

# Expanding The Proto-Tai Lexicon— A Supplement to Li (1977)\*

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## 0. Introduction

In his *A Handbook of Comparative Tai* [HCT], Professor Fang-Kuei Li has identified over 1,200 cognates for the Tai languages. He has successfully demonstrated that the standard comparative method can be applied to tonal, non-inflectional languages such as Tai.

Before his impressive reconstruction of the Proto-Tai phonological system, Li had twice proposed, on the basis of a number of distinctive lexical items, a lexical classification of the Tai languages (Li 1959, 1960). Although he does not overtly push this line of argument in HCT, his position does not change there. Throughout HCT the notion of dialect words manifests itself prominently. How firmly Li holds this position can be seen from his belief that:

These groups of languages are different in many ways. One of them is that the phonetic sounds of these correspondence words are sometimes quite different. You can also find out *certain words are used in this group of languages but not used in the other group of languages*. All of these together will give you some idea of *how far apart these groups of dialects are*. (Li Fang-Kuei 1988:84, emphasis added)

Although some Tai comparativists have reservations about the utility of this method,<sup>1</sup> it is generally agreed that lexical classification offers an alternative or a useful supplementary approach to Tai subgrouping.

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<sup>1</sup>For example, Gedney (personal communication) says that 'it is unfortunate that Li should have proposed a lexical classification of Tai dialects'. For him, 'only phonology, and phonology alone, can be used for classifying the Tai dialects'. On the other hand, Gedney talks about 'distinctive Northern Tai words' (Gedney 1993:963-965), which is clearly in line with Li's classification.

In testimony to the significance of Li's works, we have carried out extensive work comparing lexical materials from dialects of different branches. A sizeable number of new cognate sets have been uncovered which have substantially expanded Li's work. The purpose of this paper is to examine these newly-discovered lexical items to see to what extent they are relevant to Tai subgrouping along the lines of HCT. The distribution of these lexical items will be given special attention. For the purpose of presentation, new cognate sets to be discussed in this paper are arranged in semantic fields. Dialect words in HCT will also be discussed where relevant. It will be shown that Li's system needs some modification in the light of new cognates. It is hoped that these findings may have implications for current linguistic theory and may shed new light on our understanding of the cultural history of the Tai people, and in particular, on Tai subgrouping.

## 1. New Pan-Tai cognates

### 1.1 Nature and environment

Several additional cognate items designating aspects of nature and environment have been identified for Tai. They emphasize the river-oriented culture of the Tai people.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
'rainbow'	*Druŋ	A2	ruŋ C2	huŋ	huŋ	—	huŋ	loŋ	toŋ	WM toŋ	tuŋ
'flood'	*nroŋ	A2	nɔɔŋ	nɔɔŋ	lɔŋ	noŋ	noŋ	nooŋ	—	WM roŋ	looŋ
'lake'	*huroŋ	A1	nɔɔŋ	nɔɔŋ	loŋ	noŋ	noŋ	loŋ B2	—	roŋ C1	loŋ C1

The word for 'rainbow' is of particular interest, showing a Sino-Tai lexical correspondence that goes back to the pre-Christian era. The word was recorded as *dì dòng* in *Erh-Ya*, the oldest Chinese dictionary dealing with Zhou (1000 B.C.) materials. The second syllable of the word appears to be shared by the Tai form. Karlgren (1940:1175h) reconstructed it as *tung* and Pulleyblank (1991:80) proposes *təwŋ*. Note that this form is not used in modern Chinese, where the character *hóng* is used. This latter form was reconstructed as *\*g'ung* by Karlgren (1940:1172j) and *\*ɣəwŋ* by Pulleyblank (1991:125). It is interesting to note that the Northern languages and Nung appear to come closer to the *Erh-Ya* form, while the rest of the languages seem to point to clusters of some sort, for which we propose *\*Dr-*. There is a problem with this form in terms of Li's proposed *\*dr-*. The reflexes in Nung, Wuming and Fengshan all show /t/, pointing to proto *\*d-*, while Li's *\*dr-* would expect /l/ or /r/ in these dialects. Apparently an areal word, this item is attested in Kam-Sui and Miao-Yao, where the meaning is associated with 'dragon'.<sup>2</sup> This item is included in Benedict (1975:274) with possible Austroasiatic connection.

<sup>2</sup>As pointed out by Solnit (personal communication). But 'dragon' and 'rainbow' are kept distinct in the Northern dialects and in the Kadai languages on Hainan Island. For 'dragon', cf. Wuming *luŋ<sup>2</sup>* (A2), Wangmo *luuŋ<sup>2</sup>* (A2), Fengshan *lɔŋ<sup>2</sup>* (A2); Lin-gao *luŋ<sup>2</sup>*, Hlai *taŋ<sup>1</sup>*. For 'rainbow', cf. Lin-gao *xiaŋ<sup>1</sup>*, Hlai *tshop<sup>7</sup> tshun<sup>1</sup>*. Incidentally, the Tai dialect of Caobang in

The remaining two items have added to our knowledge of the Tai people as being low (wet) land dwellers. This can further be seen in several agricultural terms associated with rice cultivation to be discussed in the next section.

1.2 Agricultural terms

A number of agricultural terms or terms associated with agricultural activities are also discovered for Tai. The following items supply further linguistic evidence that the Tais were a rice-growing people.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
'to slash, clear (land)'	*thraaj	A1	thaaj	thaaj	thaaj	thaaj	thaaj	thaaj/laaj	laaj	laaj	laaj
'to soak'	*ʃe	B2	chɛɛ	sɛɛ	tse	che	che	cee	—	se	ɕe
'to drain, release water'	*khaaj	B1	khaaj	khaaj	xaaj	khaaj	khaaj	khaaj	khaaj	kuaj	kuaj
'to ladle (water)'	*guon	B2	—	—	kɔn	kon	kon	koon	—	kon	kuan
'to ear (of crops)'	*maan	A2	maan	maan	maan	maan	maan	Tho	maan	maan	faan
'grilled young rice'	*hmaw	C1	maw	maw	mau	mau	—	maw	—	—	muu
'chaff, unhusked rice'	*kaak	D1L	—	kaak	PK	kaak	kaak	kaak/kook	kook	kaak	kaak
'barnyard grass'	*hwan	A1	—	—	van	van	—	—	van	hon	van

Even without the terms already recorded in Li (1977), the above items alone present a characteristic picture of the agricultural activities of the early Tai people. Before the actual planting process started, land was cleared, seeds and fields were soaked, (then seedlings \*klaa<sup>C1</sup> were planted), followed by appropriate irrigation (releasing or ladling water in or out). When harvest time came, the Tai people would entertain themselves with grilled young rice, a practice still preserved among Tai communities today.

That the Tai people were wet-land cultivators can further be seen from evidence that throughout the three branches of the Tai languages there is a cognate word for 'water chestnut', a kind of plant that grows in rice fields.

Gloss	PT	Tone	Thai	Lao	DH	WT	LM	NG	Yay	FS
'water chestnut'	*xreu	C1	hɛɛw	hɛɛw	heu	heu	heew	heu	hew	leu

The above discussed cognate forms supply additional convincing information to our knowledge that wet-land cultivation has long been the main agricultural activity of the Tai people, no matter where they are settled today.

Vietnam also makes this distinction, cf. Caobang 'rainbow' luŋ (A2), 'dragon' lwɔŋ (A2) (Edmondson, p.c.).

Along with the above terms, several items indicate that the Tais also engaged in animal-raising.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
'pig's feed, hogwash'	*hmok	D1L	—	muak D2	mok D2	—	—	—	môk	W'ming mook	mook
'to be tame (of animals)'	*gun	C2	khun	khun	—	—	kun	—	kun	kun	kun
'burrow'	*muoŋ	C2	muŋ	muŋ	muŋ	muŋ	muŋ	moŋ	muŋ	—	mɔŋ

The first two items are attested in Saek as *mɔk*<sup>2</sup> and *khun*<sup>6</sup> respectively. The meaning of an item corresponding to 'burrow' is 'mosquito net' in Thai and Lao; a relationship is possible.

Several terms for tools are also among the pan-Tai cognates found.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
'a type of fishnet'	*muawj	A2 C2	—	mɔwŋ A2	mɔŋ A2	moŋ A2	moŋ A2	moonj A2	—	muawj C2	muawj C2
'bucket'	*thuanj	A1/2 C1	thaj A1	thaj A1	thaj A2	thuj A2	thuj A2	thoj C1	thuj A2	toj C1	tɔŋ C1
'mill'	*mua	B1/2	moo B1	moo B1	mo B1	mo B1	—	moo B2	mu B1/2	—	mua B2
'cupping glass, smoking pipe'	*kok	D1L	kɔk	kɔk	kɔk	kook	kɔk	—	kuk	kok	kook
'pincers'	*neep	D1L	neep	neep	lep	nep	nêp	—	neep	nep	neep
'hoe, to hoe'	*kuak	D1L	SoT kwak	kuak	kɔk	kuk	kuok	kuuk	kôk	—	kuak

The first three words appear to show good Sino-Tai correspondences, cf. Chinese *wǎng*<sup>3</sup> 'net', *tǒng*<sup>3</sup> 'bucket' and *mó*<sup>4</sup> 'mill'. The irregular tones for the word for 'bucket' seem to suggest that this item was borrowed into Tai at different times. Note that the vowels for this item do not agree with Li's three-way distinction for the Southwestern, Central and Northern languages. Thai, Lao and Dehong show a central low vowel /a/; White Tai, Black Tai and Nung form a group in taking the high back /u/; Lungming, Yay and Fengshan have a mid back /o/. Except for Dehong, this [a]-[u]-[o] correspondence seems to agree with the tone split pattern, i.e. A1 for /a/, A2 for /u/, and C1 for /o/. The tones seem to distinguish between the non-Northern and the Northern languages, with the former showing voiced tone and the latter, voiceless — a common phenomenon in Tai. But Lungming spoils this split pattern, siding with the Northern languages in having a voiced tone.

The last item in the table, 'hoe, to hoe', appears to be a native Tai word, with some semantic change in certain Southwestern languages. In Lao, the word means 'to beckon', and in White Tai, 'to pry'.

1.3 Body part terms

In addition to about a dozen body part terms in Li's data, several more have emerged. Some of these are found across the Tai languages, while others appear to be dialect words. The following are some examples:

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
'waist'	*ʔeu	A1	ʔeu	ʔeu	ʔeu	ʔeo	ʔeo	ʔiiw	—	ʔew	—
'elbow'	*Zuak	D1L D2L	sɔk D1L	sɔk D1L	sɔk	sok	sok	sook	θook	suak	ɕiak
'eye-brow'	*vrau	A2	khiu C2	khiu C2	—	pau	pau	caw	Tho s/chao	—	ɕau
'armpit'	*re (?)	C2/ B1	re C2	he C2	Lue le C2	he C2	he C2	lee C2	—	ʔi B1	ʔi B1

The first item, 'waist', is shared by Chinese, as has been identified by Wulff (1934:172), Haudricourt (1974:498) and Manomaivibool (1975:355). This word is of limited distribution in the Northern dialects, where another form is used, cf. Fengshan *huat* (D1L), Wangmo (Buyi) *huuat* (D1L), Wuming *ɣuut* (D1L). This latter form is also found in Yay, *huat*<sup>2</sup>. The Yay form *ʔew*<sup>A1</sup> may have been borrowed from the Central languages.

A connection may also be made between Chinese and Tai for 'elbow', cf. Chinese *zhǒu* (< Old Chinese \**tiog* [Karlgren 1957:1073a]), which appears to have Austroasiatic links (Benedict 1975:219).

For 'eyebrow', some dialects simply use the construction *khun*<sup>A1</sup> *ta*<sup>A1</sup> 'hair + eye', as in Dehong, and *pun*<sup>A1</sup> *ta*<sup>A1</sup>, as in Yay. In many Tai languages, this compound means 'eyelashes', not 'eyebrow'. For White Tai, Black Tai, Lungming, Tho and Fengshan, \**vr-* may be reconstructed. But the Lungming form is aberrant—we would expect a palatalised labial stop /pj/ for the correspondence. The initials for the Thai and Lao forms pose even greater problems, for which we tentatively propose a separate initial, \**g-*, with tone C2.

An alternation of initials /r/ and /l/ can be observed between non-Northern and Northern dialects for 'armpit', along with a tonal alternation of C2 and B1. This item is included in Benedict (1975:410) as an Austro-Thai word.

Two taboo words are found across the Tai languages, in addition to those in Li.

Gloss	PT	Tone	Thai	Lao	DH	Lue	LM	NG	Yay	FS
'clitoris'	*stet	D1L	tɛt	tɛt	tɛt	—	sit/tect	—	θit	θit
'male organ'	*ɣway	A2	khuay	khuay	xɔi	xvai	vay	vay	vay	vai

The initial for the first item seems to go back to proto clusters of some sort, for which we propose \**st-*. The first element is lost in the Southwestern languages, while in the Northern dialect the second element was lost. Lungming has both the

Northern and Southwestern forms. (For a fuller treatment of sibilant clusters in Proto-Tai, see Luo 1996.)

For ‘male organ’, all the Southwestern languages show a velar initial as against the other two branches, which fall together in having the labiodental /v/ ([w]). Benedict (1975:352) has identified this item to be an Austro-Thai word, with good Austronesian correspondence.

Two terms for animal body parts are also identified. These occur in dialects of all three branches.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	Yay	FS	Sack
‘hump’	*nok	D1L	ɲɔk	ɲɔk	ɲk	—	—	nook	nok	ɲɔk	ɲɔk
‘placenta’	*rok	D2L	rok	hok	hok	hōk	hōk	look	rok	look	ɲɔk

The form for ‘hump’ exhibits regular correspondences both in initials and in finals as well as in tones among the dialects cited. A connection is made by Benedict (1975:317-8) between Tai and the Indonesian word for ‘horn’, \**anduk*.

The meaning in Lungming and Fengshan for ‘placenta’ is ‘a litter (of animals)’. In Thai, there is a related form *khɲɔk* (D2L), with the meaning ‘litter, uterus’.

There are several items which display interesting distribution patterns that may be of significance to subgrouping. We shall come to this point shortly in §2.

#### 1.4 Cultural beliefs, social activities and residual items

A handful of terms designating spiritual and cultural life, together with quite a few words for daily activities, have been uncovered. The following items, which occur across all the three branches in our data, give us a glimpse of the cultural life of the Tai people.

Gloss	PT	Tone	Thai	Lao	DH	WT	LM	NG	Yay	FS	Sack
‘evil spirit’	*braay	A2	phraay	phaay	phaai	Lue phyayay	pyaay	—	pyaay	pyaai	—
‘fate, destiny’	*minj	B2/1	minj	minj	min B1	min A2	minj	minj B1	minj	minj	—
‘festival’	*sianj	A1	cianj	cianj	tsej	chenj	ciij	cheej	sianj	ɕianj	cianj

The meaning of the first item varies slightly in some dialects. In Thai, Lao, Dehong and Lue, it means ‘a legendary evil spirit’. In Lungming, the word means ‘spirit of a person who has died young’, and is employed in expressions for scolding a child (Gedney 1991b:500). In Yay, the word means ‘spoiled by insects before ripe (of fruit, vegetables)’ (Gedney 1991a:324-5), and this meaning is shared in Fengshan. The substratum semantics of ‘ruin, destruction’ is present in all the dialects.

The last two items, ‘fate, destiny’ and ‘festival’, are shared by Chinese *ming*<sup>4</sup> and *xiang*<sup>1</sup> [ɕian<sup>1</sup>] respectively. Both words took the *yin ping* tone in classical Chinese. The form for ‘fate, destiny’ is still used in modern standard Chinese while the latter form, ‘festival’, which was recorded in pre-Han sources, seems to have gone out of use in modern Chinese, but is still in everyday use in modern Tai languages. It is significant to note that *xiang*<sup>1</sup> was represented in two allofams/allograms in Old Chinese, which were glossed by Karlgren as ‘feast’ (Karlgren 1957:714j) and ‘the smell of grain’ (ibid.:714m) respectively. Yet the relationship between the two forms is easily seen: the fragrance of grain brought joy to the harvesters.

Furthermore, quite a number of words for daily activities have been discovered for Tai. Following are some examples.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS	Saek
'to chew up food'	*hnaay	C1/ A2	yɔɔy	nyɔɔy	yaai A2	ɲaaɪ B2	—	—	ɲaaɪ A2	ɲaaɪ	ɲaaɪ	—
'to gnaw'	*ɣen	C1/ C2	heən C1	heən C1	heən C1	heən C1	heən C1	heən C2	—	heən C2	heən C2	heən C1
'to shout'	*ʔeu	A1, B1	ʔɛw B1	ʔɛw B1	ʔu A1	ʔeu B2	—	ʔeew B1	ʔeu A1	—	ʔɛu A1	—
'to pick with all fingers'	*ɲep	D1/D 2S	yɪp D1S	yɪp D1S	yɪp D1S	yɪp D1S	ɲɪp D1S	—	ɲɪp / ɲep D2S	ɲap D2S	ɲap D2S	ɲɪp D1S
'to pull'	*Sraau	A1/B 2	saaw A1	saaw A1	thaau A1	saau A1	saau A1	saaw	sau	saaw	ɕwaau	saaw A1
'to hold in both arms'	*hop	D1L	hɔɔp	hɔɔp	hop	hop	hop	hoop	hop	hop	hoop	—
'to push fire-wood into the fire'	*zon	B2/ A2	son A2	son A2	son A2	sun A2	—	syn A2	son B1	θan	θɔn	—
'to set a load, a trap, etc.'	*thraaŋ	C1	—	haaŋ	haaŋ	haaŋ	haaŋ	thaarŋ	thaarŋ	raarŋ	laarŋ	—
'to be naked'	*pluay	A1	pluay	puay	poi B1	pɔɪ	puəɪ	—	pɔɪ	—	pyoɪ	puay
'to have sexual intercourse'	*si	C1	—	sii	Lue si/se	si	—	sey	—	θi	θi	—
'to step on, pedal'	*Diap	D2L	thiip D1L	thiip D1L	thip	thip	thip	—	tip	tiap	tiap	thiip
'to squat'	*ʔjuorŋ	B1/A 1	yɔɔŋ B1	yɔɔŋ B1	yɔŋ A1/B2	yɔŋ B1	yɔŋ B1	—	yɔŋ B1	yɔŋ A1	ʔyɔŋ A1	—
'to place crosswise'	*ɣwaarŋ	B2	—	—	vaarŋ	xwaarŋ	khoarŋ	vaarŋ	vaarŋ	vaarŋ	vaarŋ	vaarŋ



All the above items appear to be native Tai words, with wide distribution across the Tai languages. An important aspect of these lexical items is the tonal irregularities among certain cognate sets. It has been suggested that such irregularities may provide an isoglossal line for group boundaries. However, as this data set shows especially well, such tonal irregularities do not always work as a subgroup criterion. The word for ‘to shout’ is represented with tone A1 in Dehong, Nong and the Northern languages, indicating that this is the proto tone, but the remaining dialects show tone B1. The word for ‘to pull’ separates the Southwestern languages from the non-Southwestern languages with regards to tone. These indicate that we cannot rely on tonal irregularities for subgrouping.

Of the above cognate words, four are found to have wider genetic links. They include the words for ‘to chew up food’, ‘to hold in both arms’, and ‘to squat’, which are found to be shared by Mulao (Fifth Research Group 1985:198, 213, 223), a Kam-Sui language in Guangxi, cf. Mulao *naai*<sup>3</sup> ‘to chew up food’, *juŋ*<sup>1</sup> ‘to squat’, *khɣəp*<sup>7</sup> ‘to hold in both arms’. ‘To gnaw’ is also found to have Austroasiatic connections (Benedict 1975:301).

To these we may add the following two frequently-encountered words in Tai life.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
‘hard core, pit, seed (of fruits)’	*ɲuy	B1/2	nuay B1	nuay B1	hoi B1	hoi B1	—	huuy B1	hōi B1	ɲuy B2	ɲui B2
‘white ant, termite’	*pluak	D1L/ S	pluak	puak	pok	pək	puak	pyuuk	—	WM pluk	Sæk pluk

The item ‘core, pit, seed’ displays alternation of voiceless and voiced initials between the non-Northern and the Northern languages. For ‘white ant, termite’, the Northern dialects show a short D tone in contrast with a long D tone in non-Northern dialects.

Also found are three items describing certain common diseases across the Tai speaking area.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	NG	Yay	FS
‘harelip, nipped’	*waaυ	B2	—	wεευ	vaυυ B1	veυυ	veυυ	veew	veυυ	vaaw	wεευ
‘ringworm’	*klaak	D1L	klaak	kaak	—	—	—	kyaak	—	caak	tcaak
‘sunstroke’	*saa	A1	saa B1	—	sa	Tai saa	Ya	—	θa	sa	ca

The above-discussed new cognate sets are just samples from our corpus of over 300 items with such status.

### 1.5 Pan-Tai status for formerly restricted items

With access to data not available to Li at the time of his writing, we are now able to recognize pan-Tai status for over 20 words which were formerly identified

as restricted to a certain dialect group or groups only. First, more than a dozen items labelled by Li as ‘not found in the Northern languages’ in fact exist in these languages. These are illustrated in the following.

Gloss	Yay	Fengshan	Sack	Reference in Li (1977)
‘flying squirrel’	baaŋ <sup>2</sup>	baaŋ <sup>6</sup>	baaŋ <sup>6</sup>	(§4.4, item 11)
‘to hear’	—	jin <sup>6</sup>	jiim <sup>5</sup>	(§9.6, item 9)
‘fish bone’	kaaŋ <sup>3</sup>	kaaŋ <sup>3</sup>	kaaŋ <sup>3</sup>	(§10.1, item 11)
‘branch’	—	tciaŋ <sup>5</sup>	kiin <sup>6</sup>	(§10.1, item 31)
‘great, big’	huŋ <sup>1</sup>	WM huŋ <sup>1</sup>	luan <sup>2</sup> ‘king’	(§8.2, item 31)
‘termite, weevil’	mot <sup>5</sup>	moot <sup>6</sup>	moot <sup>5</sup>	(§4.5, item 19)
‘to hang, suspend’	hoy <sup>3</sup>	hoi <sup>3</sup>	—	(§13.1, item 12)
‘shellfish, shell’	θay <sup>1</sup>	θai <sup>1</sup>	—	(§13.1, item 11)
‘to bow, bend’	—	kum <sup>3</sup>	kam <sup>3</sup>	(§10.1, item 35)
‘to surround, encircle’	hum <sup>6</sup>	hum <sup>4</sup>	hum <sup>6</sup>	(§8.1, item 20)
‘to melt, cast (metal)’	lo <sup>2</sup>	lo <sup>5</sup>	—	(§8.2, item 20)
‘to husk rice’	θom <sup>6</sup>	θum <sup>4</sup>	—	(§9.2, item 11)
‘mortar’	cok <sup>1</sup>	ɕok <sup>2</sup>	—	(§11.6, item 6)
‘to pierce, to stab’	—	teen <sup>1</sup>	—	(§6.3, item 17)
‘to be insane, mad’	Wuming ba <sup>3</sup>	baa <sup>4</sup>	—	(§4.4, item 42)

Items like ‘flying squirrel’, ‘branch’, ‘fish bone’, ‘shellfish, shell’, ‘to husk rice’, ‘mortar’, ‘termite, weevil’ and ‘to melt, cast (iron)’ are of particular interest. Together with many other cultural terms established by Li (1977) these words indicate that Tai speakers were a uniform agricultural group long before their dispersal. The existence of these words in the Northern languages fills some gaps in our understanding of early Tai culture and environment.

Furthermore, several of Li’s Central-Northern words are found in the Southwestern dialects such as Dehong, indicating that we are dealing with pan-Tai cognates.

Gloss	Tone	Dehong	Lungchow	Fengshan	Reference in Li (1977)
‘piece, classifier’	B1	kaai A1	kaai	kaai	(§10.1, item 3)
‘steep, abrupt’	B1	liŋ	liŋ	liŋ	(§8.2, item 19)
‘to resemble’	C1	thum B1	Ningming lom	lum	(§8.2, item 26)
‘to redeem, tribute’	B2	lu B1	T’ienpao lou	lu	(§7.6, item 22)
‘shuttle (of loom)’	B1	tau	T’ienpao tau	tau	(§5.3, item 5)
‘umbrella’	C1	tsɔŋ	liiŋ	luanŋ	(§8.2, item 36)
‘water mill’	D1	xok <sup>5</sup> D2	Nung lōk	lɔk	(§8.2, item 21)
‘dirty’	C1	sam	ɬam	Po-ai ɬaam	(§13.1, item 12)

It is significant to note that these items are generally not found in other Southwestern dialects in our data, except in Tai Lue of Sipsongpanna, where some

of the above forms such as *liŋ* (B1) ‘to be steep’ (also found in Siamese in compounds like *taliŋ* [B1] ‘steep bank’) and *tsɔŋ* (C1) ‘umbrella’ (also common in Shan varieties such as Phake and Aiton) are encountered. This raises an interesting question of possible early migration movement of the Northern Tai speakers, a point we shall return to later in §2.2.6.

**2. Regional/Dialect words: implications for subgrouping**

As pointed out earlier, prior to the publication of HCT, Li (1959, 1960) proposed lexical classification as an important criterion for subgrouping the Tai languages. Elsewhere (1970, 1975) he pointed out that along with lexical features, the patterns of tonal irregularities are also pertinent to subgrouping (Luo 1996).

In HCT, Li continues with this stand, having identified a significant number of dialect words—8 for the Southwestern group, 86 for the Southwestern and the Central groups, 59 for the Southwestern and the Northern groups, 3 for the Central group, 28 for the Central and the Northern groups, and 39 for the Northern group. As illustrated above, of the 86 items for non-Northern dialects, 15 are shared by the Northern dialects; and 7 out of the 28 non-Southwestern dialects are shared by the Southwestern dialects as well. Also, 4 out of 39 Northern words are shared by the Southwestern dialects.

In what follows we shall present the result of new findings and discuss their implications for subgrouping.

*2.1 Northern vs. Non-Northern*

The Northern dialects are with little question the most distinct subgroup in the Tai family in possessing a set of words that are absent in other dialect groups. Such distinctive dialect words, along with a number of phonological features, enabled Haudricourt to identify Saek as a Northern dialect (Haudricourt 1963). Even disbelievers of lexical classification such as Gedney have come up with quite a long list of Northern words (Gedney 1993:953-5)—something which is often used as a diagnostic feature for distinguishing the Northern dialects from others.

Of several hundred newly-discovered cognates, a number of basic lexical items are found to be exclusive to the Northern languages. Among them are four body part terms.

Gloss	PT	Tone	Yay	FS	Wuming	Saek
‘lap’	*hruŋ	C1	ruŋ	luŋ	ruŋ	ruŋ
‘finger’	*ŋiaŋ	B2	ŋiaŋ	ŋiaŋ	ŋiŋ	ŋiaŋ
‘heel’	*kleu	C1	tiaw	ceu	kyu	—
‘waist’	*huat	D1L	huat	huat	ɣuut	—

No correspondences have been found in the non-Northern languages for the word for ‘lap’ in our data.

For the forms for ‘finger’ and ‘heel’, the non-Northern languages use a different word for each, reconstructed respectively as *\*niu<sup>C2</sup>* and *\*son<sup>C1</sup>* by Li (1977:111, 153). Gedney is to be credited for identifying the term for ‘finger’ in the Northern dialects (Gedney 1993:964).

The non-Northern forms for ‘waist’ have been discussed above in §1.3.

The following items are also worth noting. Non-Northern languages use other forms as reconstructed by Li.

Gloss	PT	Tone	Yay	FS	Wuming	Saek
‘cloth’	*baŋ	A2	paŋ	paŋ	paŋ	—
‘iron’	*va	A2	faa	faa	faa	maa
‘handle (of a knife)’	*taam	A1	taam	taam	taam	—
‘steam, vapour’	*suay	A1	θuway	θooi	fui	sooy
‘house sparrow’	*hlay	C1	lay	lai	lai	—

For ‘cloth’, Li has reconstructed *\*phaa* (C1), with the meaning ‘cloth, clothing’, a form without the final nasal which differs from the one cited here. He comments that the form *\*phaa<sup>C1</sup>* is ‘not found in the CT dialects, where the word for “cotton” is generally used’ (Li 1977:64). It seems that a distinction should be made between ‘cloth’ and ‘clothing’ in Tai. It appears that ‘cloth’ is represented in more than one form in the Tai dialects, as is ‘clothing’. The form *phaa<sup>3</sup>* (C1) is found in Lungming in our data, with the meaning ‘a Chinese quilt’ (Gedney 1991b: 506), exactly like Dehong where the word for ‘cloth’ is *man<sup>3</sup>*. The corresponding Northern form for *\*phaa* (C1) is represented with a voiced initial *\*b*, with the meaning ‘shirt or blouse, upper garment’, as identified by Li (Li 1977:64). For ‘shirt, blouse, garment’, other Tai dialects use a different word, *\*sia* (C1), as by Li (1977:154).

A different word for ‘iron’, *\*hlek* (D1S), has been identified by Li for non-Northern dialects (1977:137). This item also appears to have Austroasiatic links (Benedict 1975:320). In our data a similar form is found in the Northern dialects, cf. Yay *riak<sup>2</sup>*, Saek *riak<sup>2</sup>*, meaning ‘a kind of lead’. Both Li (ibid.) and Gedney (1993:954) have identified the Northern form cited above.

For ‘handle’, non-Northern dialects show *\*ʔd-*, with tone C1, as reconstructed by Li (1977:108-109), cf. Dehong *laam<sup>4</sup>* (C1), Tai Lue *dam<sup>3</sup>* (C1), Lungming *naam<sup>3</sup>* (C1). The Northern forms correspond to Kam-Sui, cf. Kam *taam<sup>1</sup>*, Sui *taam<sup>1</sup>*, Mulao *taam<sup>1</sup>*, Maonan *taam<sup>1</sup>*, all taking the voiceless dental stop /t/ and tone A1. It is interesting to note that the rhymes show good correspondences between the Northern and non-Northern dialects.

All the non-Northern dialects use a different word for ‘steam, vapour’, *\*ʔaai* (A1), as in Li (1977:204). This latter form is also found in the Northern dialects with the meaning ‘a sweet liquor made from rice, not distilled’, as in Yay and Fengshan.

For ‘house sparrow’, Li has identified a different word in non-Northern dialects, \**ḷɔɔk* (D1L) (1977:164). He also noticed the Po-ai form *lai* (C1), which corresponds to our form.

To these we should add two more items, ‘to carry on the shoulder’ and ‘black’:

Gloss	PT	Tone	Yay	FS	Wuming	Saek
‘to carry on the shoulder’	* <i>guat</i>	D2L	<i>kuat</i>	<i>kuat</i>	<i>kuut</i>	<i>khuat</i>
‘to be black’	* <i>von</i>	C2	<i>fon</i>	<i>fon</i>	<i>fon</i>	—

For ‘to carry on the shoulder’, all non-Northern dialects use a different word, \**ʔbeek* (D1L) as reconstructed by Li (Li 1977:69), cf. Tai Lue *bek*<sup>9</sup>, Dehong *mek*<sup>3</sup>, Lungming *mee*<sup>2</sup>. These non-Northern forms appear to have a wider link, cf. Lin-gao (Limkow, Be) *vik*<sup>7</sup>, Hlai *bi:k*<sup>7</sup>.

The form for ‘black’ is widely attested in the Northern dialects. Out of 40 Buyi dialects surveyed, 36 have this form, with some variations in vowels (Minority Language Research Centre 1959:211, item 0133). In non-Northern dialects, a different word is used, for which Li has reconstructed \**ʔdlam* (A1), cf. Dehong *lam*<sup>6</sup> (A1), Tai Lue *dam*<sup>1</sup> (A1), Lungming *nam*<sup>1</sup> (A1), Nung Fan Slihng *dam*<sup>1</sup> (A1). This latter form is found in Wuming as *dam*<sup>1</sup>, in Saek *ram*<sup>2</sup>, and in Yay, where it occurs in compounds as in *su*<sup>1</sup> *dam*<sup>1</sup> ‘black-hearted’ (Gedney 1991a:69). The form \**ʔdlam* (A1) has wider connections, cf. Kam *nam*<sup>1</sup>, Sui *ʔnam*<sup>1</sup>, Mulao *nam*<sup>1</sup>, Maonan *nam*<sup>1</sup>, Lin-gao *lam*<sup>1</sup>, and Hlai *dam*<sup>3</sup> (Fifth Research Group 1985:270). Interestingly enough, the Northern dialects, which are in close contact with Kam-Sui, do not use this latter form.

Against the Northern dialects the following items indicate Southwestern/Central alliances.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM
‘lotus plant’	* <i>ʔbua</i>	A1	<i>bua</i>	<i>bua</i>	<i>mo</i>	<i>bô</i>	<i>bua</i>	<i>muu</i> A2
‘caterpillar’	* <i>ʔboŋ</i>	C1	<i>buŋ</i>	<i>boŋ</i>	<i>moŋ</i>	<i>buŋ</i>	<i>buŋ</i>	<i>moŋ</i>
‘to say, tell’	* <i>ʔbok</i>	D1L	<i>bɔɔk</i>	<i>bɔɔk</i>	<i>mɔk</i>	<i>bok</i>	<i>bok</i>	<i>mook</i>
‘to feed (animals)’	* <i>ʔoy</i>	B1	<i>ʔɔɔy</i>	<i>ʔɔɔy</i>	<i>ʔoi</i>	<i>ʔoi</i>	<i>ʔoi</i>	NFS <i>ʔoi</i>
‘long’	* <i>jaaw</i>	A2	<i>yaaw</i>	<i>yaaw</i>	<i>yaau</i>	—	<i>yaau</i>	NFS <i>yaau</i>
‘to hunt’	* <i>braan</i>	A2	<i>phraan</i>	<i>phaan</i>	<i>paan</i>	<i>paan</i>	<i>paan</i>	<i>pyaan</i>
‘hot (of weather)’	* <i>ron</i>	C2	<i>rɔɔn</i>	<i>hɔɔn</i>	<i>hɔn</i>	<i>hon</i>	<i>hon</i>	NFS <i>hon</i>
‘to be steep’	* <i>jan</i>	A2	<i>chan</i>	<i>san</i>	<i>tsan</i>	<i>chan</i>	<i>chan</i>	<i>can</i>
‘a long time’	* <i>huŋ</i>	A1	<i>huŋ</i>	<i>huŋ</i>	<i>huŋ</i>	<i>huŋ</i>	<i>həŋ</i>	NFS <i>huŋ</i>

These are not found in the Northern dialects in our data. For the first item, ‘lotus plant’, the Northern languages use *ɲau*<sup>C2</sup>, which appears to be shared in Chinese and which is also found in Lin-gao, Kam, Mulao and Hlai (Fifth Research Group 1985:81).

For ‘caterpillar’, the Northern languages simply use the general cover term for ‘worm’, which was reconstructed as \**non*<sup>A1</sup> by Li (1977:114). Benedict (1975:

245) is also credited for identifying a link between Tai and Austronesian for this item.

‘To say, tell’ has a different pan-Tai cognate, which is not included in *HCT*, cf. Thai and Lao *law* (B2), Dehong *lau* (B2/A1), Phake *lau* (B2), White and Black Tai *lau* (B2), Lungming *naw* (A2), Nung *lau* (A1/B1), Yay *naw*<sup>A</sup>, Fengshan *nau*<sup>2</sup>, which may go back to Proto-Tai *\*nl-*.

There is a different word for ‘to feed (animals)’ in certain Southwestern dialects and the Northern dialects, cf. §2.2.4 below.

Benedict thinks the Tai word for ‘long (in space)’ has Austronesian links (1975:333), cf. Formosa *\*q[ə]law*. A Northern word is recorded by Li for ‘long and slender’, *\*rei* (A2) (Li 1977:143, 286).

The rest of the examples have pan-Tai or non-Southwestern counterparts, which have been reconstructed in *HCT*, *\*prau* (B1) ‘to hunt’ (ibid.:87), *\*ɔ̄diat* (D1L) ‘hot (of weather)’ (ibid.: 109, 282), *\*hling* (B1) ‘abrupt, steep’ (ibid.:138), and *\*naan* (A2) ‘long time’ (ibid.:111). Items like ‘to hunt’, ‘to be hot’ and ‘to be steep’ are particularly worth noting. It would be interesting to draw an isogloss line for words of this kind.

The forms for ‘market’ also separate the Northern from the non-Northern groups.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	Yay	FS
‘market’	??	D1L	ta- laat	ta- laat	kaat	laa	laa	laa D2	hu A1	hu A1

Three etymological sources seem to be involved here. The majority of the Southwestern and Central dialects show the liquid /l/, including Southern Thai, for which a proto liquid *\*hl-* may be proposed, in contrast with several varieties of Shan in the northwestern part, which show the velar stop /k/, from which a proto velar stop *\*k-* can be reconstructed. The Northern languages stand alone in opposition to non-Northern languages in showing a laryngeal fricative /h/, for which a proto-NT *\*h-* may be postulated.

The reflexes in the Southwestern dialects pose some problems for subgrouping. If dialects like Dehong are ignored, the above lexical materials seem to point to the Southwestern and the Central dialects as a distinct group, since the rhymes for this item are very regular among non-Northern dialects. Alternatively, one might wish to postulate *\*kl-* for non-Northern languages, but *\*kl-* would yield /kl-/ in Thai and /k-/ or /kj-/ in other non-Northern dialects.

2.2 Non-Southwestern vs. Southwestern

2.2.1 The Central-Northern alliance

Almost an equal number of new cognates are found between the Northern and the Central dialects. These suggest that the Central and the Northern languages may fall together as a subgroup.

Gloss	PT	Tone	LM	NG	Yay	FS
'porcelain'	*hmenj	A1	mecj	—	—	mɛɛj
'spinning wheel'	*swa	C1	saa	—	θa	θwaa
'tail of fowls'	*swan	C1	sɾn	θon	θwn	θwan
'to punt (a boat)'	*kaaw	A1	kaaw B2	—	kaaw	kaau
'to hide (oneself)'	*ʔdo	C1	noo	dō	—	doo
'to put on (hats)'	*thlom	C1	thom	thom	sam	ɕom
'swelling on skin'	*hnun	C1	nɾn	—	nun	nun
'to melt, dissolve'	*juak	D2L	cuuuk	—	suak	ɕiak

The form for 'porcelain', which appears to be a native Tai word, is found only in Lungming and Fengshan in our data, not in Nung or Yay. The distribution of this word will be of interest to anthropologists and historians.

'Spinning wheel' is another interesting word to anthropologists and historians, since weaving was an important part of Tai culture, as manifested in cognates such as 'tube, bobbin for weaving' (Li 1877:138), 'loom' (ibid.:121), and 'to weave (cloth)' (ibid.:98). This word is also found in Saek as *lwaa*<sup>2</sup>, with the A1 tone.

For 'tail of fowls', the Southwestern languages simply use the pan-Tai form for 'tail (of animals)', without making a further distinction.

'To punt (a boat)', a very common daily word, further indicates the importance of river navigation as a part of the life of the Tai people.

'Swelling on skin' and 'to melt, dissolve' are not found in the Southwestern dialects in our data either.

The following examples for plant names are also worth noting.

Gloss	PT	Tone	LM	NG	Yay	FS
'sweet corn'	*tay	B1	—	tai	tay	tai
'yam, sweet potato'	*zuu	A2	sɾu	—	Wuming θau	θuuu
'orange'	*kaam	A1	kaam	kaam	kaam	kaam
'maple tree'	*raw	A1	law	—	WM rau	lau

The word for 'sweet corn' seems to be related to the word for 'king' in the Northern languages, for which a connection may be established between Tai and Chinese *dì*. Often used in compounds with \**yau*<sup>C2</sup> 'grain' as in *yau*<sup>C2</sup> *tai*<sup>B1</sup>, 'sweet corn' literally means 'the grain of the king' in Tai. As sweet corn was introduced into Asia after 1500, this word may not be part of the Proto-Tai lexicon.

For ‘yam, sweet potato’, there is a pan-Tai cognate, *man* (A2), as mentioned by Li (1977:72). This cognate form is also found in Lungming and in Yay. A Kadai word, the form *man* is widely attested across Kam-Sui as well as in Lin-gao and Hlai. Both *man* (A2) and *zu* (A2) are attested in the Northern dialects, with *\*zu* (A2) exhibiting a wider distribution.<sup>3</sup>

The form for ‘orange’ also appears to have Chinese connections, cf. Modern Chinese *gān*, from Old Chinese *kam*.

The item for ‘maple tree’ has a wider genetic link, cf. Kam *jaau*<sup>1</sup>, Mulao *hγəu*<sup>1</sup>, Maonan *hu*<sup>1</sup>, Sui *fo*<sup>1</sup>, Hlai *tsu*<sup>2</sup> *gau*<sup>1</sup>. This form is not found in any Southwestern dialects in our data, possibly because of a different ecosystem.

Three body part terms, ‘upper leg, thigh’, ‘breast, milk’ and ‘under the knee’, divide the Central/Northern groups and the Southwestern group.

Gloss	PT	Tone	LM	FS
‘upper leg, thigh’	*paaj	B1	paaj	paaj
‘breast, milk’	*hnu	B1	now	nu
‘under the knee’	*kwaŋ	B1	Nung kōŋ	kwaŋ

These forms are found in Lungming and Fengshan in our data, two Tai dialects in Guangxi representing the Central and the Northern branch. They are not found in Nung Fan Slihg or Yay. The first item, ‘upper leg, thigh’, appears to be shared by the Wu dialects as *phaŋ* with a similar meaning. The second item is also found in White Tai as *nu*, where it is represented with tone C1. White Tai may have borrowed this term from nearby Central and Northern languages. In the other non-Northern languages, the term is represented by *\*nom*<sup>A2</sup>, as reconstructed by Li (1977:111). Note that along with *now*<sup>B1</sup> Lungming also has *nom*<sup>A2</sup>, which is not found in White Tai in our data. The final item ‘under the knee’ is also represented in Saek as *kwaŋ*<sup>B1</sup>.

Such examples raise problems for the widely-accepted view of a Central and Southwestern alliance.

### 2.2.2 The Southwestern group

Like the Northern dialects, the Southwestern dialects possess quite a number of words that are unique to the group. Some examples are given below.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT
‘soil, earth’	*ʔdin	A1	din	din	lin	din	din
‘body’	*γiŋ	A2	khŋ	khŋ	xiŋ	xiŋ	kiŋ
‘a kind of basket’	*zaa	C2	saa	saa	saa	Lue saa	—
‘skirt’	*sin	C1	sin	sin	sin	sin	sin

<sup>3</sup>22 out of 40 Puyi dialects have this form, while 13 have *man* (A2).



The first item, ‘soil, earth’, is particularly worth noting. Benedict (1975: 277-8) has proposed a link between Tai and Austronesian for this item. Note that a pan-Tai form, *\*tom<sup>A1</sup>*, has been reconstructed by Li (1977:99) for this item. This form is not commonly found in the Northern languages except Wuming, possibly a loan from the nearby Central dialects. More complicated still is yet another form, *\*naam<sup>B2</sup>*, which Li (1977:111-2) suspects to be a Northern word but which is also found in Lao, White Tai, Dehong, and Tianpao.

The Siamese form for ‘body’ cited here is listed in the Thai Ratchabandiddhayasathan Dictionary (1982:188) as a regional and literary form. The word is represented in the non-Southwestern languages as *\*?daaŋ<sup>A1</sup>*, as reconstructed by Li (1977:129) who speculates that the Southwestern form *raaŋ<sup>B2</sup>* might be related.

‘A kind of basket’ has a limited distribution. This form is not found in White or Black Tai in our data.

For ‘skirt’, the Northern dialects use a different word with a similar rhyme but with a labiodental initial, cf. Wuming *vun<sup>3</sup>*, Fengshan *vin<sup>3</sup>*. This form may probably be a loan from Chinese *qun<sup>2</sup>*, Old Chinese *gun* (Pulleyblank 1991:263). Also found are several verbs describing actions or mental states in everyday life.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT
‘to fear, be afraid’	*klua	A1	klua	kua	ko	kô	kua
‘to listen’	*vaŋ	A2	faŋ	faŋ	faŋ	faŋ	phaŋ
‘enough, sufficient’	*bo	A2	phɔɔ	phɔɔ	po	po	po
‘to spit’	*thom	B1	thom	thom	thum	thum	thôm
‘to block, bar’	*kan	C1	kan	kan	kan	kan	kan
‘to employ, hire’	*čaaŋ	C1	caaŋ	caaŋ	tsaaŋ	čaaŋ	čaaŋ

The form for ‘to fear’ cited here appears to have cognates in Kam-Sui, cf. Sui *qho<sup>1</sup>*, Maonan *chu<sup>1</sup>* (Fifth Research Group 1985:228), which is an Austro-Thai word (Benedict 1975:287). The Central and the Northern languages use a different word, *\*laau<sup>A1</sup>*, as reconstructed by Li (1977:137, 139).

A different cognate for ‘to listen’ has been identified by Li between the Southwestern and the Northern dialects, for which Li has proposed *\*hŋ-* for Proto-Tai and *\*hŋ-* for Proto-NT (Li 1977:206), cf. Thai *nja* C1/B2, Yay *nja* (A1), Fengshan *nja* (A1) and Saek *nja* (A1). Still another form with the meaning ‘to hear’, has been reconstructed for Proto-Tai as *\*ñin* (B2) (ibid.:173),<sup>4</sup> cf. Dehong *ŋin* (A2), Tai Lue *jin* (A2), Lungming *yin* (A2), Nung Fan Slihng *ŋin* (A2), Yay *jin* (B2), Fengshan *jin* (B2). Both these forms are better rendered as ‘to hear’.

For ‘enough’, both the Central and the Northern dialects use another word, which shows a distinct initial in each dialect group from the Southwestern form, cf. Lungming *noo* (A2), Nung Fan Slihng *dô* (A1), Yay *to<sup>5</sup>*, Fengshan *to<sup>6</sup>*. The

<sup>4</sup>Li comments that this form ‘is not found in the Northern dialects’ (Li 1977:175), which can now be corrected, cf. Fengshan *jin* (B2), agreeing with Li’s *\*ñ-*.

Central forms point to proto *\*ʔd-* while the Northern form *\*d-*. These correspondences present a problem, as /ʔd/ and /d/ are seldom confused in Tai. The three dialect groups share the same rhyme, /-o/, however. In the Central and Northern dialects a Chinese loan is also used for this purpose, cf. Lungming *kaw* (B1), Yay *kaw* (B1), Fengshan *kau* (B1), from Chinese *gòu* (<Old Chinese *kəw<sup>h</sup>*). A different word for ‘spit’ is identified between White Tai and the Po-ai, which has been reconstructed as *\*phi* (B1) by Li (1977:64).

For ‘to block, bar’, there is another cognate form between the Southwestern and the Northern dialects, cf. Lao *khaŋ<sup>3</sup>*, Dehong *xarŋ<sup>3</sup>* (C2), White Tai *xorŋ<sup>3</sup>*, Yay *harŋ<sup>3</sup>*, Fengshan *harŋ<sup>3</sup>*, Saek *harŋ<sup>3</sup>*. The Yay and Saek forms mean ‘fence’.

‘To employ, to hire’ is a typical Southwestern word. The Central and the Northern dialects use a different word, cf. Lungming *koo<sup>2</sup>*, Yay *ko<sup>2</sup>*, Fengshan *ko<sup>5</sup>*, which appears to be a loan from Chinese *gu<sup>4</sup>*. Old Chinese *\*kɔ<sup>h</sup>* (Pulleyblank 1991:112).

Perhaps the most convincing evidence is the fact that the Southwestern dialects possess a set of numerals that are not found in the other two groups.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT
‘twenty’	*zaaw	A2	—	saaw	saau	saao	saao
‘thousand’	*ban	A2	phan	phan	pan	pan	pan
‘ten thousand’	*hmun	B1	muuun	muuun	mun	mun	mun
‘hundred thousand’	*sen	A1	sɛɛn	sɛɛn	sen	sen	sen
‘million’	*laan	C2	laan	laan	laan	—	laan

For ‘twenty’, all non-Southwestern languages use the compound *yi<sup>B2</sup>-sip<sup>D2</sup>*, literally ‘two-ten’.

For ‘(a) thousand’, the non-Southwestern languages also have different forms, which appear to be late loans from Chinese *qiān* (from Old Chinese *ts<sup>h</sup>en*), cf. Nung Fan Slihng *sên<sup>1</sup>*, Fengshan *çian<sup>1</sup>*.

A Sino-Tai link can be set up for ‘ten thousand’, cf. Modern Chinese *wàn* (from Old Chinese *muan<sup>h</sup>*). The Modern Chinese form appears to be closer to the form in the Central and the Northern dialects, which has a labio-dental initial, cf. Lungming *faan<sup>5</sup>*, Nung Fan Slihng *faan<sup>5</sup>*, Yay *vaan<sup>2</sup>* (B1), Fengshan *faan<sup>6</sup>*. The Southwestern form seems to be close to the Old Chinese form.

It is interesting to note that the Southwestern form for ‘one hundred thousand’ appears to be homophonous with that for ‘one thousand’ in non-Southwestern languages.

There is no single-syllable equivalent for the term for ‘million’ in the non-Southwestern dialects, where the construction *paak<sup>D1L</sup> faan<sup>B2</sup>* ‘hundred + ten-thousand’ is generally used.

The above lexical items seem to indicate that the Southwestern dialects form a group of their own.

With the exception of ‘million’, all the above cited examples are believed to have Austronesian connections (Benedict 1975:213, 218).

### 2.2.4 The Southwestern-Northern connection

So far, the Southwestern dialects have been depicted as being in alliance with the Central dialects or forming a distinct group of their own. At this juncture we must hasten to offer parallel evidence for a Southwestern-Northern connection. The following basic vocabulary items are samples of cognate forms found in these two groups in our data, but apparently lacking in the Central languages.

Gloss	PT	Tone	Thai	Lao	DH	WT	Yay	FS
‘to chew (hard food)’	*hnam	C1	—	nyam	yem C2	Phake yem	nam	nam
‘to drink, slurp (liquid)’	*zut	D2	suut D2L	sot	sut	sôt	θut	θut
‘to bite seeds, crack’	*ket	D1	—	ket	ket	kêt	—	tset
‘to mix, stir’	*koy	A1	—	koy	koi	—	koy	kooi
‘to wipe after defecating’	*kien	B1	ken C1	ken	ken	Lue ken	—	tein
‘to move’	*hniŋ	A1	—	niŋ	luŋ	Lue nŋ	WM niŋ	niŋ
‘to run’	*phruat	D1L	phruat D2L	puat	—	—	puat	puat
‘to stumble’	*?duot	D1	sa-dut	dut	—	—	dop	dot <sup>5</sup>

The first three examples cited have Austronesian connections (Benedict 1975:249, 275, 301).

A pan-Tai cognate has been cited above for ‘to chew up (food)’ in §1.4, which also takes the palatal nasal \*hp. The form cited here means ‘to chew (hard food)’, and has wider genetic links: cf. Lin-gao *njan*<sup>2</sup>, Hlai *nom*<sup>3</sup>.

The form for ‘to drink, slurp’ has a wider connection, being also attested in Mulao as *hyop*<sup>7</sup> (D1S). This form may be related to the pan-Tai cognate ‘to suck, kiss’, which has been reconstructed by Li as \*?duot (1977:109, 267).

‘To bite seeds, crack’ seems to form a word family with ‘to eat’, ‘to bite’, and ‘to gnaw’, among others.

For ‘to run’, Li has identified a different word for the Southwestern and the Central dialects (1977:133), which takes a liquid initial, \*len (B2). The Thai and Lao forms cited above mean ‘to be eager’.

No correspondences are found for the rest of the examples in the Central dialects in our data.

In addition to the above-cited examples, a set of items describing productive activities is also found. These includes terms for tools and the actions associated with them as well as animal-raising and fishing terms.

Gloss	PT	Tone	Thai	Lao	DH	WT	Yay	FS
'to carry on the back'	*ʔua	C1	ʔua	ʔua	—	—	ʔua A1	ʔoo
'to spin (thread)'	*suay	A1	khra-suay	suay	—	—	—	ɕwai
'to drive, guide or lead cattle'	*ʔuan	A1	—	ʔuan	ʔon	ʔon	—	ʔuan
'to feed animals'	*kua	A1	—	kua	—	kə	kua	kua
'to copulate (of animals)'	*ʔdaw	C1	kra-daw	daw	—	—	daw	daw
'river crossing'	*sok	D1L	—	sook	—	—	θok	θook
'a kind of eel'	*hlut	D1S	—	lut	—	—	—	lut
'a kind of eel-like fish'	*çi	A1	—	—	tsi C1 si A2	Lue tsi C1	—	çi A1
'a kind of oily fresh water fish'	*hlaat	D1L	cha-laot	sa-laot	—	laat	raat	laat
'to catch fish using a dipper net, scoop'	*son	C1	—	sɔɔn	sɔn	son	—	sɔn

'To carry on the back' is represented only in Thai and Lao among the Southwestern dialects in our data. Many other Tai dialects simply use the term \**baa* 'to take along, carry', as noted by Li (1977:66), for this purpose.

'To spin (thread)' is of limited distribution in the Southwestern dialects, found only in Thai and Lao in our data, where the word is used as a noun, meaning 'shuttle'. This form appears to have a wider genetic link, cf. Lin-gao *sia*<sup>1</sup>, Maonan *sa*<sup>3</sup>, and more significantly, Hlai *hwei*<sup>1</sup>. The Hlai form may explain the variations in Tai.

The rest of the items supply evidence of Tai people being animal-raisers as well as hunter-gatherers.

Three items describing dwelling and housing constructions are also noteworthy:

Gloss	PT	Tone	Thai	Lao	DH	WT	Yay	FS
'bedroom'	*druk	D2S	—	—	luk D1S	BT duk D1S	ruk	luk
'low, projected roof'	*buaŋ	A2	phəəŋ	phuaŋ	puŋ C1	—	—	puŋŋ
'beam'	*faŋ	A1	—	—	faŋ A2	faŋ	faŋ	faŋ

For the first item, the meaning of the Dehong form is 'bedroom of master Buddha'. No correspondences are found in Thai or Lao, nor in White Tai.

'Low projected roof' and 'beam' are also sporadically represented in the Southwestern dialects, with tone variations.

Last, but not least, are several items related to body parts or physical conditions.

Gloss	PT	Tone	Thai	Lao	DH	WT	Yay	FS
'marrow of bone'	*ŋui	A2	—	ŋuy 'giddy'	—	—	ŋuy	ŋui
'back of the neck'	*ʔdon	C1	—	ka-don	—	—	dan	ɗɒn
'wart'	*hruʔ	D1	huʔ	tuʔ	hut	hut	ruʔ	lut
'stupid, idiot, ignorant'	*ʔŋua	B2/ C2	ŋoo B2	ŋoo B2	ŋa B1	—	ʔwaa C2	ʔwaa C2

Lao is the most conservative dialect among the Southwestern group in preserving all these items, which are rather uniformly represented in the Northern dialects in our data.

The distribution of the above lexical items in the Southwestern and the Northern dialects suggests that we are dealing with remnants of proto forms, which are a strong indication of a closer contact between these two groups when Proto-Tai split.

### 2.2.5 Terms for social organizations

Three items in our data exhibit interesting distribution patterns and pose difficulties for subgrouping. These are terms for social organizations, which supply vital information on the early movements of the Tai people.

Gloss	PT	Tone	Thai	Lao	DH	WT	BT	LM	Yay	FS	Saek
'country, state'	*buaŋ	A2	—	—	—	—	—	puuŋ	puan	puan	phiaŋ
'country, area'	*muaŋ	A2	muʔ	muʔ	məŋ	məŋ	məŋ	—	muʔ	—	—
'place, town, location'	*gre	A2 C2	khrua A2	khua A2	tse A1/ B2	—	—	—	ce C2	tɕie A2 tɕe C2	—

Note that the first item separates the Southwestern from non-Southwestern languages. This word seems to be shared by Chinese *paan*<sup>1</sup>, also meaning 'country, state', which occurred in the Yin bone inscriptions and which was reconstructed as *pǔng* by Karlgren (1940: 1197e, 1197g) and as *paiwŋ/pæ:wŋ* by Pulleyblank (1991: 29). In spite of intense contact with the Southwestern languages, Saek still retains this form.

The second item, which appears to be basically a Southwestern word (cf. §2.2.2), was recorded in *Man Shu*, a historical work dealing with non-Chinese tribes in Yunnan by Fan Chuo in Tang times (863 AD), where it was recorded as having been used by the non-Chinese tribes to refer to themselves (Fan 1985:170). This term has been frequently cited by scholars in China as a piece of linguistic evidence for early Tai settlement in Yunnan (You 1985, Jiang 1983). This form was not recorded in Lungming or Nung Fan Slihg in our data, but it is found in Yay, suggesting that Yay may have borrowed this form from White Tai.

The last item also boasts a long history as it was found in early Chinese sources. Often used as the first element in compounds for place names, this form was recorded in *Han Shu*, the Chapter 'di li zhi', by Ban Gu (100 AD), a historical work dealing with the Former Han period (-206 to +24 AD). The term is still preserved in a number of place names in Tai-speaking areas in Yunnan (Wu 1988: 100) as well as in Guangxi and Guizhou today. The form appears to be shared by the Vietnamese term *quê*, which was inappropriately thought to be a native Vietnamese word with the meaning 'village, locality' (Taylor 1983:8). It seems quite likely that the Vietnamese borrowed this term from Tai.

If words of this kind are criterial in subgrouping, none of the two-way or three-way classification schemes will work.

### 2.2.6 The case of Dehong: implications for lexical classification

We have described in the previous subsections several patterns of lexical distribution relevant to Tai subgrouping. We now turn our attention to Dehong, which raises interesting questions with regard to lexical classification.

As already pointed out in §1.5, Dehong is the only Southwestern dialect studied here that supplies a 'missing link' for pan-Tai status for a number of lexical items that were formerly found to be otherwise restricted to non-Southwestern dialects. Following are more examples of this kind.

Gloss	PT	Tone	DH	L'ming	Nung	Yay	FS
'to crawl through (a narrow space)'	*ʔdon	C1	lan	—	dun	don	doon
'right in the middle'	*deŋ	A2	teŋ A1	—	tiŋ	teŋ	teŋ
'to gather, collect'	*do	A2	to	too	to	to	to
'to merge, gather up'	*khlon	C1	xon	can	—	con	tʃoon
'rapids in river'	*hlaai	B1	laai	laay	—	raay	laai
'late, tardy'	*luot	D1L	lut D2S	WT lut	—	lot	loot
'half old and half new'	*hmaŋ	A1	moŋ	maŋ	—	maŋ	maŋ
'to tiller, tillering'	*Mun	A1/2	mun	muun	—	—	mun
			A2	A2			A1
'patch (of field)'	*raai	B2	hau	—	laay	raay	laai
'to bounce, splatter'	*zin	A2	sin A1	sin	—	θin	θin
'to crowd into a small place'	*zon	C2	son A2	—	san	san	θen
'to burn over fire'	*blaam	A2	laam	—	pem	pyaam	pjaam

These all appear to be good pan-Tai cognates. Particularly important are words like 'to gather, collect', 'rapids in river', 'to crawl through a narrow space', 'to burn over fire', and 'patch (of field)' (differentiated from *hai*<sup>B2</sup> 'upland field' in Dehong), which reflect early Tai culture. But none of the them are found to be represented in other Southwestern dialects in our data. Note, too, that not every item is found in the two representative Central dialects.

More significant still are items that are shared by Dehong and the Northern dialects only. The following three examples are illuminating:

Gloss	PT	Tone	DH	Yay	FS	Saek
'do not . . . yet'	*ba	B2	paa	paa	paa	phaa
'to pole (a boat)'	*seŋ	B1	seŋ	seŋ	seŋ	kuuŋ
'to stand'	*zoŋ	A2	soŋ	soŋ	soŋ	yoŋ

These examples are all found in Saek, indicating that they are common Northern words. The first item is a grammatical-functional operator characteristic of the Northern languages. This word is not found in any Central dialects in our data. For 'to pole (a boat)', the Saek form means 'to pry up', which may not be related. The item for 'stand' is also significant. Note that Saek has the palatal semivowel /y/, which is found to be a special feature of this language to represent Proto-Tai sibilant fricatives, cf. *yak*<sup>6</sup> 'to wash (clothes) (from PT \*zak)', *yo*<sup>5</sup> 'to be straight' (from PT \*zio), *yaa*<sup>4</sup> 'to roast' (from PT \*çi ?).

In a number of cases, such shared items are found in Dehong, Yay and Fengshan only, but not in Saek. The following examples illustrate.

Gloss	PT	Tone	DH	Yay	FS
'a kind of bamboo'	*?drok	D1S	hok	dok	ɔk
'to donate, ransom'	*dl/ru	B2	lu B1	ru	lu
'to mix, be mixed up'	*dliaw	C2	lo A2	riaw	liaw
'back basket'	*jaŋ	C2	yoŋ B2/A1	yaŋ	yaŋ
'plump, well-filled'	*mwaak	D2L	maak	faak	faak
'to pound rice slightly to make it whiter'	*sop	D1S	sut	sop	sop
'time of a cock crowing'	*zau	B2	sau	θaw	θau
'a kind of tree'	*jam	A2	yom	yam	jam

Again these appear to be everyday Tai words, which one would expect to find in every Tai dialect. Especially revealing are items like 'a kind of bamboo', 'back basket', 'plump, well-filled', 'to pound rice lightly', and 'time of a cock crowing'. Of these, 'back basket' and 'time of a cock crowing' merit special mention. The form for 'back basket' is also found in Tai Ya among the Southwestern dialects in our data, with tone A1. 'Time of a cock crowing' is a very important cultural concept for measuring time in Tai. Note that Dehong is the only Southwestern dialect in our data that preserves the item, which is widely distributed in the Northern dialects. This form may be related to the item for 'morning, early', which is quite uniformly represented among the Tai languages and which Li has reconstructed as \**ɰau* (C2) (1977:168).

Moreover, our data shows that several items are found to be shared only by Dehong and Fengshan, but not by Yay.

Gloss	PT	Tone	DH	Yay	FS
'to hit, strike, punch'	*?boŋ	C1	maŋ B2	—	boŋ
'to splash, sprinkle'	*Son	A1/2	son A2	—	θon A1
'a kind of eel-like fish'	*çi	A1	tsi B1, si A2	—	çi
'a piece (of land)'	*lok	D2	lɔk D1	—	look D2
'to kick (of a horse)'	*?eŋ	A1	?eŋ	—	?eŋ

The distribution patterns of words of this kind raise important questions for the lexical classification of Tai dialects. What significance is to be given to the above examples? How do we account for this phenomenon? If lexical items are traces of the migration movements of a cultural group, this seems to suggest that a group of Northern speakers may have moved southwards and then northwestwards, as Chinese historical sources seem to have indicated (see Luo 1996). Also there may have been dialect mixing with other Tai varieties, a point to which we shall return in Chapter 8. This type of argument may be supported by similar facts elsewhere, e.g. in some Western Nung dialects such as Sin Fong Yiw (Gedney 1995:410ff), a dialect located right on the north bank of the Red River in Yunnan on the Chinese side of the Sino-Vietnamese border, which shows Central/non-Northern phonological features but Northern lexical features:

Gloss	Tone	Dehong	SFY	LM	LC	Yay
'two or more carry'	D1L	haam	thaam	thaam	haam	raam
'tail'	A1	haaŋ	thaan	thaan	haan	ruaŋ
'shower'	B2	haa	chaa	laa	haa	raa
'the ribs'	C1	xaan	chaan	laan	—	θeŋ C2
'ear'	A1	hu	chuu	low	hu	rua A2
'to measure'	A1	—	chaaw	laaw	—	raaw
'rice'	C1/2	xau	khaw	khaw	khaw	haw C2
'older sibling'	B2/C2	pi B2	pii B2	pii B2	pi B2	pi C2

The above examples show that Sin Fong Yiw has the phonology typical of the Central group, in particular for items like 'two or more carry', 'tail', 'shower', 'ear'; and non-Northern features for items like 'rice', 'older sibling', for which the Northern dialects show different tones.

Although Sin Fong Yiw is characteristically a Central dialect, it shares a significant number of lexical items with the Northern dialects which are not found in such Central dialects as Lungchow, Lungming, or Leiping, which are also located in China. Some examples are given below.

Gloss	Tone	SFY	LM	LC	Yay	FS
'cloth'	A2	phan A1	—	—	pan	pan
'bamboo shoots'	A2	θaan	—	—	raan	laan
'mosquito net'	D1L	θip	—	—	riap	liap
'yellow'	C1	hen	—	—	hen	hen
'rust'	C2	nay	—	—	nay	nai
'market'	A1	hu	—	—	hu	hu
'to do'	D2L	hok	—	—	kwa B2	kwak
'insane'	D2L	paak	—	—	paak	paak

Items like 'bamboo shoots', 'mosquito net', 'yellow', and 'rust' have been cited in Li (1977) as Northern words, not found in other branches. Their presence in Sin Fong Yiw seems to supply evidence for our hypothesis of the southbound and then northwestbound migration of a group of Northern Tai suggested above, which appears to be in line with historical records of the turbulent periods in early



Song when Nong Zhigao and his clan was suppressed by both the Chinese and the Vietnamese rulers (Luo 1996, Barlow 1987).

2.2.7 Summary on dialect words

To sum up the result of findings on dialect words: a significant number of unique dialect words have been identified that may have implications for Tai subgrouping. However, matters are complicated when shared items are taken into account. The following figures show Li's findings in comparison with ours.

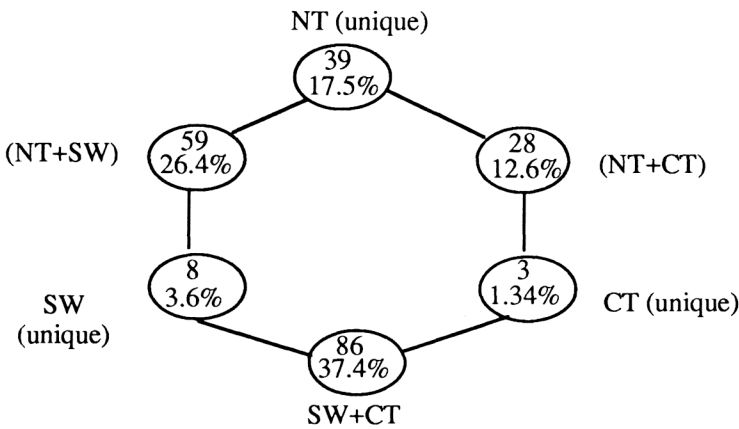


Figure 1. Lexical sharing in Tai branches after Li (1977), figures referring to total lexical items

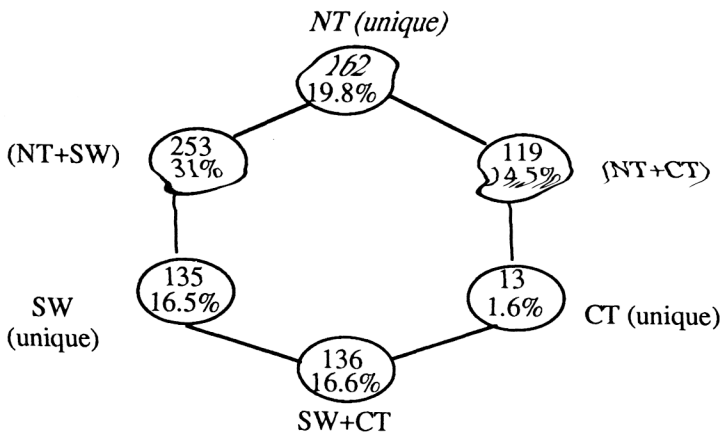


Figure 2. Lexical sharing revised with new data included

It can be seen that the proportion of Li's unique Northern words is very similar to ours, and the same is true of his unique Central words. There is a considerable difference in the number of unique Southwestern words between the two sets of figures: 3.6 % in Li's data but 16.7% in ours. In terms of lexical sharing, Li's data indicates that the Southwestern and the Central languages have more words in common than the Southwestern and the Northern languages. However, our new data point to the opposite conclusion. In addition, new findings suggest that a group of Northern Tai speakers may have made a southward movement and then turned northwest.

### 3. Summary of findings: implications for Tai subgrouping

The following table sums up the results of our initial findings, in conjunction with Li's data. Emphasis is laid on lexical materials as they are considered to be an important criterion for subgrouping.

Cognate types	PT	SW	SC	SN	CT	CN	NT	Total
Li's count	997	8	86	59	3	28	39	1220
New count	1009	8	71	63	3	21	35	1220
New cognates <sup>5</sup>	337	127	64	186	10	89	129	942
Subtotal	1356	135	136	253	13	119	162	2162
Percentage	62.7%	6.24%	6.3%	11.7%	0.6%	5.5%	7.49%	100%

A few general remarks can be drawn from the above discussion. First, our findings support the views of Li and others that the Northern and the Southwestern languages each form a distinct group. However our statistics raise doubt over current views that there is a closer link between the Central and the Southwestern languages. We have found that there are more shared cognates between the Southwestern and the Northern languages than between the Southwestern and the Central languages. On the other hand, the number of shared cognates between the Central and the Northern languages is about the same as that between the Southwestern and the Central languages; the difference is very marginal. The status of the Central languages as a distinct group is questionable if this factor is taken into account.

In certain aspects of cultural vocabulary, there are indications that the Central and the Northern languages fall together as a group as opposed to the Southwestern group. However, there are cross connections between the three groups that make a two-way or three-way division rather difficult.

In general there appears to be a mismatch between lexical and phonological features with regard to subgrouping, which may be attributed to lexical diffusion.

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<sup>5</sup>A full list of new cognates will not be offered here for lack of space; they will be published at a later stage.

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