

## Macrophyletic Trees of East Asian Languages Re examined

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## 7. Macrophyletic Trees of East Asian Languages Re-examined

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### **Abstract**

This paper re-examines the linguistic relationship among the five major language stocks of East Asia: Sino-Tibetan, Austronesian, Austroasiatic, Kra-Dai, and Miao-Yao. Various issues related to current macrophyletic proposals can be traced back to the influential hypotheses of the past century, namely, the Indo-Chinese hypothesis, Austric, and Austro-Tai. Discussions focused on the relationship between Tai and Chinese, between Tai and Austronesian, and on the position of Miao-Yao with respect to Sino-Tibetan and Austroasiatic. Basic vocabulary lists are adapted to test the competing hypotheses and to justify genetic versus contact relationships.

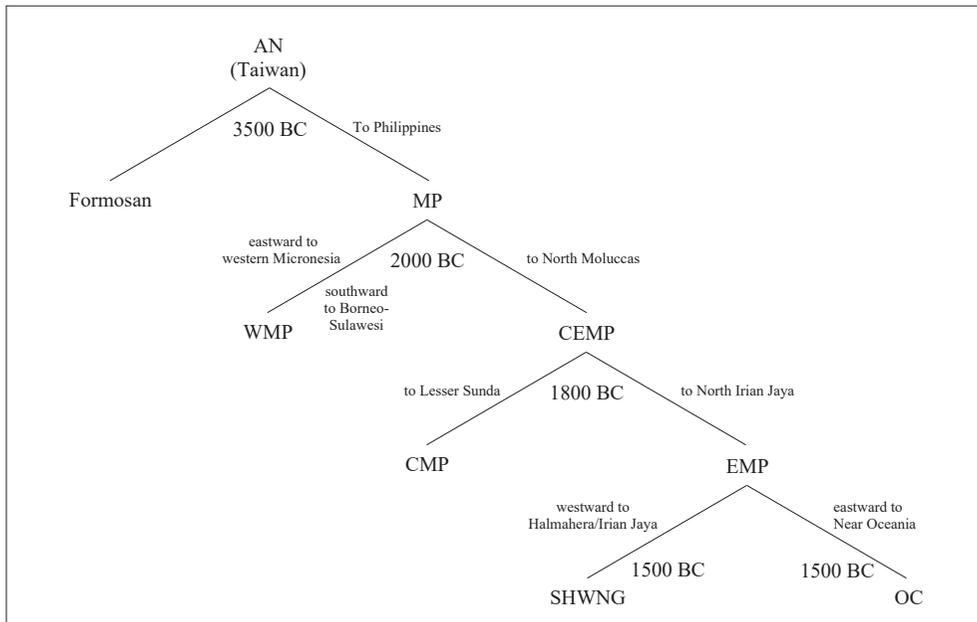
### **7.1. Introduction**

One of the significant implications of a linguistic tree is the chronology of events, which is suggested by the hierarchical nodes of the tree branches. This characteristic distinguishes it from other diagrams or maps that emphasize synchronic representation such as those in dialectology and areal studies. Thus, the Austronesian family tree proposed by Blust (1977) charts a picture of the dispersal/migration of the Austronesian people and their languages, as shown in Figure 7-1.

The place of a language group on the family tree hierarchy is thus important. In Sino-Tibetan, for example, it has been held that Chinese constitutes one of the two primary branches; the other related languages belong to the other branch called Tibeto-Burman (Figure 7-2a). Under this schema, any word that shows related forms between Chinese and one of the Tibeto-Burman languages, such as Tibetan, may represent a Sino-Tibetan root. And, indeed, a number of proposed Sino-Tibetan etyma are based on evidence from Chinese and Tibetan alone.

If Chinese belongs to a lower level branch in the family tree, however, this may not be the case. A different schema (van Driem 2005: 89) is shown in Figure 7-2b, where Chinese belongs to his proposed Sino-Bodic branch, together with Tibetan and some others.<sup>1)</sup> According to this view, then, roots that show corresponding forms only from Chinese and Tibetan may reflect Sino-Bodic rather than Sino-Tibetan etyma.

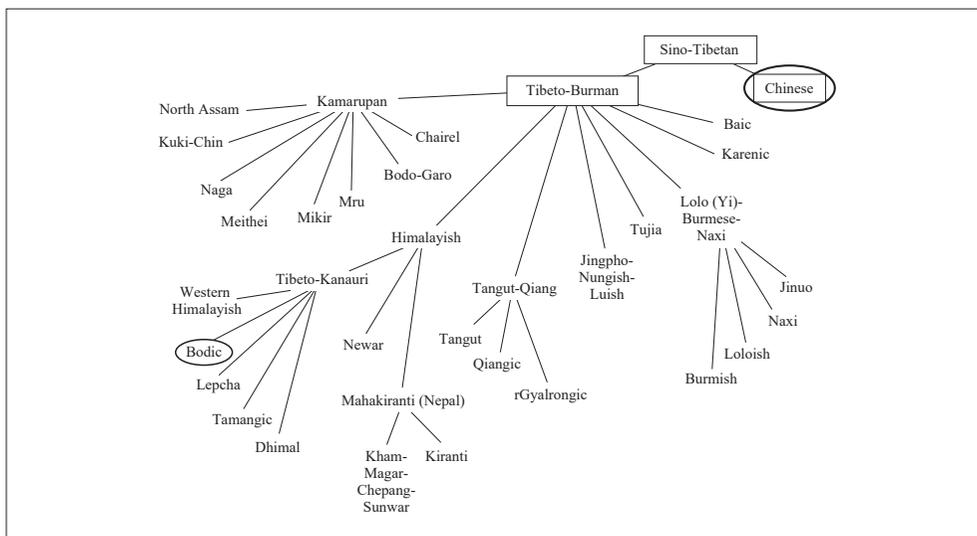
A similar situation can be said for the Austroasiatic family. Traditional Austroasiatic



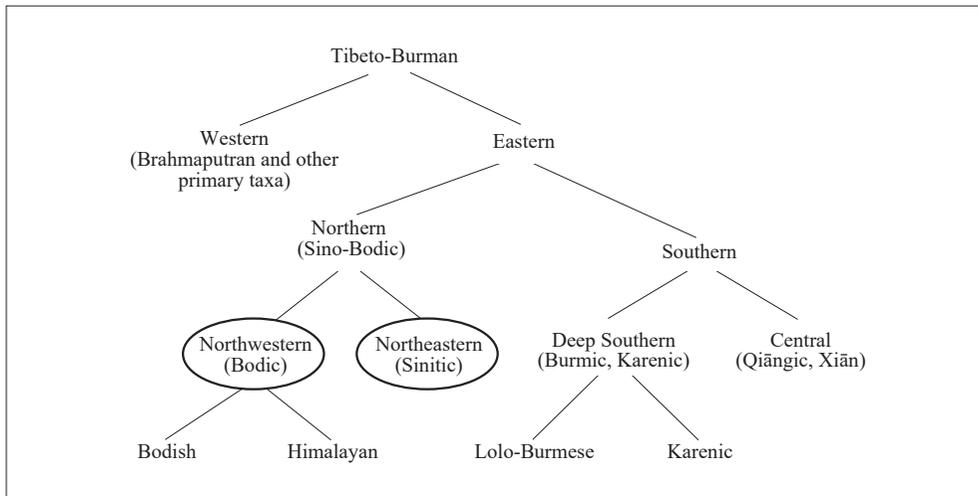
**Figure 7-1** Austronesian family tree\* (based on Blust 1977)

AN = Austronesian; MP = Malayo-Polynesian; WMP = Western Malayo-Polynesian; CEMP = Central/Eastern Malayo-Polynesian; EMP = Eastern Malayo-Polynesian; SHWNG = South Halmahera/West New Guinea; OC = Oceanic

\*Formosan represents at least nine primary branches of AN in Taiwan. WMP is not innovation-defined, and may represent more than one primary branch of MP. Updated information and dating are according to Blust (p.c.).



**Figure 7-2a** Sino-Tibetan family tree (adapted from Matisoff 2003)

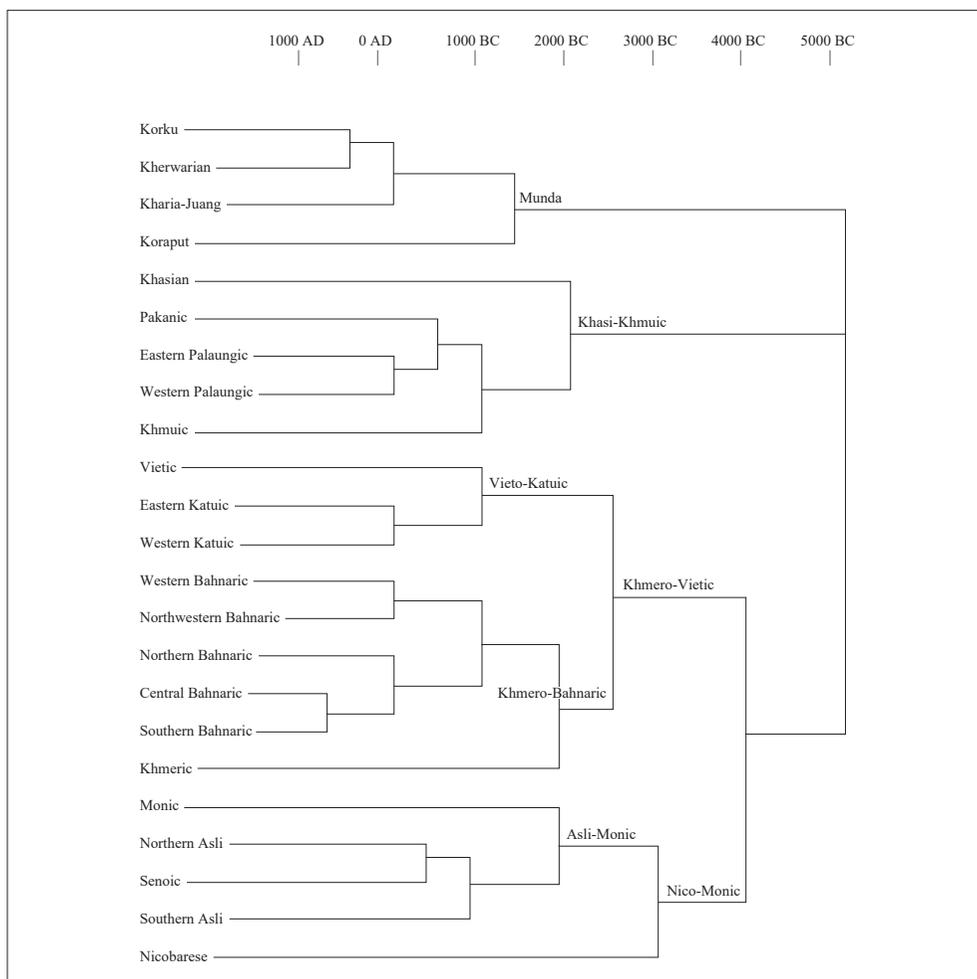


**Figure 7-2b** Tibeto-Burman (= Sino-Tibetan) family tree (adapted from van Driem 2005)

trees show a bifurcation between Munda and the rest that are typically called the Mon-Khmer group of languages. This schema suggests that, in theory, we need cognate forms in Munda for any lexical item to be reconstructed as Proto-Austroasiatic. More recently, the Austroasiatic tree has been revised, as shown in Figure 7-3 (Diffloth 2005); Munda is here one of three primary branches. This tree implies that any roots that have cognates in one language in the Khasi-Khmuic branch and another in the Khmero-Vietic/Nico-Monic branch can be reconstructed to Proto-Austroasiatic. In effect, there would be no distinction between Proto-Mon-Khmer and Proto-Austroasiatic anymore.

A macrophyletic hypothesis, in turn, may favor one subgrouping scheme over another within the phylum members. The Sino-Tibetan-Austronesian (STAN) hypothesis (which combines Sino-Tibetan and Austronesian into a larger phylum, cf. Sagart 2005), for instance, fits better with the Sino-Tibetan tree that has Chinese at the highest node. This is partly because the proposed cognates between Sino-Tibetan and Austronesian so far are based more on Chinese evidence than on Sino-Tibetan as a whole. If Chinese is located at a much lower node in the Sino-Tibetan tree, the suggested link between Chinese and Austronesian may more likely be the result of contact. On the Austronesian side, the STAN hypothesis considers Malayo-Polynesian as a lower level subgroup, not as a primary branch (contra Blust 1977), and thus Malayo-Polynesian may not be as valuable for STAN comparisons as it has been for Austronesian specialists who consider Malayo-Polynesian to be a foundation branch.

At times, controversy over language subgrouping has led scholars to avoid a family tree. The aforementioned competing views of Sino-Tibetan have interestingly given birth to a non-tree diagram called ‘fallen leaves’. (See Figure 7-4 for a recent version from van Driem 2014). As Sino-Tibetan specialists have turned more attention to micro-level research on specific groups during the past decade, this agnostic diagram appears to be



**Figure 7-3** Austroasiatic family tree (adapted from Diffloth 2005)

accepted, despite its lack of a historical perspective. To the eyes of specialists, however, the diagram has several invisible branch lines connecting each leaf-cell. In other words, the leaves are not placed randomly; the potential closely related groups appear as cells that lie next to each other and specialists know it because such ‘potential’ groups used to be represented by branches in a tree diagram.

This resort to a non-tree diagram, therefore, seems to be a special case in Sino-Tibetan for a currently practical reason. However, it does raise a general question: shall we represent language relationship with a family tree when our knowledge is not yet substantial or when the controversy remains unsettled? On the one hand, it seems better to be cautious and to avoid hasty claims. On the other hand, oftentimes, only when bold hypotheses are ventured can we see the stimulating questions being raised. Comments

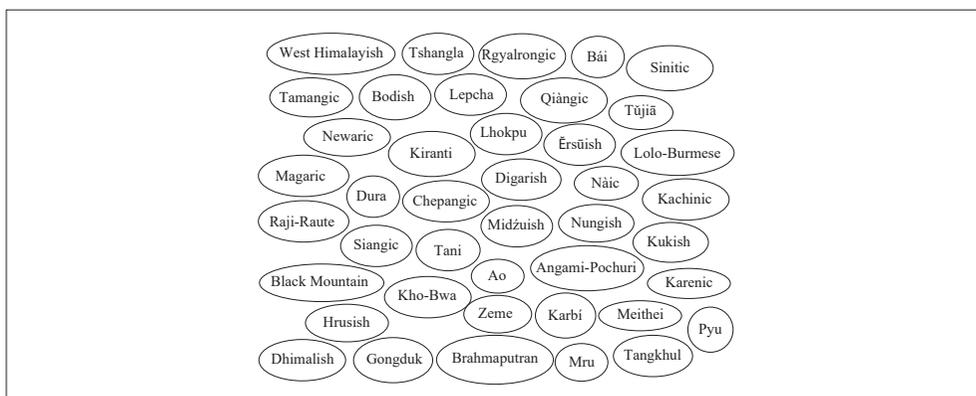


Figure 7-4 The Tibeto-Burman 'fallen leaves' model (from van Driem 2014)

and debates flourish, and our understanding of the relevant issues are improved. Because of these kinds of merits, I will now turn to a re-examination of the macrophyletic hypotheses of East and Southeast Asian languages.

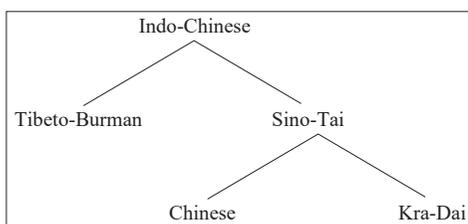
## 7.2. Macrophyletic Trees of East-Asian Languages Re-examined

The East or Southeast Asian area hosts five established language families: Sino-Tibetan, Austronesian, Kra-Dai, Miao-Yao, and Austroasiatic. At the turn of the 20<sup>th</sup> century, two macrophyletic hypotheses were dominant: the Indochinese hypothesis (Conrady 1896) that includes Sino-Tibetan and Kra-Dai (Figure 7-5a) and the Austric hypothesis (Schmidt 1906), with Austronesian and Austroasiatic as its members (Figure 7-5b). Miao-Yao was lesser known at that time.

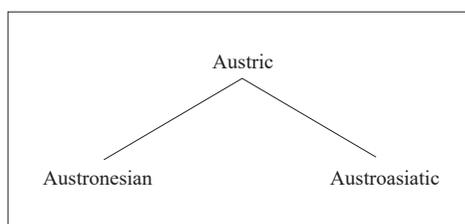
By the 1940s, an interesting shift occurred when Wulff (1942) and Benedict (1942) independently suggested that Kra-Dai and Austronesian are genetically related. However, while Wulff added Austronesian to the Indochinese schema (Figure 7-6a), Benedict moved Kra-Dai to the Austric side (Figure 7-6b).

As mentioned in the previous section, Sagart (2005) has proposed a Sino-Tibetan-Austronesian (STAN) hypothesis relating Sino-Tibetan and Austronesian. The scope of STAN resembles Wulff's expanded Indochinese scheme, but with a more explicit subgrouping hierarchy. Reid has supported Schmidt's Austric hypothesis in several articles (cf. Reid 2005). He also appears to be convinced by the evidence for the relationship between Kra-Dai and Austronesian given by Ostapirat (2005), and is plausibly sympathetic to the expanded Austric schema (cf. Reid 2006).

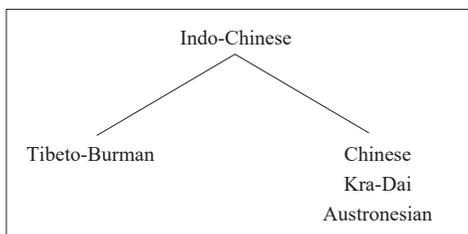
Until the latter half of 20<sup>th</sup> century, Miao-Yao had been poorly known. A number of hypotheses concerning the genetic affiliation of Miao-Yao have been proposed. It is often placed under the Sino-Tibetan family (cf. Shafer 1964). Benedict (1975) relates it to Kra-Dai/Austronesian, while Haudricourt (1966) and Jakhontov (1977) prefer an Austroasiatic link.



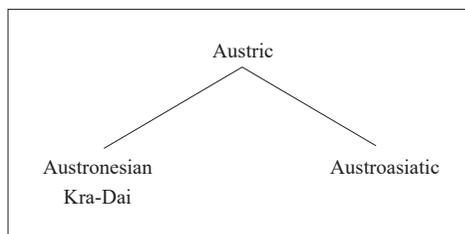
**Figure 7-5a** The Indo-Chinese hypothesis (based on Conrady 1896)



**Figure 7-5b** The Austric hypothesis (based on Schmidt 1906)



**Figure 7-6a** Expanded Indo-Chinese (based on Wulff 1942)



**Figure 7-6b** Expanded Austric (based on Benedict 1942)

The core issues thus appear to revolve around the relationship between Kra-Dai and Austronesian as well as the obscure position of Miao-Yao with respect to other families. I will pay special attention to these suggested relationships in this section. For the languages to be considered related, they ideally should show a good number of shared lexical items with systematic sound correspondences, and significant links in morphology and syntax. However, borrowing occurs all the time in the history of languages and loanwords may sometimes show regular sound correspondences just like true cognates. It is here that the concept of Basic Vocabulary, in which lexical items supposedly vary in their degrees of resistance to borrowing, has played an important role.

### 7.2.1 Basic Vocabulary Test-list

In his well-known article, Swadesh (1955) devised a list of 100 basic words, claiming that the vocabulary items in this list are more stable and loan-resistant than others. Thus, languages that are genetically related are supposed to share a significant number of words in the list.<sup>2)</sup> Recently, Tadmor *et al.* (2010), based on a quantitative study of loanwords in 41 languages, constructed a new Leipzig-Jakarta100-wordlist, two-thirds of which overlap with Swadesh's list. Other practical shorter lists include Jakhontov's wordlist of 35 items, and the 40 wordlist of Holman *et al.* (2008). The latter is a selection of words from Swadesh's 100 list based on ranked stability.

A test-list of 24 basic vocabulary items is offered here for an examination of the macrophyletic relationship among Sino-Tibetan, Austronesian, and Kra-Dai languages. The list includes words that overlap in all the aforementioned wordlists, except three (*two*,

*die, full*) that are absent from the Leipzig-Jakarta list.

From Table 7-1, we find related forms falling into two divisions—between Tibeto-Burman and Old Chinese on the one hand and between Austronesian and Kra-Dai on the other. The high number of shared vocabulary items from the list between Tibeto-Burman and Old Chinese is not surprising; they confirm the Sino-Tibetan unity that has become uncontroversial. The lexical connection from the list between Kra-Dai and Austronesian is also almost as strong and supports a genetic relationship between Kra-Dai and Austronesian (the ‘Austro-Tai’ hypothesis).

On the other hand, no related items from the list are found between Kra-Dai and Old Chinese/Tibeto-Burman, and thus a genetic relationship between Chinese or Sino-Tibetan and Kra-Dai—the Indochinese hypothesis—cannot be maintained.

The case of Sino-Tibetan and Austronesian also seems weak. Apart from the forms for ‘horn’, which Sagart (2005) considers to be cognate between Austronesian and Old

**Table 7-1** 24 basic words in Tibeto-Burman, Old Chinese, Austronesian, and Kra-Dai languages

	<b>Tibeto-Burman</b>	<b>Old-Chinese</b>	<b>Austronesian</b>	<b>Kra-Dai</b>
1. ‘blood’	s-hwɣəy	hwit, hwik	daRaq	pɣla:c
2. ‘bone’	rus	kut	CuqelaN	Kudɣ:k
3. ‘ear’	r-na	njəʔ	Calija	qɣɣ:
4. ‘eye’	mik, myak	m(r)juk	maCa	maTa:
5. ‘hand’	g-lak	hjuʔ	(qa)lima	(C)imɣ:
6. ‘nose’	s-na(:r)	bjit(s)	ujuŋ, ijuŋ	(?)idaŋ
7. ‘tongue’	m-lay, s-lay	Ljat	Sema	(C)əma:
8. ‘tooth’	s-wa	Khjəʔ, thjəʔ	nipen	lipan
9. ‘dog’	kwəy	kwhin, kwhen	asu	Kama:
10. ‘fish’	ŋya	ngja	Sikan	bala:
11. ‘horn’	krəw	krok	(quRuŋ)	paqu:
12. ‘louse’	śrik	srjit, srjik	kuCu	KuTu:
13. ‘fire’	mey	hməjʔ	Sapuy	(C)əpuj
14. ‘stone’	r-luŋ	djAk	batu	KaTi:l
15. ‘sun’	nəy	njit, njik	qalejaw	Kada:w ‘star’
16. ‘water’	ti(y), twəy	h(l)jujʔ	daNum	(C)aNam
17. ‘I’	ŋa, ŋay	nga, ngajʔ	aku	aku:
18. ‘Thou’	naŋ	njaʔ, njəjʔ	iSu, Simu	isu:, amɣ:
19. ‘one’	it	ʔjit, ʔjik	isa, esa	(C)itsɣ:
20. ‘two’	g-ni-s	njəjs	duSa	sa:
21. ‘die’	səy	sjəjʔ	ma-aCay	maTa:j
22. ‘name’	r-miŋ	mjeng	ŋajan	(C)ada:n
23. ‘full’	bliŋ, plij	(l)jeng	penuq	pəti:k
24. ‘new’	sar	sjin(g)	baqeRuh	(C)ama:l

The Tibeto-Burman and Old-Chinese forms are from Baxter (1995) and the AN forms are from Blust (1999), with adjustments according to his on-line Austronesian Comparative Dictionary (Blust and Trussel ongoing). The provisional Kra-Dai reconstructions are mine, with potential phonational and suprasegmental features omitted. (The capital letter /K-/ represents currently undetermined k- or q-; /C-/ indicates yet unspecified consonants due to inadequate evidence. For Kra-Dai \*T- and \*N-, are distinct from \*t- and \*n-, see Ostapirat 2005).

Chinese, only two words from the test-list are included among the 61 roots proposed as evidence for a genetic relationship between Sino-Tibetan and Austronesian ('bone' Austronesian \*kukut instead of \*CuqelaN, and 'water' Old Chinese \*<sup>B</sup>t-hlim? 'liquid, juice' instead of \*h(l)juj? 'water').

	Austronesian	Old Chinese
bone	kukut	<sup>A</sup> kut
water	daNum	<sup>B</sup> t-hlim? 'liquid, juice'

Austronesian does not otherwise share any forms with Sino-Tibetan in the basic word test-list. From this angle, the connection between Sino-Tibetan and Kra-Dai/Austronesian, assumed by the expanded Indochinese hypothesis and the Sino-Tibetan-Austronesian hypothesis, thus appears unsupported.

### 7.2.2 Basic Vocabulary Ranking Scale

Swadesh's 100 basic wordlist is in fact a short list, considered more 'basic', reduced from his earlier 200-wordlist (Swadesh 1952). In other words, Swadesh's 200 wordlist can be ranked into a 'more basic' 100 wordlist and the rest into a 'less basic' 100 wordlist. Recently, Chen (1996) has taken up this implication, proposing that the languages that have a genetic relationship must have a higher number of shared vocabulary items in the first 100-wordlist than those in the second list.

In Table 7-2, I present a picture of shared lexical items between Proto-Tai and Austronesian and between Proto-Tai and Old Chinese in their basic-vocabulary ranking. The estimated figures are based on my on-going research, which can be adjusted in the future, though I do not expect the big picture to be altered.

From Table 7-2, we can see that the overall numbers of shared words between Proto-Tai and Austronesian (21+8=29) and between Proto-Tai and Old Chinese (6+20=26) are not much different. However, when we look at them from the ranking scale, the higher percentages of the Proto-Tai/Austronesian case are from the more basic set rather than the lesser one. The reverse picture is obtained for the Proto-Tai/Old Chinese case. The proposed number of shared vocabulary items between Tai and Chinese indeed vary, and those who believe in their genetic relationship usually come up with a very large repertoire of 600+ items (cf. Manomaivibool 1975) or even 900+ items (cf. Xing 1999). However, as long as the additional words (assuming that they are valid) belong more to the lower-ranked set, they will not change the result. As a matter of fact, the increasing number of proposed related forms in the low-rank set (and beyond) but not in the high-

**Table 7-2** Shared lexical items between Proto-Tai and Austronesian (PT/AN) and between Proto-Tai and Old Chinese (PT/OC) in the basic- vocabulary ranking scale (compiled by the author)

	PT/AN		PT/OC	
1 <sup>st</sup> 100-words	21	(21%)	6	(6%)
2 <sup>nd</sup> 100-words	8	(8%)	20	(20%)

rank set substantiate a contact relationship between the families.

The proposed relationship between Tai and Chinese (sometimes known as Sino-Tai) has formed a backbone of the Indochinese Hypothesis. This comes as no surprise as the two languages share several phonological and word features, such as monosyllabicity and tones. They also share a large number of etyma, as shown in Table 7-2. However, since the Tai-Chinese genetic relationship is now ruled out by the basic vocabulary tests, and Tai is aligned instead with Austronesian, the Indochinese hypothesis is left with its core members, Chinese and the various Tibeto-Burman languages, known as the Sino-Tibetan family nowadays.

### 7.2.3 Numerals and the Affiliation of Miao-Yao

Numerals is a lexical field for which the degrees of ‘basic-ness’ or borrow-ability seem uncontroversial. Speaking in terms of ranking scale, the resistance to borrowing should be stronger for lower numerals than for higher numerals. In a contact situation, we would thus expect the higher numbers (such as 11–20, 20–90, 100, etc) to be more easily borrowed than the lower numbers. Miao-Yao has been known to have borrowed the higher numerals beyond ‘ten’ from Chinese and the lower numerals from four to nine (perhaps except ‘five’) from certain Tibeto-Burman source(s) (cf. Downer 1971; Benedict 1987). The numeral forms in Miao-Yao and Tibeto-Burman languages are presented in Table 7-3.

The issue here is that Miao-Yao has retained native forms for numerals ‘one’, ‘two’, and ‘three’ that cannot be connected with Tibeto-Burman. Thus, while the Tibeto-Burman related numeral forms in Miao-Yao constitute an earlier layer than the Chinese ones do, they are both considered as loans. The situation is similar to the case of Tai and Chinese in the previous section on basic vocabulary ranking. When the languages show related forms in the less basic set but lack those in the more basic set, they are prone to have been in a contact relationship.

It is still unclear whether Miao-Yao native numerals ‘one’, ‘two’, and ‘three’ can be related to those in the other families. The following comparisons with Austroasiatic forms (Table 7-4), however, may reveal the possibility of a Miao-Yao and Austroasiatic

**Table 7-3** Miao-Yao and Tibeto-Burman numerals

	‘four’	‘six’	‘seven’	‘eight’	‘nine’
Proto-Miao-Yao	plei	kruk	djuŋH	jat	N-juə
Miao	plau	ʃau	teoŋ	ji	cua
Yao	pləi	klə	ni	dzjat [Z]	ku [Z]
Written Tibetan	blyi	drug	bdun	brgjad	dgu
Monpa	pli	kro?	nis	cen	tu ku
Burmese	le	tehau?	khu ŋi?	ei?	ko

Proto-Miao-Yao forms are from Ratliff (2010). The representative dialects of Miao and Yao are White Hmong (Heimbach 1979) and Biao Min (Wang and Mao 1995) respectively. [Z] = Zao Min (Wang and Mao 1995). Written Tibetan, Monpa, and Burmese forms are from Dai (1992).

Table 7-4 Miao-Yao and Austroasiatic numerals

	‘one’	‘two’	‘three’
Proto-Miao-Yao	ʔi	ʔui	pjɔu
Miao	i	ɔ	pe
Yao	i	wəi	pau
Palaung	ʔu	ʔa	pheʔ:w [Chong]
Khasi	wei	ar	paj [Kui]

The Palaung (Ta-ang) forms are from my fieldnotes, Chong forms are from Preamsirat *et al.* (2008), and the rest are from Shorto (2006).

connection.

For ‘one’ and ‘two’, see also Chong /mɯʔ:j/ and /paʔ:j/ respectively. I assume that the early Austroasiatic or Mon-Khmer basic forms for these etyma have a glottal stop initial \*ʔ- (something like \*ʔu:j and \*ʔa:r). Chong (and many other Mon-Khmer languages) has added prefixes to the forms, thus \*m.ʔu:j > mɯʔ:j and \*b.ʔa:r > baʔ:r (> pɯʔ:j), where the original glottal initial has transformed into vowel creakiness.<sup>3)</sup> (Vowel breathiness is the result of early voiced initials). For other Mon-Khmer languages, see, for instance, Proto-Monic (Diffloth 1984) \*mway ‘one’ and \*baar ‘two’. Palaung, in fact, also has a form with glottal initial for ‘three’, /ʔɔj/, and Chong (and many others) may likewise have turned it into a prefixed form with \*p- onset (the change \*p- > ph- is a typical change in Chong; see also Proto-Monic \*piiʔ). The prefixes may vary in different languages, thus Wa show a liquid prefix: \*lʔar ‘two’ and \*lʔɔj ‘three’. This may further support the claim that the real root initial is \*ʔ-, and various prefixes have developed independently in different groups. The Miao-Yao initial \*ʔ- for ‘one’ and ‘two’ thus appears to be faithful to the original forms.

These numeral comparisons are further substantiated by other Miao-Yao/Austroasiatic comparisons of basic words as shown in Table 7-5. No systematic reconstruction of Proto-Austroasiatic is yet available, so I present here the comparisons from Proto-Vietic (Ferlus 1991) and Proto-Wa (Diffloth 1980). These groups represent two Austroasiatic primary branches; thus, the relevant etyma are likely to go back to the Proto-Austroasiatic stage.

From Table 7-5, we may note that the Miao-Yao three ‘tonal’ categories (symbolized by -X, -H, and unmarked) correspond to Proto-Vietic finals/phonations (-ʔ, -s/-h, and others, respectively) in a way reminiscent of Haudricourt’s (1954) classic tonogenesis scheme. Although the complex story of Mon-Khmer/Austroasiatic phonations is still controversial and unsettled, and the overall comparisons reveal numerous exceptions, the aforementioned correspondences between Miao-Yao and Austroasiatic remain impressive and will partly help justify the proposed lexical links between Miao-Yao and Austroasiatic.

The preceding comparisons include eight words from our 24-basic wordlist (*louse, blood, nose, name, horn, water, I, thou*), plus ‘one’ and ‘two’. One-third of the 24-basic wordlist is substantial, if the comparisons prove valid.

**Table 7-5** Miao-Yao and Austroasiatic comparisons (prepared by the author)

	<b>Proto-Miao-Yao</b>	<b>Proto-Vietic</b>	<b>Proto-Wa</b>
‘louse’	ntshjeiX	ci?	si?
‘fruit’	pjiəuX	ple?	pli?
‘road’	kləuX	khra?	kra?
‘shoot’	pənX	paŋ?	pɔŋ
‘blood’	ntshjamX	asa:m?	hnam
‘weep’	ʔnæmX	ja:m?, ɲa:m?	jam
‘hawk’	qlaŋX	kla:ŋ?	klaŋ
‘cooked’	sjeŋX (M)	ci:n?	sin
‘heavy’	hnjeinX	naŋ?	(s-)jen)
‘full’	pɤeŋX	pəiŋ (Mo)	phoiŋ (Ks)
‘nose’	mbruiH	mu:s	mis
‘name’	mpəuH	jhmoh (Mk)	mis
‘horn’	kləeŋ	kəreŋ	ʔrɔŋ
‘water’	ʔɤəm	ʔom (Pl)	rʔom
‘live, alive’	ʔjəm	ʔim (Pl)	ʔem
‘I’	ʔja (Y)	ʔoa (Mo)	ʔi?
‘thou’	mɤei	màày (Vn)	me (Ks)

Abbreviations: (M) Miao, (Y) Yao, (Mo) Mon, (Mk) Middle Khmer, (Pl) Palaung, (Vn) Vietnamese, (Ks) Khasi. For ‘horn’, Austronesian has an interestingly similar form \*(q)uRung.

Some of the comparisons between Miao-Yao and Austroasiatic may have important implications. The Austroasiatic root for ‘water’ as presented above, for instance, is mainly found in the Northern-Mon-Khmer (or Khasi-Khmuic) branch, while the other Mon-Khmer groups use another word (something like Proto-Mon \*d̥aak). If the Miao-Yao/Austroasiatic genetic relationship is real, the status of the Khasi-Khmuic root (represented by Proto-Wa \*rʔom) can be interpreted as an early retention since it is shared by Miao-Yao (\*ʔɤəm). On the other hand, if the root is a Khasi-Khmuic innovation, it would suggest that Miao-Yao somehow was closer to this branch of Austroasiatic, otherwise the word has to be considered as a borrowing between the two groups.

### 7.3. Conclusion

In conclusion, the Indochinese hypothesis that places Tai/Kra-Dai together with Sino-Tibetan, or its expanded version, with Austronesian thrown in, appears untenable. The valid core part of the hypothesis is now what we know as the Sino-Tibetan (or the Tibeto-Burman) family, with hundreds of language members, including Chinese, Tibetan, and Burmese. The relationship between Austronesian and Kra-Dai is well supported and the two families join together in the Austro-Tai phylum.

Recent reviews of the Austric hypothesis (cf. Diffloth 1994), which links Austroasiatic and Austronesian, seem to suggest that shared lexical items between the two families are few but some are still optimistic about supporting morphological

evidence (cf. Reid 2005). However, with the Kra-Dai/Austronesian connection firmly established, any future Austric reassessment inevitably needs to take Kra-Dai into account. If the connection between Miao-Yao and Austroasiatic is also valid, the task of those who support Austric may become even more daunting, as the scope of the new ‘Greater Austric’ will encompass all East/Southeast Asian families except Sino-Tibetan. Continuing research on this, however, might yield a fruitful result.

## Notes

- 1) Partly because of this view that Chinese belongs to a lower, non-primary, node in the family tree, van Driem uses ‘Tibeto-Burman’ to represent the whole family (= Sino-Tibetan).
- 2) Swadesh also propagated ‘glottochronology’ and the lexicostatistic method that attempted to date the ages of language families and subgroups using the percentages of shared basic-vocabulary items. My reservation on glottochronology and such use of basic vocabulary is considerable.
- 3) See also Diffloth (2012) for his suggestion that Chong creaky register may have partially arisen from the glottal consonant in medial position.

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