e.g. minerals] | Any | Austronesian movement in the Indian Ocean |
| | political dominance | States, acephalous raiders | Thai, Khmer states, Austronesians [?] |
| Assimilation | religious/cultural dominance | States, institutions | Hindu, Buddhist proselytization |
| | economic dominance | States, traders | Rise of Srivijaya |

Cross-cutting these categories are what may be called ‘enabling’ or ‘push’ factors, which would include innovative technology, resource shortages and disease, any of which might apply to the trajectories listed above. Given that the Austronesians leaving Taiwan were able to reach the Marianas islands across some 3000 km of open ocean, they clearly had access to advanced sailing technology, which allowed them to pursue favoured fish species across a vast area (Hung et al. 2011). Similarly, the possession of writing systems, introduced by Indic cultures, must have given them an early advantage in establishing cultural and religious dominance.

Linguistic reconstruction of proto-languages, or the use of historical linguistics to reconstruct items spoken at early periods of language dispersal, can be helpful in underwriting hypotheses about the core drivers of expansion, but it can also be misleading. Put simply, just because crops can be reconstructed to a proto-language, the only conclusion this licenses is that the speakers were farmers, not that the quest for farmland lay behind their expansion. To take the example of Austronesian, the cereal agriculture of the highland peoples of Taiwan ensures that various crops are posited for the proto-language. But if the fisher/forager

model is correct, the early mariners may have been exchanging goods for their food, making the practice of agriculture a false inference for the phylum as a whole.

Another key factor in SE Asian linguistic prehistory, as elsewhere in the world, is language levelling (Blench 2104b). This occurs when one language or dialect expands at the expense of related languages. In this case, because the languages are already related, speakers of a minority language begin substituting words and grammatical forms taken from the dominant speech into their own utterances, gradually eliminating differences until these disappear. The usual motivation is to gain social or economic access where the locus of power or wealth is with the dominant group. A striking example is the island of Nias, part of the Barrier islands west of Sumatra. Nias shows astonishing genetic and linguistic uniformity, despite settlement from more than 12,000 years ago (Forestier et al. 2005). This can be attributed to a settlement and language-levelling event as little as 600 years ago, obliquely recorded in the *hoho* or historical chants (Kennerknecht, Hammerle & Blench 2012). An example of these contrasts within Austronesian is Vanuatu, which has one of the highest language densities in the world, 116 languages spoken by a quarter of a million people spread over 12,190 km², reflecting the complete absence of hierarchical societies or pressure to conform to a linguistic norm. By contrast, Java, one of the most densely populated large islands in the world, has just six languages. Clearly, at some point in history, there were many more languages, but the elaborate polities that dominate Javanese society have gradually assimilated almost all the linguistic diversity.

3. Language and the peopling of SE Asia

3.1 Overview

It is generally assumed the modern humans reached SE Asia during the Pleistocene and that the earliest humans to reach Australia must have passed through the MSEA region. Findings in Laos (Demeter et al. 2012) are beginning to provide confirmation for such a scenario. However, there is little evidence for this from the linguistic point of view. Just as true hunter-gatherers probably only survived on the Andaman Islands, so the isolated languages spoken there may be the only remaining evidence for the early linguistic picture (Abbi 2006, 2012). The language phyla of SE Asia are highly coherent and there is little doubt about the affiliation of individual languages. As a consequence, it is generally considered that agriculture can be reconstructed to the proto-language of all but Sino-Tibetan (Blench 2011). Given that the Neolithic of SE Asia is now dated to around 4000 BP (Rispoli 2008; Higham & Higham 2009; Higham et al. 2011) this suggests that Austroasiatic, Hmong-Mien and Daic cannot be older than this. The initial expansion of Austronesian, assuming the model of migration from the Chinese mainland is correct, might date to 6000 BP, reflecting earlier agriculture in the Yangtze Valley. Nonetheless, compared with New Guinea, Africa or the Amazon, linguistic diversity is extremely low. Broadly speaking, the pre-existing forager populations must have assimilated or been wiped out, and extensive prior linguistic diversity eliminated. SE Asia undergoes a second transformation in the second half of the first millennium AD when urbanism accelerates and a whole series of polities begin to develop, and as military conquests, irrigated agriculture, writing and state religion begin to transform the landscape. It would not be an exaggeration to say that the outlines of the current linguistic map were formed during this period. This section provides an overview of the evolution of the major language phyla in SE Asia.

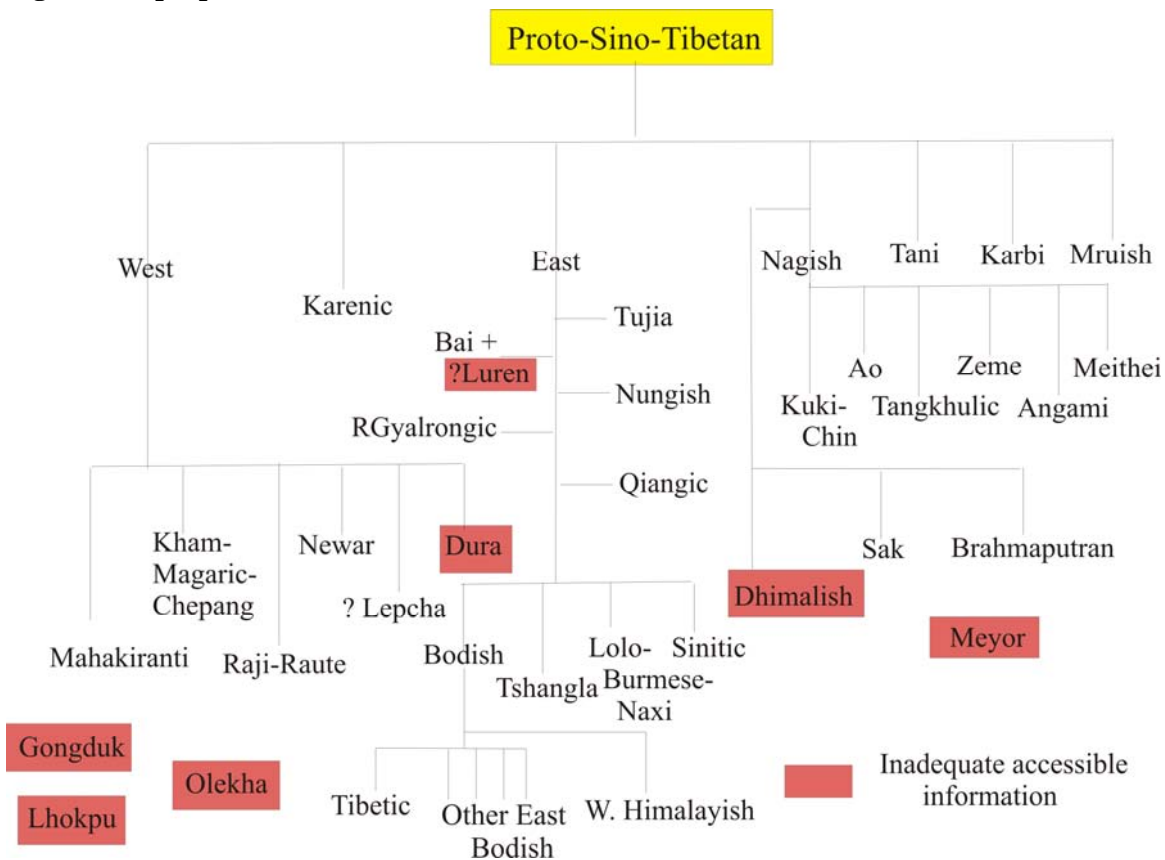
3.2 Sino-Tibetan

The Sino-Tibetan phylum has more speakers than any other language phylum except Indo-European, largely due to the inclusion of the Sinitic branch, composed of the many dialects of Chinese. Despite some two centuries of study and publication, the subclassification of Sino-Tibetan remains highly controversial, as does its external affiliation (Blench 2008; Van Driem 2008). Considering its importance and the history of its scholarship, there is a striking lack of agreement as to its internal classification, which creates difficulties for linguistic reconstruction. Some questions that remain unresolved are;

- ❖ Whether the primary branching is Sinitic (i.e. all Chinese languages) and the remainder of languages constitute a secondary branching (usually called Tibeto-Burman), or whether Sinitic is simply part of one branch, e.g. Bodic etc. Certainly the distinctiveness of Sinitic is far from proven.
- ❖ What are the inter-relations of its branches?
- ❖ Whether can it be linked with other phyla such as Austronesian or Caucasian.

Broadly speaking, the opposing camps are those who consider Sinitic as the primary branching of Sino-Tibetan, such as Benedict (1972), Matisoff (2003), Thurgood & La Polla (2003) and those who situate it within the remaining languages, consequently applying the name Tibeto-Burman to the whole phylum, such as Shafer (1966/67) and Van Driem (1997). Sinitic would thus be incorporated within the group conventionally defined in opposition to it. Both of these classifications essentially show large parallel arrays, with Van Driem being the extreme version of the agnostic view. Neither model seems to give fair weight to the highly diverse languages of NE India, for which documentation is gradually becoming available. In terms of internal diversity, the region from the southern flanks of the Himalayas to the Assam region is characterised by large numbers of small subgroups which are very different from one another. Figure 1 shows a proposed internal structure for Sino-Tibetan, which represents a compromise between these models but which gives due weight to the diversity in NE India (Blench & Post 2013).

Figure 1. A proposed internal structure for Sino-Tibetan



Interpreting this structure in terms of the regional archaeology is a considerable challenge, due to the absence of early stratified sites in NE India and adjacent regions. The cultural evidence suggests that this region was characterized by vegiculture, sago extraction, management of semi-domesticates (mithun) and hunting, all occurring until very recently (Blench 2014a). A move into higher altitudes may have stimulated the adoption of buckwheat and the yak. Exactly what caused this early movement is unclear, but the exploitation of a range of environments east of Assam and a rapid move into what is now China by a range of different groups is certain. It has been suggested previously that the shouldered celts characteristic of the archaeology of the region between Eastern India and Sichuān correlate with early Sino-Tibetan movement (Van Driem 1998).

Isolate branches of Sino-Tibetan in China, such as Tǔjiā, 土家, and Báí, 白, are apparently remnants of a much more significant movement into South-Central China. The ancestors of the Sinitic-speakers must have moved to a more northern zone, where they encountered livestock keepers and cereal growers, which *might* be correlated with the earliest Neolithic communities in North China such as the Péilígǎng or Cǐshān (9000 BP onwards) but these dates seem rather early. It was only when the Sinitic speakers began to move south

and encountered rice-producers in the Yangtze valley that the characteristics associated with present-day Chinese culture develop, with the emphasis on rice, pigs and hierarchical social and political structures.

Given this situation, we cannot confidently reconstruct *any* agricultural terms to Proto-Sino-Tibetan. Agriculture presumably developed well after the primary dispersal of Sino-Tibetan, which must therefore be considerably earlier than the other language phyla in the region. Given this, there are widespread terms attesting agriculture in well-studied branches such as Sinitic, Karenic and Lolo-Burmese; these must certainly reflect the importance of farming in the secondary expansion of Sino-Tibetan. Table 3 presents some widely attested terms for crops and livestock terms.

Table 3. Widely attested agricultural terms in Sino-Tibetan

| | Gloss | Comment |
|-------|----------------|------------------------------------|
| #mei | rice | [also in Daic and Hmong-Mien] |
| #fan | rice | [also in Daic] |
| #tʃək | foxtail millet | [also in Mienic and ?Austronesian] |
| #ŋwV | cow, ox | [also in Daic and Austroasiatic] |
| #brak | pig | [also in Austronesian] |

It is notable that all these terms are found outside Sino-Tibetan, especially in Daic, which points strongly to a period of intense interaction between speakers of the phyla in the early phases of the intensification of agriculture.

Political and cultural institutions are also responsible for secondary expansions within Sino-Tibetan. The Tibetic languages form a subgroup of Bodish, a large but somewhat poorly characterized group of languages spoken between western China and North-Central India. Although Tibetan has many dialects, they are all relatively close and are not likely to go back to a period much earlier than AD 800. Tibetan culture has extremely marked features, including a distinctive script and a particular form of Buddhism, and probably expanded through a mixture of military force and religious conversion, absorbing the diverse groups previously inhabiting the Tibetan Plateau. Burmese must have a similar story; the Burmese language itself is just one of a large family of Sino-Tibetan, the Lolo-Burmese languages, which include many languages spoken in southwestern China. However, by the ninth century, the Burmese were able to raid and take over the settlements of the Pyu, after which there was almost continuous military expansion. Many aspects of Burmese culture were adopted from resident groups such as the Mon and the Pyu. The linguistic geography of Myanmar today illustrates this neatly, with a large central area which is uniformly Burmese-speaking and dispersed minority languages on its periphery.

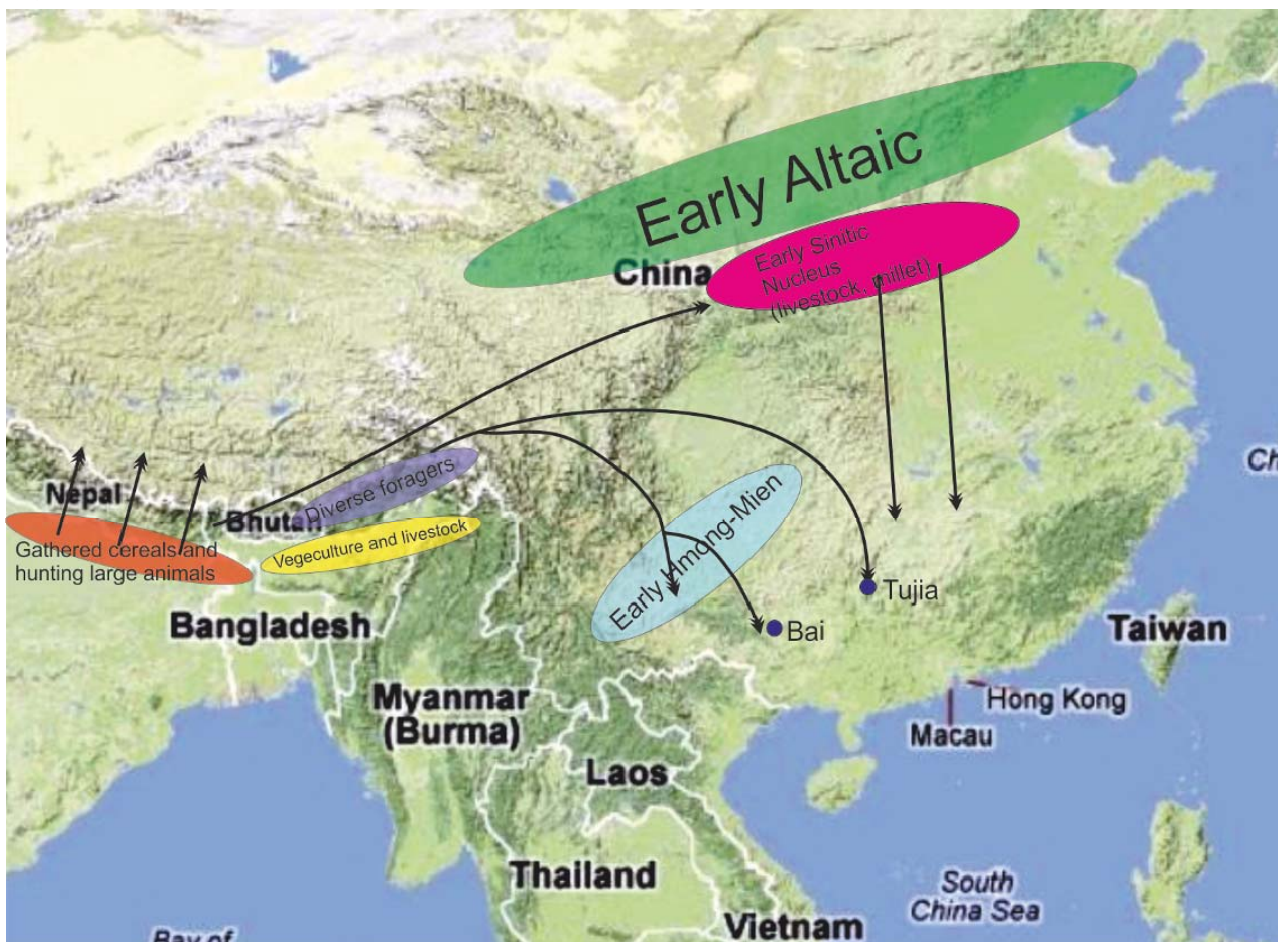
Sino-Tibetan is undoubtedly the most difficult of the SE Asian language phyla to model; gaps in the data, a lack of evidence for a coherent internal structure and a failure of congruence with archaeology and genetics. Given this, any hypothesis concerning its spread and diversification must be speculative and subject to revision. However, we can do better than any of the claims presently on the table by presenting an account which at least does not contradict the interdisciplinary evidence. With this in mind, the following scenario is put forward as a model of the development of the phylum;

- The earliest speakers of Sino-Tibetan were highly diverse foragers living in an arc between the slopes of the Himalayas and Assam/Arunachal Pradesh up to 10,000 years ago.
- Some would have spoken early Sino-Tibetan languages, others unknown languages now present only as substrates.
- Seasonal foragers begin to exploit the high Tibetan Plateau from 7500 BP.
- By perhaps 6-5000 BP a 'livestock revolution' takes place. Yak herders move up and settle the Tibetan Plateau permanently. Pig domestication in China among non-Sino-Tibetan speakers begins
- Foragers in NE India probably began to practice vegeculture (taro, plantains), arboriculture (sago) and animal management (mithun) by 8-6000 BP.
- But 5000 BP diverse early Sino-Tibetan groups spread eastwards to China. Sinitic is not a primary branch but simply one of many migratory groups.

- Proto-Tujia, proto-Bai and probably others meet unknown populations (Hmong-Mienic? pre-Austronesians?) with domestic pigs, while also cultivating and beginning to domesticate rice.
- Proto-Sinitic speakers encounter early Altaic speakers with foxtail millet and other crops.
- The Sinitic languages expand southwards, assimilating or encapsulating many small groups. They encounter Hmong-Mien speakers with rice and switch millet terminology to rice.
- Cold zone cereals (buckwheat, foxtail and *Panicum* millets) and perhaps also taro are moved from gathering to domestication in the montane areas on the fringes of the Himalayas.
- Rice moves up from India but also westwards from China (hence hybridised types) and overlays older cereals where ecologically possible.
- Tibetic speakers undergo a major expansion from AD 800 onwards, assimilating linguistic diversity on the Plateau.
- Groups such as early Burmic spread southwards, fragmenting Austroasiatic-speaking peoples.

Figure 2 shows a highly simplified map of the early phases of these movements;

Figure 2. A model of the early history of Sino-Tibetan



3.3 Hmong-Mien

The Hmong-Mien [=Miao-Yao] languages are spoken mostly in China with outlying groups also in Laos, Vietnam and Thailand (Niederer 1998, 2004; Ratliff 2010). Their center of gravity is between the Yangtze and the Mekong rivers since the southern extensions may be as recent as the last few centuries. Hmong-Mien languages are quite close to one another, but are very different from neighbouring language phyla. They can be divided into two strongly distinct groups, except for the single language, Ho Nte, spoken NE of Guangdong. This points to speakers undergoing a linguistic bottleneck or language levelling episode in the last 3-2000 years. Linguistic geography suggests strongly that they were scattered by the incoming Han and

probably forced southwards. Many agricultural terms can be reconstructed to proto-Hmong-Mien but most of them are either Chinese borrowings or resemble Chinese closely. It seems likely that pre-Hmong-Mien speakers have a long history in China, and that they can be linked with early Neolithic cultures, but Chinese cultural dominance has made this hard to detect.

The Hmong-Mien proto-language is likely to be older than is apparent from the lexical data. The reconstruction of agricultural vocabulary is clear, but so are borrowings from Old Chinese into the proto-language. Moreover, proto-Hmong-Mien has many fruit-crops and other plants typical of a drier climate and is not generally characteristic of the Southeast Asian region. Table 1 shows proposals for the Hmong-Mien subsistence lexicon, adapted from Ratliff (2010);

Table 4. The Hmong-Mien subsistence lexicon

| Item | Reconstruction | Source |
|--------------|-------------------|-------------|
| bean | *dup | < Chinese |
| buckwheat | *jæu | cf. Chinese |
| chicken | *Kəi | < Chinese |
| cucumber | *K ^w a | < Chinese |
| eggplant | *ja | cf. Chinese |
| pear | *rəy | < Chinese |
| plum | *hljəŋX | |
| rice, cooked | *hnrəŋH | |
| rice, husked | *tuX | < Chinese |
| rice plant | *mbləu | |
| taro | *wouH | < Chinese |
| buffalo | *ŋiuŋ | < Chinese |
| dog | *qluwX | |
| duck | *ʔap | < Chinese |
| sheep/goat | *yuf | < Chinese |

Adapted from Ratliff (2010)

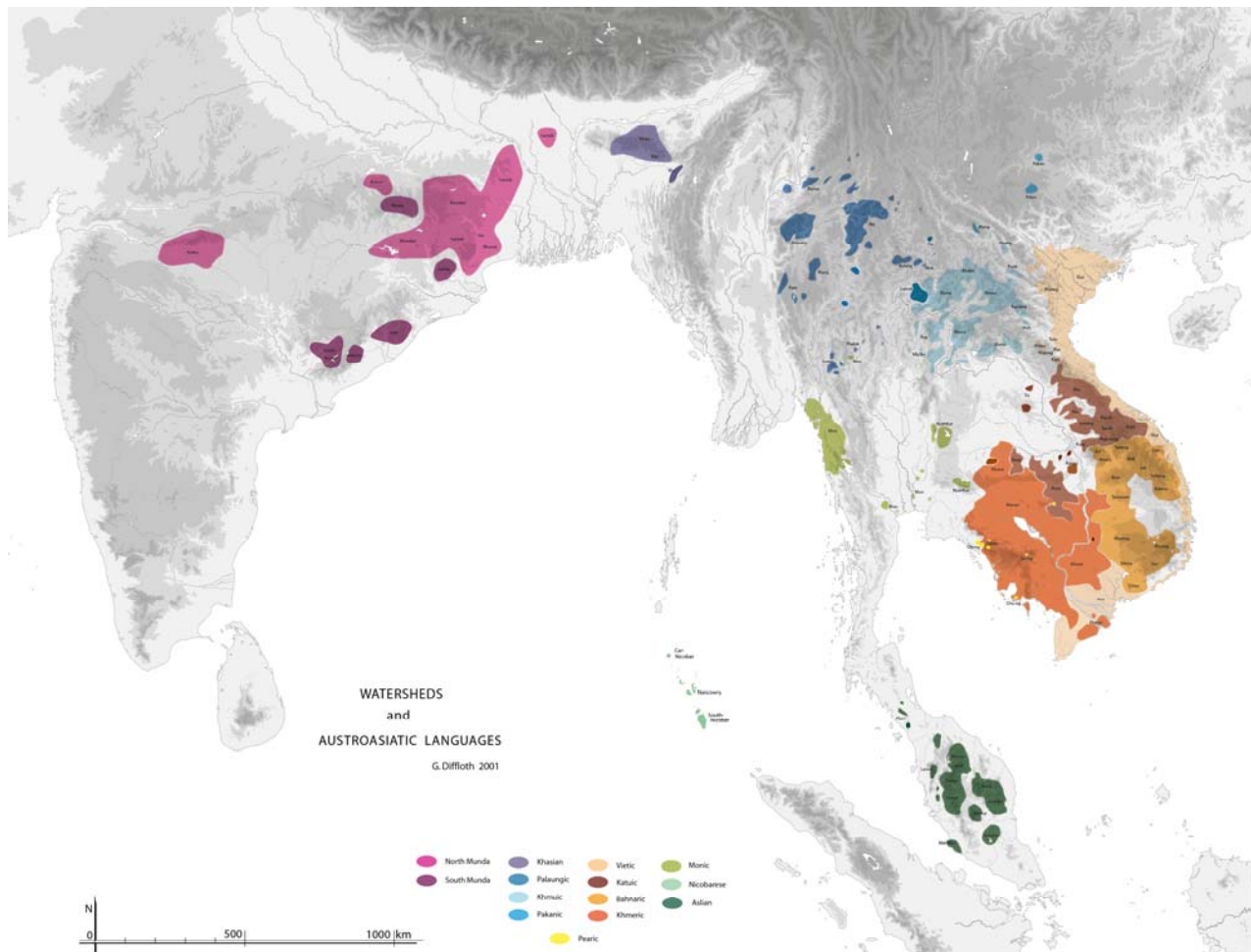
Early Hmong-Mien speakers may have been residents of the central plains of China for a very long period and were perhaps the inhabitants of Pengtoushan (彭頭山文化) (ca. 9000 BP onwards). However, Sinitic speakers would have been gradually moving south from perhaps 5000 BP onwards, in part assimilating the Hmong-Mien, and certainly reducing their original linguistic diversity. Some groups, however, must have been pushed southwards, and underwent a linguistic bottleneck about the time the Han were unifying the Warring States. This strongly suggests that the Hmong-Mien may themselves have been the dominant group in one of the many states existing at this time whose linguistic affiliation is unknown, explaining the low diversity of these languages. As the Chinese carried military conquest further into Yunnan, the Hmong-Mien must have dispersed into the northern reaches of Laos and Viêt Nam.

3.4 Austroasiatic

The Austroasiatic language phylum is situated in the heartland of MSEA and yet today is remarkably fragmented, its individual branches scattered from NE India to the Malay Peninsula (Parkin 1991). Map 1 shows the current pattern of Austroasiatic languages. Interwoven territorially with much more geographically coherent phyla such as Daic and Hmong-Mien, the narrative of its dispersal is central to a general understanding of the ethno-cultural history of SE Asia. Austroasiatic languages remain the most poorly researched of all those in the region, and many are barely documented, while some in China are still not classified with certainty. The nearest approach to proto-Austroasiatic reconstructions is the ‘Mon-Khmer’ etymological dictionary of Shorto (2006), which identifies a large number of common roots attested across several branches. However, few of them are pan-Austroasiatic and may reflect regional, local or subgroup innovations. It is therefore as yet unclear whether, for example, we can draw inferences concerning the environment in the homeland of Austroasiatic, as has been claimed (Diffloth 2005). Sidwell & Blench (2011) review some of the theories concerning the classification and antiquity of Austroasiatic languages

and argue for a relatively recent dispersal along the Mekong basin, marked by incised and impressed pottery (Rispoli 2008).

Map 1. Austroasiatic languages



Source: Gerard Diffloth (p.c.)

The model presented in Sidwell and Blench (2011) for the structure and dispersal of Austroasiatic is consistent with the claim by Diffloth (2005) that Austroasiatic speakers typically spread along river valleys in the early period of their expansion, seeking waterlogged soils suitable for taro. Rice terminology is widespread, and includes the Munḍā languages of NE India, but is not attested to in as many branches as taro and is thus not necessarily proto-Austroasiatic, despite claims to the contrary. Table 5 shows quasi-reconstructions of Austroasiatic names for crops, and the numbers of individual branches for which reflexes (i.e. modern forms cognate with proposed proto-forms) are attested.

Table 5. Crop reconstructions in Austroasiatic

| Gloss | Reconstruction | Comment |
|----------------|----------------|---|
| rice (general) | #ḃa:ʔ | Found in seven branches |
| rice-grain | *sŋɔ:ʔ | Reconstructs only to Proto-Mon-Khmer |
| paddy rice | #srɔ | Found in three branches including Munda |
| husked rice | #rəkau | Found in seven branches including Munda |
| foxtail millet | #səŋkɔɔy | Found in seven branches |
| taro | #trawʔ | all branches except Aslian |
| sesame | #ləŋa | Found in six branches |
| banana | #tVIVy | Found in six branches |
| betel pepper | #mpluw | Found in six branches |

Source: Blench (2011)

If agriculture itself emerges ca. 4000 BP, the initial dispersal of proto-Austroasiatic would not be earlier than this. If this is the case, then Austroasiatic is unlikely to have an intricate nested structure. This evidence is consistent with a rapid spread over a large region, as the ‘flat’ structure of the phylum suggests. The view which attributes the original homeland of Austroasiatic to a region along the Mekong is here called the ‘aquatic hypothesis.’ It also suggests an important reorientation in our views of the subsistence strategies of early speakers of Austroasiatic languages as primarily fisher-forager populations based along rivers, initially the Mekong and its affluents. The other aspect of a fisher-forager strategy is that boat-based populations can move far and fast, hence the rapid expansion of Austroasiatic and the absence of linguistic subgroups. In support of this hypothesis, Austroasiatic has reconstructions of fish and other aquatic species, as well as river birds, all pointing towards a riverine dispersal. There are two widespread roots for ‘boat’ which appear to be indigenous. The root #*duuk* is discussed in Diffloth (2011) and is confined to core languages in the Mekong area. Table 6 shows the reflexes of this root.

Table 6. The #*duuk* root for ‘boat’ in Austroasiatic

| Branch | Subgroup, language | Citation |
|-----------|--------------------|---------------|
| Bahnaric | Proto-Bahnaric | * <i>duuk</i> |
| Katuic | PKa | * <i>duuk</i> |
| Khmeric | Khmer | <i>tuuk</i> |
| Monic | Nyah Kur | <i>thù:k</i> |
| Nicobaric | Nancowry | <i>düe</i> |
| Pearic | Common | # <i>tòk</i> |
| Vietic | Proto-Vietic | * <i>đu:k</i> |

Given the importance of taro and other aquatic terminology, it is reasonable to link this with the wide distribution of ‘incised and zone-impressed’ pottery ‘across parts of far southern China, northern Việt Nam and Thailand after about 2500 BC’ (Bellwood 2005:132; Rispoli 2008). This remains a radical revision of views about Austroasiatic dispersal, but which are in line with challenging perceptions of Austronesian (§3.5).

3.5 Austronesian

The Austronesian hypothesis, that more than a thousand languages spoken from Island SE Asia to Remote Oceania form a single language phylum, was first given its modern shape by Dempwolff (1938). Dempwolff did not clearly identify and situate the languages of the indigenous peoples of Taiwan, an omission rectified by the second major figure in Austronesian studies, Isidore Dyen (1963). Blust (1999) may have been the first author to clearly establish that the diversity of Formosan languages required them to be ancestral to all others and to constitute an array of primary branches. This hypothesis was adopted by Peter Bellwood (1984/5) and Blust (1995) to model the archaeological evidence, whence emerged a story about the ancestors of the Austronesians who left Taiwan around 4000 BP by means of a highly developed sailing technology, and reached the furthest shores of the Pacific and East Africa. 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 jewelry, such as the nephrite *linglingo* ornament. Various sub-narratives, such as

the ‘express-train to Polynesia’ (Diamond 2001), reached high-profile journals, and the idea acquired a certain currency in global prehistory.

Although the expansion of Austronesian languages was one of the most rapid and widespread in history, a convincing analysis of the forces underlying it remains elusive. The Austronesian hypothesis proposes that it was the Austronesian adoption of an agricultural package which allowed them to colonize Islands in SE Asia at the expense of resident hunter-gatherers (e.g. Bellwood 1995). However, archaeology has signally failed to support this model. Denham (2004), Donohue & Denham (2010), Blench (2009, 2012), Lewis et al. (2008) and Bulbeck (2008) have all argued that neither the archaeological assemblages nor the linguistic structures of Austronesian correspond to a simple model of incoming Neolithic farmers replacing foragers. Early sites show very similar dates across a wide geographical area, suggesting that the first phase of Austronesian expansion took place extremely rapidly (Spriggs 2011). Sites in the extreme south of Taiwan at the beginning of the fourth millennium BP such as O Luan Pi (I and II) show no evidence of agriculture (Kuang Ti 2000). Pigs and chickens have been shown to arrive via other routes, and rice is conspicuously absent in most early sites. The majority of pigs in the Southeast Asian Islands originate not from Taiwan, but from the mainland, probably Việt Nam (Hongo et al. 2002). Moreover, they are conspicuously absent from the archaeological record in the main islands until significantly later than the Austronesian expansion (Dobney et al. 2008). The situation for dogs and chickens is if anything more perplexing; they rarely turn up in assemblages at all, until identified later in Polynesia.

If the existing paradigm of Austronesian migration is crumbling in the face of a conspicuous absence of archaeological evidence for some of its central claims, its replacement will be a far more nuanced account of the movement of plants, animals and other types of material culture in the Southeast Asian region. The ‘fisher-foragers’ of Bulbeck (2008) and the emphasis placed by Solheim (1984/5) on trade may well be significant components in any new model. However, these views do not satisfactorily account for the extreme pervasiveness of the Austronesian languages, which must have replaced and assimilated a mosaic of language families in numerous different places in Island South East Asia (ISEA).

It now seems we may have to consider a more extreme inversion of the Neolithic hypothesis and characterize the Austronesian expansion as an agricultural revolution that failed. There is a paradox here, since we know that the Austronesian peoples of highland Taiwan were skilled practitioners of intensive cereal cultivation, at both adopting species from outside and domesticating local grasses (Arnaud 1974). But when they left the island for the Philippines these skills and cultigens were not transferred. The pondfield technology of the famous rice-terraces of Luzon are now not considered to be an inheritance from the field rice of Taiwan (Acabado 2014). The groups which left Taiwan and became the Yami, Itbayat and Chamorro, were instead fisher/forager/traders energized by a powerful religious ideology but with no tradition of cultivation or livestock production (Blench 2012). This suggests that in addition to sailing technology and trade, the Austronesians must also have had an attractive social, organizational and religious ideology which persuaded the residents of individual islands to adopt Austronesian culture. This would certainly explain the extraordinary diffusion of certain iconographic elements, such as the *bulul* figure [woodcarvings of seated figures with their arms on their knees], the *linglingo* and others, long noted by art historians (Blench 2012). The expansion of Chamic on the Vietnamese mainland and the displacement or assimilation of Austroasiatic languages and cultures shows just how effective this type of cultural colonization can be (Blench in press a). With access to innovative sailing technology they were able to expand rapidly in many directions, hence both the apparent lack of nested structures in the Austronesian language phylum and the near-simultaneous dates for archaeological sites across the region (Spriggs 2011).

No consensus on a new paradigm for Austronesian is likely to be reached for some time. However, as with Sino-Tibetan, it is possible to outline a speculative model that is at least an account for the interdisciplinary data (Blench 2014a). With all the usual caveats, the following hypotheses are put forward;

- a) The ancestors of the Austronesians probably migrated from mainland China, although there is no direct linguistic evidence for this.
- b) Austronesian originates in Taiwan, where an array of primary branches persist, while the remainder of Austronesian, i.e. Malayo-Polynesian, constitutes a single subgroup.

- c) The Austronesians who left Taiwan were not primarily agriculturalists, but fisher/forager/traders with access to innovative maritime technology.
- d) They disperse very rapidly, both eastwards to Micronesia and around ISEA, accounting for the scatter of near-simultaneous dates and the lack of evidence for an internal hierarchy within the Austronesian phylum and the unstructured characteristics of Western Malayo-Polynesian.
- e) Oceanic, which is a highly coherent and structured branch of Austronesian, is almost certainly to be correlated with the Lapita pottery complex.
- f) The many Austronesian languages in SE Asian islands with *in situ* residents must have spread largely by assimilation rather than conquest or physical elimination.
- g) This process would have resulted in a wholesale language switch, hence the limited evidence for non-Austronesian (NAN) substrates. In Melanesia, these processes broke down, hence both the phenotypic switch of Austronesians to Papuan physiognomy and the occurrence of a range of mixed languages from within a family.
- h) The primary means of assimilation was through conversion via religious and cultural practice, rather than military conquest or commerce.
- i) The material culture package supposedly typical of Austronesians was constructed from elements adopted along the way, some of which diffuse across the region, giving a retrospective impression of cultural coherence.
- j) As an additional consequence, many of the reconstructions for subsistence-related terms in Austronesian hitherto considered solid must instead be mosaics of ancient loanwords, spreading either east from MSEA or west from Melanesia.
- k) The rise of Srivijaya from the seventh century onwards is strongly associated with the spread of Malay as a language of trade and colonization in ISEA, with language levelling in Java and the Malay Peninsula.

3.6 Daic [=Tai-Kadai]

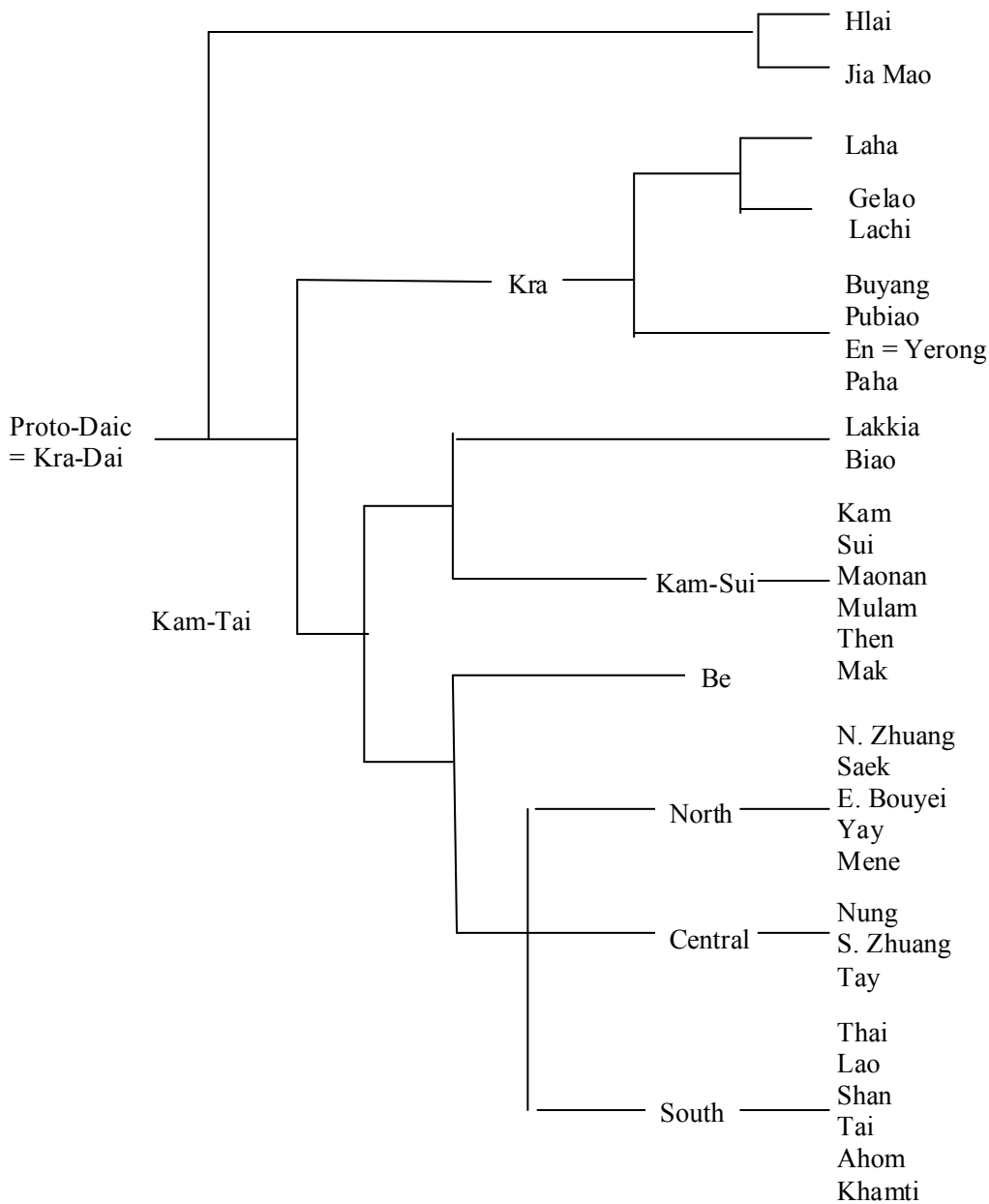
The Daic or Tai-Kadai languages, of which Thai is the most well-known and widespread representative, are spoken from southern Thailand into Laos, Vietnam and China. Overviews of the phylum are Edmondson & Solnit (1988, 1997b) and Diller et al. (2008), and maps of their distribution are given in Edmondson & Solnit (1997a). The current estimate for the number of Daic speakers is at least 80 million (Ethnologue 2013). The linguistic geography of Daic is highly suggestive of its history. Essentially, there are many small populations in China, Laos and Việt Nam. However, the Thai, Lao and Shan peoples now inhabit a substantial region of Thailand, Laos and Myanmar, which can be traced to the growth of state-systems around the beginning of the second millennium AD.

The Daic languages represent a highly coherent grouping whose structure is well understood; a relatively long list of common glosses make it possible to construct hypotheses concerning the subsistence and migrations of the proto-Daic speakers. All the most diverse Daic languages are in China: despite the marked southward extension of Thai today, the likely origin of Daic is in Kweichow. Surprisingly however, there is no standard reconstruction of proto-Daic, although branches such as Kra, Tai and Hlai have lists of proto-forms (Li 1977; Hudak 2008; Ostapirat 2000; Norquest 2007). Figure 3 shows the view of the internal relationships of Daic taken from Edmondson & Solnit (1997b) amended with reference to Thongkum (2001) and Ethnologue (2013).

The external affiliations of Daic have remained controversial, sharing as it does many features with surrounding language phyla. These were used by Benedict (1975) to argue for ‘Austro-Tai’, a macrophylum that would unite Austroasiatic, Hmong-Mien, Daic and Austronesian. More credible is a link between Daic and Austronesian. Ostapirat (2005) sets out a series of regular correspondences between them, assuming a model of a primary split between the two; they would then be co-ordinate branches. But this seems unlikely, as Daic does not share in the phonological complexities of Formosan. Sagart (2005b) proposes that proto-Daic is a branch of proto-Malayo-Polynesian and that speakers migrated back to the mainland, both to Guangdong and the region of Hainan island. Norquest (2007:413) points out that the Hlai branch shares some striking lexical items with proto-Austronesian which do not occur in the other branches of Daic. Despite this, the Daic expansion has no obvious archaeological correlate, although there are clearly cultural

links with speakers of Austronesian languages in Taiwan, for example dental ablation and tooth staining (Blench 2013a).

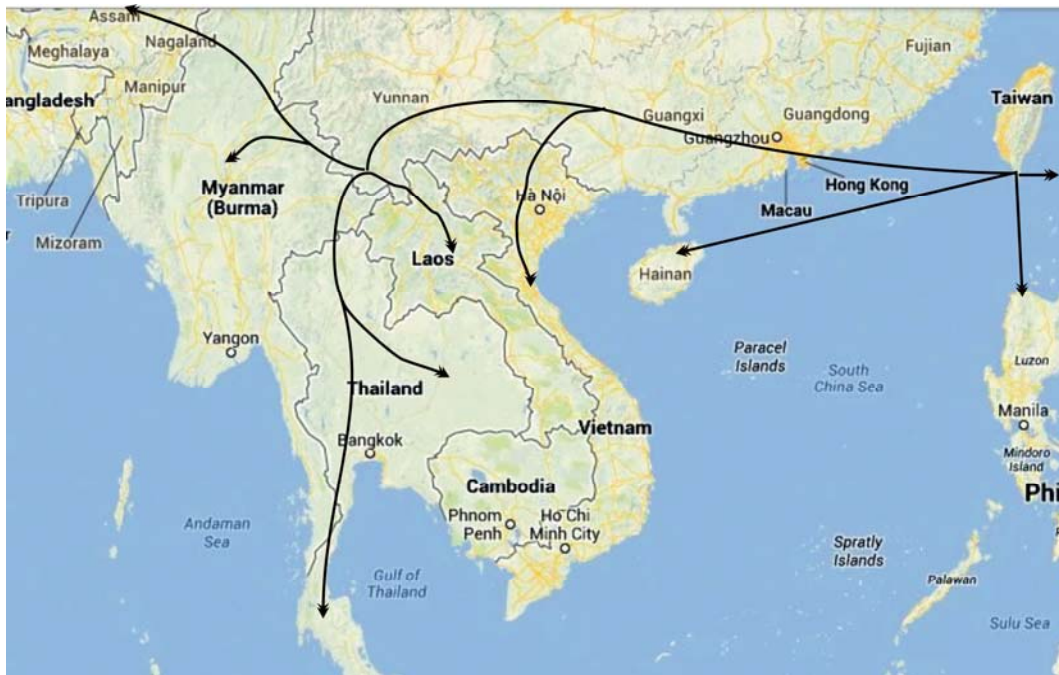
Figure 3. Daic subclassification



Hlaic must have branched off at the same time as the Kra languages, as it retains a specific set of Austronesian lexical items. Daic then became relexified and radically restructured following contact with Hmong-Mien and perhaps other languages of unknown affiliation. Such a migration would be around 4000 BP, to be congruent with current dates for the first incursions in the Northern Philippines. Map 2 shows the hypothetical routes of Daic expansion based on this evidence.

There is no direct evidence for the earlier stages of the routes depicted here, as the southward expansion of Sinitic has eliminated all traces of other populations nearer the coast. However, it has been regularly claimed that there is a Tai substrate in Cantonese, most notably in Bauer (1996).

Map 2. Proposed Daic expansions from Taiwan



This is a complex scenario, and the question arises as to the reasons for these movements. If the model of Austronesian is correct, then the early dispersal from southern Taiwan would brought one group of mariners to SE China, possibly Guangdong, and another to Hainan island. Those on the mainland appear to have settled and gradually moved westwards. It is striking that despite numerous other lexical links, Austronesian and Daic share no agricultural vocabulary in common. The mainland would have been only sparsely populated at this time, and it seems credible that subsistence activities would have consisted largely of foraging. Recent studies of starches and phytoliths have shown that at this time subsistence in Southern China was based around sago, bananas and tubers, and that cereals were yet to be adopted (Yang et al. 2013). There must formerly have been a chain of Daic languages from Guangdong inland to Yunnan and somewhere a transformation occurred, and agriculture was adopted. As with the Hmong-Mien, it is probable the Daic peoples were dispersed by the Sinitic expansion.

Daic languages are not all that diverse, and both crops and domestic animals can be reconstructed for proto-Daic. Ostapirat (2000) presents some glosses shared across all three branches, including ‘pig’, ‘dog’ and at least some crops. Table 7 shows items from Ostapirat relating to crops and domestic animals attested across all branches of Daic;

Table 7. Daic lexicon illustrative of subsistence

| Language | chicken | pig | dog | sesame | ‘yam’ |
|----------|---------|-----|------|--------|-------|
| Gelao | qai | map | mpau | ŋklau | mbø |
| Lachi | kɛ | mye | m | — | mfiə |
| Laha | kəi | məu | maa | — | mal |
| Paha | qai | muu | maa | ŋaa | man |
| Buyang | ?ai | muu | — | ŋaa | man |
| Biao | qai | muu | maə | ŋhwa | mfiən |
| Hlai | khai | pou | pou | keu | man |
| Sui | qaai | muu | maə | ?ŋaa | man |
| Tai | kai | muu | maa | ŋaa | man |

Source: Ostapirat (2000)

Table 8 presents additional proposals for the Daic subsistence lexicon, based on a more extensive compilation in Blench (2013a);

Table 8. Proposals for the Daic subsistence lexicon

| Item | Quasi-reconstruction | Possible source |
|-------------|----------------------|---|
| taro | #pyaak | < Taiwan names for <i>Alocasia macrorrhizos</i> |
| cooked rice | #mpVŋ | widespread mV- roots |
| husked rice | #saan | Sino-Tibetan and Austroasiatic |
| white rice | #rɔp | Daic innovation |
| millet | #pfeɛŋ | Daic innovation |
| ginger | #k ^h iŋ | < Proto-Hmong-Mien |
| buffalo | #kwaay | < Austroasiatic |
| goose | #yaan | < Austroasiatic |

The sheer variety of crops and livestock in this inventory strongly suggests that the proto-Daic speakers were established farmers. As Table 8 suggests, Daic does borrow terms from other regional phyla.

The scenario traced here points to a transformation of the Daic peoples from fisher/foragers to forager/vegeculturalists, to small farmers, part of the Neolithic transformation of SE Asia, around 4000 BP. However, at least one group of the south-western Tai adopted more ambitious military and political strategies in the eighth and ninth centuries, displacing the Mon from Dvaravati. From this point onwards, the expansion of Thai itself covered much of modern Thailand, while the closely related Lao developed in Luang Prabang and other branches headed westwards to found the Shan States, reaching NE India and leading to the creation of the Ahom state in the 15th century.

3.7 Residual populations

The only language isolates in SE Asia are those spoken by the Andamanese foragers on the Andaman Islands, west of Myanmar. The Andamanese physically resemble the Orang Asli of the Malay peninsula and the Philippines negritos. It has become common currency that the Andamanese are the remaining population of an original coastal expansion out of Africa, and thereby ultimately related to the Vedda of Sri Lanka, the Papuans and other negrito groups. This has had some support from genetics (Endicott et al. 2003; Forster et al. 2005) but archaeology has yet to provide any confirmation.

On Great Andaman, the majority of languages have become extinct with only minimal records remaining. Abbi (2012) has now collated what lexical data can still be collected for Great Andamanese. Little Andaman (=Onge), Sentinelese and Jarawa are still spoken but Onge, at least, is severely threatened. No data on Sentinelese has ever been recorded and the islanders are officially classified as ‘hostile,’ so classifications of its language are mere speculation. All the available data on the languages of the Andamans up to 1989 was reviewed by Zide and Pandya (1989), which has a very complete bibliography.

Many issues concerning the Andamans would be resolved if reliable archaeological data were available. Were the Andamans settled long ago and are the populations currently there the result of millennia of isolation, or are they relatively recent migrants from the mainland? Although a book about the archaeology of the Andamans has been published (Cooper 2002), in practice it remains unclear when and how the Andaman islands were settled. What few radiocarbon dates exist (Cooper 2002: Table VII:1) are mostly very recent, with a small cluster of uncalibrated dates on a shell at Chauldari in the 2300-2000 BP range.

It is likely that highly diverse forager languages were formerly spoken widely across SE Asia. One piece of evidence for this is the relic vocabulary in the languages of surviving negrito populations in the Malay Peninsular and the Philippines. Skeat & Blagden (1906) pointed out long ago that some Orang Asli groups have a divergent lexicon which points to retentions from a prior lexical stratum, while Reid (1994) showed that Agta groups in Luzon, who today speak an Austronesian language, share vocabulary which cannot be accounted for by Austronesian etymologies.

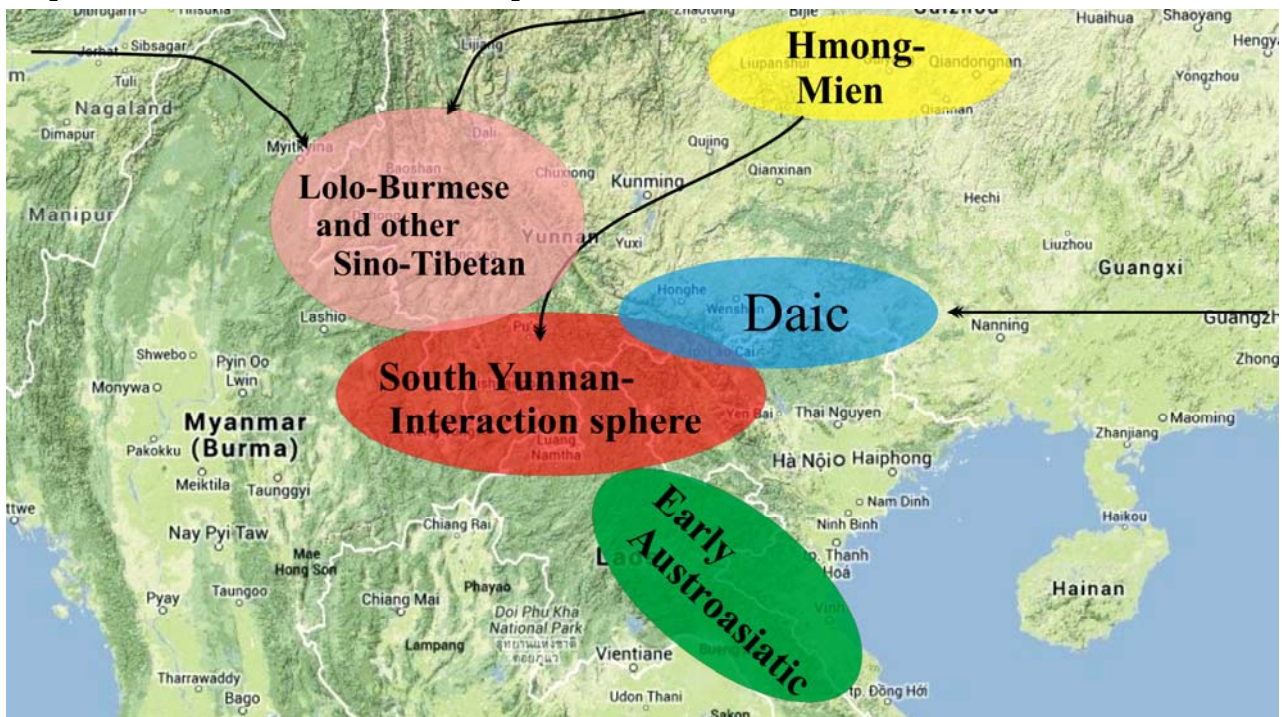
4. Synthesis

Archaeological coverage of the SE Asian region is highly skewed, and the quality and density of data from China has a tendency to bias interpretation. However, three of the five language phyla of the region originate

in the montane zone between southern Yunnan and Laos/Việt Nam, and Sino-Tibetan languages were also present during this period. Early borrowing and contact between language families point to long-term interaction that probably dates to this early period. Austronesian has its linguistic roots in Taiwan, but a mainland origin is credible. Apart from Sino-Tibetan, the other phyla all have credible reconstructions for crops and livestock in their proto-languages, which underlines the importance of agriculture in the expansion of these phyla.

By around 4000 BP there was a striking confluence of four quite distinct language phyla in what is now Yunnan and an almost simultaneous transformation of agriculture. This may well have been a result of the expansion of pre-Sinitic Sino-Tibetan speakers such as the Bai. Hmong-Mien, Austroasiatic and Daic speakers who all begun farming at the period when their respective proto-languages began to expand. This early period of intense interaction is provisionally named the South Yunnan Interaction Sphere (SYIS) and a tentative graphic representation is shown in Map 3. It cannot be emphasized too strongly that this remains a speculative hypothesis; only more detailed archaeology and linguistics will establish its credibility. The common roots in Sino-Tibetan that reflect agriculture probably also date to this era.

Map 3. The South Yunnan Interaction Sphere



None of this implies that a demic expansion model is necessarily appropriate, but it is improbable that these language phyla expanded significantly before the inception of agriculture. In other words, the present-day constellation of phyla cannot be significantly older than farming, but other factors, such as improved water transport or military threats, may have underwritten their dispersal. There is a pervasive stereotype that the languages of MSEA must be very old. However, a constellation of evidence from different disciplines suggests that this interpretation may be erroneous (Blench 2011). In fact it may be that the expansion of the major phyla is associated with the Neolithic and that their observed convergence occurred quite rapidly.

Much remains to be done to add weight to this revised view. We urgently await more credible reconstructions for Sino-Tibetan based on attestations from all its diverse branches. An evidence-based approach to the internal classification of Austroasiatic is essential. Direct material remains reflecting the transition to farming, based on actual archaeobotanical and archaeozoological materials would make claims for the dates of the inception of agriculture more plausible. Nonetheless, the potential to correlate different disciplines in creating an integrated prehistory of SE Asia is clearly now within reach.

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