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# Jinghpo Prefixes: Their Classification, Origins, and Implications for General Morphology

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## INTRODUCTION

The term 'prefix' in the title refers to the initial syllables in the following disyllabic Jinghpo words:

fix	Relevant wo	ords
make sb. cry	[kh3ap31]	to cry
cause to sleep; put to bed	[jup <sup>55</sup> ]	to sleep
possessions	[lu <sup>31</sup> ]	to have
his mother < pron. >	[nu <sup>51</sup> ]	mother
twins	[ma <sup>31</sup> ]	child
	[ʒun <sup>55</sup> ]	side by side, abreast
black soil	[ka <sup>55</sup> ]	earth, soil
	[t∫ <u>a</u> ŋ³³]	black
elephant	[kui <sup>31</sup> ]	dog
leader	[po <sup>33</sup> ]	head
star	cf. Written	Tibetan skar ma
knee	cf. Written	Tibetan pus mo
to help	cf. Motuo N	Menba [rum]
	make sb. cry cause to sleep; put to bed possessions his mother <pro> twins  black soil  elephant leader star knee</pro>	make sb. cry $[k^h3ap^{31}]$ cause to sleep; $[jup^{55}]$ put to bed possessions $[lu^{31}]$ his mother $<$ pron. $>$ $[nu^{51}]$ twins $[ma^{31}]$ $[3un^{55}]$ black soil $[ka^{55}]$ $[tfan^{33}]$ elephant $[kui^{31}]$ leader $[po^{33}]$ star $[tfan^{33}]$ cf. Written knee $[tfan^{33}]$

There are several reasons for identifying all the initial syllables in the left column as prefixes. 1) They appear word-initially. 2) They are bound, i.e. they cannot stand on their own. 3) These initial syllables verge on being a closed class. 4) Each one of these syllables recurs before a number of morphemes, thereby creating a set of words beginning with the same prefix but having different roots. The size of the set varies from only a few items to about 70 words in one instance and to [ʃã-], the productive causative prefix. 5) These syllables have two phonetic characteristics: (a) the syllable nucleus is always a simple vowel, never a diphthong. Moreover, this vowel is either [i], [u], or a weakened [a], i.e. the

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schwa, which is transcribed with the breve as [ $\check{a}$ ] in Xu et al. (1983), and (b) these syllables fairly often begin and/or end with a nasal, such as the  $[ni\eta^{31}-]$  in  $[ni\eta^{31}po^{33}]$  'leader'.

Xu (1986) is the first study (at least in China) of Jinghpo prefixes. She divides them into two groups and coins a new term: prefix vs. ban-qiánzhuì, literally 'semi-prefix'. That paper, however, offers only a preliminary treatment of the latter, and its classification is rather limited in scope. Then Dai (1993) came along to describe, and explain the origins of, semi-prefixes in more detail. He also propounds that the historical process of reducing several content morphemes into a single form in the word-initial position (i.e. a semi-prefix) signifies the simplification, motivated by the principle of economy, in the phonetic format of disyllabic words (p. 188). Departing from Xu's analysis, Part 1 of the present paper proposes a tripartite classification of Jinghpo prefixes. Furthermore, based on Dai's insight into the semi-prefix, Part 4 demonstrates the feasibility of a natural language creating new disyllabic words with a relatively small inventory of word-initial syllables, some of which are devoid of any meaning.

The three types in question are: prototypical prefixes (such as the causative ones), semi-prefixes, and look-alike prefixes. An example of the second type is the  $[k\bar{a}^{31}]$  in  $[k\bar{a}^{31}t]$  'black soil', which originates from the free morpheme  $[ka^{55}]$  'earth, soil'. An example of the last type is  $[j\bar{a}^{31}3am^{33}]$  'otter', the initial syllable of which evidently comes from the consonant cluster in its Proto-Tibeto-Burman (PTB) etymon, as reflected by the cognate in Written Tibetan (WT): sram 'otter.' (The symbol [3] in the Jinghpo transcription represents an r-colored sound; in fact, it corresponds to the letter 'r' in the orthography. Two other IPA symbols are also viable for this sound, namely  $[z,\pm]$  and [1].) Part 2 of this paper argues against Xu's classification of a certain group of bound morphemes as a subset of semi-prefixes.

Since the origin of a prefix is a major criterion of its classification, Part 1 also illustrates the origins of each type of prefix. It first traces one of the causative prefixes in Jinghpo, i.e. the afore-mentioned [ʃă-], to the \*s- of the same function in PTB. As for semi-prefixes, they originate from word-initial content morphemes in what used to be genuine compounds. In relation to this, it is suggested that semi-prefixes present a problem to the definition of 'compound nouns' as consisting of free morphemes. Lastly, some instances of look-alike prefixes are shown to descend from word-initial clusters in PTB, whereas others find no genetic correspondence in other Tibeto-Burman (TB) subgroups. A list of words in other TB languages cognate with Jinghpo words with a prefix is also given. Part 3 schematically delineates a few sample etymologies to reiterate the historical development of prefix morphology in Jinghpo.

With regard to data for the present study, those of the prototypical prefix are primarily from Xu (1986), while those of the semi-prefix are from Dai (1993). The English gloss of Jinghpo words provided here is based on Hanson (1906), henceforth shortened to 'Han.' after quotations from the dictionary, and Xu et al. (1983), hereafter just 'Xu et al.'. Since the former has no phonetic transcriptions,

all the Jinghpo transcriptions in this paper are from the latter dictionary.

#### 1. THREE TYPES OF PREFIXES

# 1.1 Two Groups of Prototypical Prefixes

Prototypical prefixes are subdivided into two groups: causative prefixes, and prefixes which change the part of speech of the root morpheme. Both of them share the function of qualifying the root, which is the head of the word.

1.1.1 Causativization is a regular morphological process in Jinghpo. There are three causative prefixes, viz. [a-], [ʃiŋ-], and one with two variants: [tʃā-] before a root beginning with a voiceless fricative or an aspirated consonant, and [fā-] elsewhere. Of these three prefixes, the last one is by far the most frequent; it can attach to most monosyllabic verbs and adjectives. Note the following examples:

ectives, etc. <sup>2)</sup>	Causative Verbs	
to cave in, to be dented	[a <sup>31</sup> ŋjop <sup>55</sup> ]	to dent
[of sth.] to crack	[a <sup>31</sup> p3ep <sup>55</sup> ]	crack sth.
to be covered (up)	[ʃiŋ³¹nip³¹]	cover (up)
to be or go beyond	[ʃiŋ³¹toౖt⁵⁵]	jump or leap over
to cry	[t∫ă <sup>31</sup> kʰʒap <sup>31</sup> ]	make sb. cry
to be wrong	[tʃă <sup>31</sup> ʃut <sup>55</sup> ]	make a mistake
to be thin {=not thick}	[tă <sup>31</sup> p <sup>h</sup> a <sup>31</sup> ]	make thin
to pass [an exam]	[∫ă³¹oŋ³³]	let sb. pass [an exam]
to be drunk	[∫ă³¹na⁵⁵]	make sb. drunk
to be clean	[ʃă³¹tsai³³]	to clean
a name	[∫ă³¹mjiŋ³¹]	to name
in a ruffled manner	[∫ă³¹mjam⁵⁵]	[hair] hang down loosely
	to cave in, to be dented [of sth.] to crack to be covered (up) to be or go beyond to cry to be wrong to be thin {=not thick} to pass [an exam] to be drunk to be clean a name	to cave in, to be dented [ $a^{31}\eta j o p^{55}$ ] [of sth.] to crack [ $a^{31}p j o p^{55}$ ] to be covered (up) [ $\int [i \eta^{31} n i p^{31}]$ ] to be or go beyond [ $\int [i \eta^{31} k^{55}]$ ] to cry [ $\int [i \eta^{31} k^{31} a \mu^{55}]$ ] to be wrong [ $\int [i \eta^{31} k^{55}]$ ] to be thin {=not thick} [ $\int [i \eta^{31} n \mu^{31}]$ ] to pass [an exam] [ $\int [i \eta^{31} n \mu^{35}]$ ] to be drunk [ $\int [i \eta^{31} n a^{55}]$ ] to be clean [ $\int [i \eta^{31} n a^{55}]$ ] a name [ $\int [i \eta^{31} n \mu^{31}]$ ]

It has generally been accepted that \*s- was a causative prefix in PTB and that almost all TB languages show traces of this prefix. The Jinghpo causative prefix  $[t[\tilde{a}-]/[f\tilde{a}-]]$  should be a reflex of this \*s-. Examples from the small number of

[tsa<sup>31</sup>] to be damaged [ $[\check{a}^{31}tsa^{31}] \sim [s\check{a}^{31}tsa^{31}]$  to destroy [tsam<sup>31</sup>] strength, spirit [ $[\check{a}^{31}tsam^{31}] \sim [s\check{a}^{31}tsam^{31}]$  to energize; to spur on

But in the case of [tsap<sup>55</sup>] 'to stand', there is only [ʃă<sup>31</sup>tsap<sup>55</sup>] 'make sb. stand' and no [să<sup>31</sup>tsap<sup>55</sup>] in either Hanson (1906:613) or Xu et al. (1983:720).

<sup>1)</sup> Some instances of [ʃã-] are in free variation with [sã-] before a root morpheme beginning with [ts], for example:

<sup>2)</sup> Many Jinghpo words that have the verb 'to be' in their gloss in Hanson (1906) are classified as adjectives in Xu et al. (1983), e.g., [pha<sup>31</sup>] < adj. > 'thin' (p. 272) and [tsai<sup>33</sup>] < adj. > 'clean' (p. 838). In Sino-Tibetan languages, an adjective by itself can generally be the predicate, so the verb 'to be' often makes a better English gloss.

Tibetan and Jinghpo cognate verbs that simultaneously show prefix causativization are given below. (The overwhelming majority of causative verbs with initial consonant cluster in Tibetan have s- as the prefix; the rest have b-, g-, d- and sporadically m- and fi- [Gesangjumian 1982:31].)

WT	Tense (if not present)	Lhasa Speech in IPA	Jinghpo	Gloss
nub snub fik <sup>h</sup> ur	• ,		[lup <sup>31</sup> ] [∫ă <sup>31</sup> lup <sup>31</sup> ] [kun <sup>33</sup> ]	[e.g. of a boat] to sink cause [e.g. a boat] to sink to carry on one's back;
skur gas bkas	past past		[ʃã <sup>31</sup> kun <sup>55</sup> ] [ka <sup>931</sup> ] [ʃã <sup>31</sup> ka <sup>931</sup> ]	to have on one's person cause to carry; to send [a letter] to crack, split, break cause to crack, split; to smash
t¢ <sup>h</sup> ag (zig	past)		[pjak <sup>31</sup> ] [pʰjak <sup>31</sup> ] [pja <sup>955</sup> ]	to be broken to be destroyed [e.g. of a house] to be in ruins, fall
(P-2			[tsa <sup>31</sup> ]	down <sup>3)</sup> 'To be damaged [or] too roughly handled' (Han., p. 733)
btcag	past		[ʃă³¹pjak³¹] [tʃă³¹pʰjak³¹]	to break; to put out of order cause to be destroyed
(bçig	past)		[ʃǎ <sup>31</sup> pja <sup>755</sup> ] [ʃǎ <sup>31</sup> tsa <sup>31</sup> ]	cause to fall down; to demolish 'To destroy, as one's own work' (Han., p. 656)
bzu bzu fit <sup>h</sup> ib			[pju <sup>31</sup> ] [ʃã <sup>31</sup> pju <sup>31</sup> ] [nip <sup>31</sup> ]	to melt, dissolve cause to melt; to smelt <sup>4)</sup> to be covered up; to become overcast
gtib dral	past	[tşhe13]	[ʃiŋ <sup>31</sup> nip <sup>31</sup> ] [t∫e <sup>55</sup> ]	[of clouds] to gather and cover up <sup>5)</sup> T.: to get torn/ripped; for J.: to tear up
dbral	past	[re <sup>55</sup> ]	$[\int \bar{a}^{31} t \int e^{55}]$	cause [sth.] to tear

<sup>3)</sup> The brackets around the Tibetan word zig means that even though it means '[of a house] to fall down, to be in ruins', it is unrelated to the comparison here.

<sup>4)</sup> In Yu (1983:842) 'to melt, dissolve' and 'to smelt' are two senses of a single entry, viz., bzu(r) ~ zu. (Incidentally, the dictionary has recorded the future, past, and imperative forms for the latter sense, but only the present (or infinitive) form for the former.) In Goldstein (1978: 980 & 1000), zu and bzu are two separate entries, but they have almost the same gloss. Qujizhaba (1957) has, however, zu ba for 'to melt, dissolve' (p. 738) and bzur for 'to burn, smelt' (p. 753). It is possible that the two senses were pronounced differently in ancient times.

<sup>5)</sup> The WT form cited here is in both Goldstein (1978:480) and Qujizhaba (1957:338) but not in Yu (1983:419).

<sup>6)</sup> The WT form cited here of the verb 'to get torn/ripped' is in Goldstein (1978:577) but not in Yu (1983:915).

It should, however, be pointed out that the roots in most simplex-causative verb pairs are phonetically quite different in Jinghpo and Tibetan, for example:

WT	Jinghpo	Gloss
lan slon nal snol gon skon fikhol skol fikhor skor fithor gtor fitchad gtood fitchag gtoog fithor	[3ot <sup>31</sup> ] [[ă <sup>31</sup> 3ot <sup>31</sup> ] [[jup <sup>55</sup> ] [[ă <sup>31</sup> jup <sup>55</sup> ] [phun <sup>55</sup> ] [phun <sup>55</sup> ] [tʃā <sup>31</sup> phun <sup>55</sup> ] [pʒut <sup>31</sup> ] [[ă <sup>31</sup> pʒut <sup>31</sup> ] [tʃai <sup>33</sup> ] [[ă <sup>31</sup> tʃai <sup>31</sup> ] [pʒa <sup>55</sup> ] [[ă <sup>31</sup> tga <sup>55</sup> ] [ti <sup>31</sup> ] [[ă <sup>31</sup> ti <sup>31</sup> ]	to get up; to stand cause to get up to sleep cause to sleep; put to bed to wear cause to wear; to dress to be boiling to boil [of sth.] to turn around and around to turn/spin/roll sth. to separate, disband cause to disband, disperse [e.g. of a rope] to snap, sever cause [e.g. a rope] to snap; to sever [e.g. of a tree branch] to break cause to break to crumble, break down
gtor		to destroy, crush

Even though many of the roots in Jinghpo and Tibetan causative verbs look unrelated, some interesting cognate cases can still be unearthed there. The pair of verbs 'to suck' and 'to suckle' is a case in point. Consider the following words:

Gloss	WT	Jinghpo	Remarks
breasts; milk	fio ma nu ma	[tʃu̞ <sup>ʔ55</sup> ]	J.: [nu <sup>51</sup> ] 'mother' {Related?}
milk < n.>	ho btcud		T.: btcud 'nutrition'
to suck <sup>7)</sup>	nu	[tʃu̞ <sup>ʔ55</sup> ]	
	fidzib	[mã <sup>31</sup> ʒun <sup>31</sup> ]	
•	•	[t∫up <sup>31</sup> ]	'to suck [the finger]'
to breast-feed8)	snun	[ʃă³¹tʃu̞ˀ⁵⁵]	•
	blud		
	ster		

Both WT and Jinghpo show causativization for the pair 'to suck' and 'to breast-feed': nu vs. snun and  $[t \int \underline{u}^{955}]$  vs.  $[f\bar{a}^{31}t \int \underline{u}^{955}]$  respectively. But the Jinghpo root  $[t \int \underline{u}^{955}]$  is rather related to the second syllable of the Tibetan noun for 'milk', i.e.

<sup>7)</sup> The WT form nu is in Huang (1992:550) but not in Yu (1983:#555 & 872).

<sup>8)</sup> The WT forms snun and blud are in Goldstein (1978:#663 & 776) but not in Yu (1983:#572 & 665).

btcud, which by itself as a free morpheme means 'nutrition' in contemporary Lhasa speech. Another cognate example is the Jinghpo word for 'to fetch somebody':

Gloss	WT	Jinghpo	Remarks
speech	skad tçha	[ka <sup>31</sup> ]	cf. Written Burmese (WB) [cakā <sup>3</sup> ]
			T.: skad 'sound, voice'
	* * *		tcha {meaning unknown; a suffix?}
fetch somebody	skad gton	[ʃă³¹ka⁵⁵]	T.: gton 'do, make'
			J.: cf. [ʃă <sup>31</sup> ka <sup>33</sup> ] speak

Although it cannot be proven beyond doubt that the [ka<sup>55</sup>] in [ʃā<sup>31</sup>ka<sup>55</sup>] 'to fetch' is related to [ka<sup>31</sup>] 'speech', a similar kind of construction in Tibetan makes it seem probable.

The point here is that although Jinghpo and Tibetan have both inherited the causative category from PTB, the relevant prefixes may have attached to different PTB cognates. On the other hand, the divergence of the roots in Jinghpo and Tibetan causative verbs means that causativization as a morphological process must still have been productive after PTB had split up into different subgroups.

1.1.2 The second group of prototypical prefixes changes the part of speech of the root morpheme. Before proceeding to a discussion of actual examples, a caveat is in order here: the parts-of-speech systems in Hanson (1906) and Xu et al. (1983) are very different. Accordingly, the two dictionaries often assign the same word to a different part of speech. This difference, although theoretically important for an elegant grammar of the Jinghpo language, does not significantly affect the analysis here presented. What is important is the shift in part of speech, thereby denoting a change in syntactic behavior, even though Hanson and Xu et al. may disagree on the part of speech of an individual word.

The prefixes with the most productivity in this group are the two uses of  $[a^{55}]$  and the two nominalizers  $[t] \underline{\check{a}}^{33/55}$  and  $[f \underline{\check{a}}^{33/55}]$ . The first use of  $[a^{55}]$  is to go before a verb to signify repetition, e.g.,  $[k \underline{\check{a}}^{31}] 0^{33}$  'to do' and  $[a^{55}k \underline{\check{a}}^{31}] 0^{33}$ ] 'to do sth. often', and  $[f a^{55}]$  'to eat ' and  $[f a^{55}] 0$  'to eat sth. often'. Secondly, an adjective or a verb is preceded by  $[f a^{55}] 0$  and followed by  $[f a^{31}] 0$  to produce an adverbial phrase. Note the following examples, where 'sfp' stands for 'sentence-final particle':

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[loi<sup>31</sup>] easy:

[a^{55}loi<sup>51</sup> \int a^{31} phā<sup>55</sup>an^{55} kau<sup>55</sup>] to have easily solved easily solve perfective marker [a problem]

[pui<sup>31</sup>] slow:
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[a <sup>55</sup> pui <sup>51</sup> ∫a <sup>3</sup> slowly	k <sup>h</sup> om <sup>3</sup> walk	33]			to walk slo	owly
[kă³¹t∫oŋ³¹]	<v.> to scar</v.>	e, fright	en:			
[a <sup>55</sup> kă³¹t∫oŋ <sup>3</sup>	<sup>31</sup> ∫a <sup>31</sup>	n <sup>55</sup>	mu <sup>51</sup>	mat <sup>31</sup>	sai <sup>33</sup> ]	suddenly cannot
suddenly		not:	see	perfective marker	sfp	be seen/found
$[lu^{31}]$ < aux	v.> to be ab	le to:				
[phot55ni55	a <sup>55</sup> lu <sup>51</sup> ∫a <sup>31</sup>	sa <sup>33</sup>	3it <sup>31</sup>	lu <sup>33</sup>	3]	You must come
tomorrow	definitely	go	sfp towar		rticle r request	tomorrow!

The two prefixes [t] and [f and [f and [f and f can tag on to most monosyllabic verbs and adjectives to produce corresponding nouns, for example:

[si <sup>33</sup> ] [lu <sup>31</sup> ]	to die to have	[t∫ <u>ã</u> <sup>33</sup> si <sup>33</sup> ] [t∫ <u>ã</u> <sup>55</sup> lu <sup>51</sup> ]	n. a dead person n. 'Possessions; whatever may be on hand or laid by' (Han., p. 96)
[mu <sup>33</sup> ]	delicious	[t∫ <u>ă</u> ³³mu³³]	n. delicious food
[t∫e <sup>33</sup> ]	know, understand	[ʃã <sup>33</sup> tʃe̞ <sup>33</sup> ]	n. the state of knowing how to do sth.
[lum <sup>33</sup> ]	warm	[ʃă³³lum³³]	n. something that is warm
[tum <sup>55</sup> ]	to feel	[ʃă <sup>55</sup> tum <sup>55</sup> ]	n. the state of being awake

The other prefixes in this group, although much more restricted in distribution, are theoretically more interesting. There are, for example, some other prefixes besides  $[t]_{\underline{a}^{33/55}}$  and  $[f_{\underline{a}^{33/55}}]$  that are also used for nominalization. Note the following words:

[a <sup>31</sup> ŋok <sup>31</sup> ]	n.	'(from ngawk, to be silly.)	
		A foolish, silly, puerile person'	(Han., p. 18)
[thoŋ <sup>33</sup> ]	v.	leave behind	(Xu et al., p. 319)
[n <sup>33</sup> t <sup>h</sup> oŋ <sup>33</sup> ]	n.	legacy, inheritance	(Xu et al., p. 592)
[pʒa <sup>955</sup> ]	v.	'To be apart, severed, not close; to be	
		forked'	(Han., p. 73)
[kă <sup>55</sup> pʒa <sup>955</sup> ]	n.	' a fork, a crotch, as of a limb'	(Han., p. 245)
[poŋ <sup>33</sup> ]	v.	'to be swelled'	
[kin <sup>31</sup> poŋ <sup>33</sup> ]	n.	'ridges, as made by ploughing'	(Han, p. 153)
[kin³¹t∫um³³]	n.	'(from chyum, to be tapering.)	
		The base of a hill, as seen from the top;	
		a cape, a promontory'	(Han., p. 153)
[ʃot <sup>31</sup> ]	v.	to shovel	(Xu et al., p. 801)
[lă <sup>55</sup> ∫ot <sup>55</sup> ]	n.	'(from shawt, to scrape.) A chisel; a	
		gauge'	(Han., p. 381)

[3ut <sup>31</sup> ]	v.	to wipe away	(Xu et al., p. 701)
[lă <sup>55</sup> ʒut <sup>55</sup> ]	n.	a brush	(Xu et al., p. 415)
[mă <sup>31</sup> kap <sup>31</sup> ]	n.	'(from gap, to cover.) A cover, a lid'	(Han., p. 413) <sup>9)</sup>
[mă³¹tsun³¹]	n.	'(from tsun, to speak.) A word, com-	
		mand; a will, a testament'	(Han., p. 441)
[p <u>ă</u> <sup>33</sup> kʰam³³]	n.	'(from hkam, to receive.)	
		A security, as for money; a bond'	(Han., p. 524)
[ʒa <sup>ʔ31</sup> ]	v.	'to like, be fond of, as an object of enjoy-	, , , ,
		ment and hence to wish, desire, long for'	(Han., p. 563)
[sum <sup>31</sup> 3a <sup>931</sup> ]	n.	'Love'	(Han., p. 596)
[sum <sup>31</sup> tso <sup>955</sup> ]	n.	'(from tsaw, to like.) Love, affection'	(Han., p. 598)
	n.	lover	(Xu et al., p. 819)
		sumtsaw sumra 'love, passion, lustful	
		desires'	(Han., p. 598)
[ʃiŋ <sup>31</sup> nan <sup>55</sup> ]	n.	'(from nan, to follow.) A body-servant;	
		a slave, given as a part of a marriage	
		dowry'	(Han., p. 624)

Nominalization in Jinghpo is then interesting because besides the two major markers  $[t]_{\underline{a}}^{33/55}$  and  $[f_{\underline{a}}^{33/55}]$ , there are a small number of minor prefixes which are, as it were, pressed into service occasionally. In this respect, Jinghpo is very different from languages that show more inflectional and derivational morphology. In the latter case, a part of speech will be marked by a (or a few) regular suffix(es), such as the *-tion* and *-ness* in English. Consequently, no general distribution pattern, such as the causative prefix  $[t]_{\underline{a}}$  going before monosyllabic verbs and adjectives, can be stated for these minor nominalizers. Insights will be gained from an explanatory and/or historical accounting for the Jinghpo phenomenon.

On the other hand, it is not uncommon for a Jinghpo prefix to convert various morphemes into different parts of speech. Take for example the prefix [a-]. In addition to being an adverbial marker, it can also turn a word into an adjective, a verb, etc.:

[a³³t∫aŋ³³]	adj.	'(from chyang, to be black;) black,	
		dark'	(Han., p. 3)
[a <sup>31</sup> k <sup>h</sup> jep <sup>55</sup> ]	v.	'(from hkyep, a fragment.)	
		To break, as bread, into small pieces'	
	n.	'fragments, crumbs, leavings'	(Han., p. 10)
[mun <sup>55</sup> ]	v.	'To be fine, atomical; (Shan.)'	(Han., p. 397)
	n.	powder	(Xu et al., p. 526)
[a <sup>31</sup> mun <sup>55</sup> ]	n.	'(from <i>mun</i> , to be atomical.) Small, dustlike particles'	

<sup>9)</sup> The root in the Jinghpo word [mă³¹kap³¹] 'lid' may be related to the root in [n³¹kup³¹] 'mouth'. This relation is true in Lhasa Tibetan: kha gtçod 'lid, cork', literally kha 'mouth' plus gtçod 'to close'.

Other examples of relevant Jinghpo prefixes are ('class.' equals 'classifier'):

[kun <sup>33</sup> ]	v. ·	carry on one's back			(Xu et al., p. 214)
[mă <sup>31</sup> kun <sup>55</sup> ]	class.	a load on the l	oack		(Xu et al., p. 453)
[mă <sup>31</sup> p <sup>h</sup> 30 <sup>31</sup> ]	adj.	'(from hpraw,	to be white.)		
•		White; mahpro	<i>w ri</i> , white ya	rn'	(Han., p. 430)
		cf. 'ri hkyeng,	red yarn'		(Han., p. 331)
$[n^{31}t^{h}om^{55}]$	adv.	'(from htawm, to be behind.) After, since, although'			
					(Han., p. 506)
		$[t^{hom^{55}}] < n.>$	•		(Xu et al., p. 591)
		$[n^{31}t^{h}om^{55}] < c$	onj.>		(Xu et al., p. 319)
[wa <sup>33</sup> ]	n.	tooth	[kă <sup>31</sup> wa <sup>55</sup> ]	v.	to bite
[khjeŋ³1]	adv.	slantingly	[n³¹kʰjeŋ³¹]	adj.	slanting, sloping
[niŋ <sup>33</sup> ]	class.	a year's time	[ʃǎ³¹niŋ³³]	n.	year

Based on the words listed above, another observation concerning the direction of derivation can be made. One would expect the classifier, being a new part of speech in the Jinghpo language, to be the derived item. This is true for the pair  $[kun^{33}] < v.>$  'to carry on one's back' and  $[m 3^3 kun^5] < class.>$  'a back-load of'. But this expectation is contradicted by the pair  $[j 3^3 lnin^3] < n.>$  'year' and  $[nin^3] < class.>$  'a year's time'. Since the latter word corresponds to cognates meaning 'year' in other TB languages, such as Cuona Menba  $[nin^5]$  and Bogaer Luoba [nin], it must have gone through a shift in its part of speech. Note also the semantic association between  $[wa^3]$  'tooth' and  $[k 3^3]$  'to bite'. More generalizations about the shift direction can only be made by examining instances in other languages, including those genetically unrelated to Jinghpo.

## 1.2 Semi-Prefixes

(1) Semi-prefixes are weakened forms of corresponding content words. While the former are bound morphemes, the latter are mostly free. Preliminary examples of semi-prefixes are as follows:

Prefix	<original free="" morpheme<="" th=""><th>Examples</th><th>Gloss</th></original>	Examples	Gloss
[kă <sup>31</sup> -]	< [ka <sup>55</sup> ] earth, soil	[kă³¹kʰje³³] [kă³¹t∫aŋ³³]	<pre>soil+red {= red soil} soil+black {= black soil}</pre>
[lă <sup>55</sup> -]	< [na <sup>33</sup> ] ear	[lă <sup>55</sup> tsop <sup>55</sup> ]	ear + [tsop <sup>31</sup> ] membrane/reed {= eardrum}
[n <sup>33</sup> -]	<[mam <sup>33</sup> ] the rice plant	[n <sup>33</sup> nan <sup>33</sup> ]	<pre>paddy+new {= grain of the new harvest}</pre>
		[n <sup>55</sup> phun <sup>55</sup> ]	paddy+tree/log

[num <sup>31</sup> -]	<[lam <sup>33</sup> ]	road	[num <sup>31</sup> p30 <sup>931</sup> ]	{= stem of the rice plant} road+separate
			[ PJ- ]	{= a fork in the road}
[mă <sup>31</sup> -]	$<$ [ma $^{31}$ ]	child	[mă <sup>31</sup> 3un <sup>55</sup> ]	child+side by side, abreast
				$\{= twins\}$
[wă <sup>33</sup> -]	<[ŋa <sup>33</sup> ]	cattle	[wă <sup>55</sup> lam <sup>55</sup> ]	ox+to stroll
				$\{= \text{ an ox on the loose}\}$
		•	[wă <sup>55</sup> ∫an <sup>51</sup> ]	$cattle + [\int an^{31}] meat \{ = beef \}$

Prefixes in the first column from the left and words in the second column can be considered as morphemic variants, or allomorphs, of a single morpheme. This implies that the two forms *are* different in their pronunciation.

Semi-prefixes are different from prototypical prefixes in three regards: (a) the former originate from independent lexical morphemes, not from PTB prefixes; (b) their meaning, being lexical, is very different from the meaning of causative prefixes; and (c) it is irrelevant whether a semi-prefix changes the part of speech of the other morpheme in the same word.

- (2) Semi-prefixes can go through tone sandhi. Taking  $[wă^{55} \int an^{51}]$  'beef' as an example, the underlying form should be 'cattle+meat'  $[wă^{33}]+[fan^{31}]$ . This sandhi is in accordance with a phonological rule in the language, viz.,  $[^{33}]+[^{31}]\# \rightarrow [^{55}]+[^{51}]$ . For example, when  $[mu^{31}]$  'see' is preceded by  $[n^{33}]$  'not', the resultant phrase is  $[n^{55} mu^{51}]$  'not see' (Liu 1984:9). Sandhi phenomena involving prefixes are more complicated than the general tonological rules in Jinghpo and so require discussion in a separate paper.
- (3) Semi-prefixes and look-alike prefixes often show free variation. This subject will be described in more detail in Section 1.3.1. For the moment, suffice it to say that a semi-prefix can be in free variation with the content morpheme from which it derives, for example:

[n <sup>31</sup> -]:	$[n^{31}p30^{931}] \sim [num^{31}p30^{931}] \sim [lam^{31}p30^{931}]$	a fork in the road;
	[lam <sup>33</sup> ] road; [p30 <sup>931</sup> ] separate <sup>10)</sup>	crossroads
[n <sup>31</sup> -]:	$[n^{31}kam^{33}]\sim[ma^{31} kam^{33}]$	eldest son <sup>11)</sup>
	[ma <sup>31</sup> ] child; [kam <sup>33</sup> ] eldest son	
[n <sup>31</sup> -]:	$[n^{31}k^hut^{31}] \sim [wan^{31}k^hut^{31}]$	smoke

<sup>10)</sup> Hanson (1906:339) has lampraw for 'crossroads'. The word will be spelled as lampro and transcribed as [lam<sup>31</sup>p<sub>30</sub><sup>731</sup>] according to the system in Xu et al. (1983). The [p<sub>30</sub><sup>731</sup>] (or [p<sub>30</sub><sup>731</sup>]) in 'crossroads' may be related to [p<sub>30</sub><sup>33</sup>] 'to separate', which is not an entry by itself in Xu et al., but appears in an example under the entry [thiŋ<sup>31</sup>pjen<sup>33</sup>] 'a smaller household, as separated from the parental family' (p. 312): [thiŋ<sup>31</sup>pjen<sup>33</sup>#p<sub>30</sub><sup>33</sup>] '[of offspring] to divide up family property and live apart' (also in Huang 1992:440). This [p<sub>30</sub><sup>33</sup>], spelled 'pru', is not in Hanson (p. 529). (Incidentally, an underlined IPA symbol is a tense vowel.)

<sup>11)</sup> The form [ma<sup>31</sup> kam<sup>33</sup>] is not listed as an entry in Xu *et al.* (1983:450), but is used in an illustration under the entry [ko<sup>955</sup>] <a locative marker>: [ma<sup>31</sup> kam<sup>33</sup> ko<sup>955</sup>] 'at the eldest son's, or in his possession' (p. 369).

```
[wan31] fire
               [khut31] 'To be ready, prepared, as food' (Han., p. 305)
               [n^{31}ko^{33}]\sim[nin^{31}ko^{33}]\sim[t^hin^{31}ko^{33}]
                                                                                               household
               [thin31-] house
               [ko<sup>33</sup>] to lay [bricks]; establish
               [n^{31}k^h 3ut^{31}] \sim [ni\eta^{31}k^h 3ut^{31}] \sim [lu\eta^{31}k^h 3ut^{31}]
                                                                                               whetstone
[n^{31}-]:
               [lun<sup>31</sup>-] stone
               [k^h 3ut^{31}-] whetstone, as in: [k^h 3ut^{31}tsut^{31}] a coarse
               whetstone
                                                                                               head-cloth, turban
               [n^{31}k^ho^{955}] \sim [pun^{31}k^ho^{955}]
[n<sup>31</sup>-]:
               [pun<sup>31</sup>-] pertaining to the head
               [k^ho^{955}-] head-cloth, as in: [k^ho^{955}t[\underline{a}\eta^{33}] dark turban
               [p\underline{a}^{31}t\int at^{31}]\sim [p\underline{u}^{31}t\int at^{31}]
                                                                                               womb
[pă<sup>31</sup>-]:
               [pu<sup>31</sup>] intestine
               [t[at31] an animal lair made for giving birth
                                                                                                cattle's horn
               [w\bar{a}^{33}zu\eta^{33}] \sim [\eta a^{33} zu\eta^{33}]
               [na<sup>33</sup>] cattle
               [3u\eta^{33}-] horn, as in [3u\eta^{33}pot^{31}] the root of a horn
```

Although there is a lack of concrete statistics on the relative usage frequencies of allomorphs in each set, this synchronic variation can constitute proof for the origins of semi-prefixes.

(4) Ignoring its tonal component which is not represented in the orthography, a single syllable, such as [wă-] or [n-], as a semi-prefix can trace its origins back to several content morphemes. The origins of [wă-] are as follows:

[wă-] from:	[k <u>ă</u> 55wa55]	bamboo	[wa <sup>33</sup> ]	tooth
	[ŋa <sup>55</sup> ]	fish	[kʰai⁵⁵nu³³]	corn,
				maize
	[ŋa <sup>33</sup> ]	cattle	$[n^{31}wa^{33}]\sim[nin^{31}wa^{33}]$	ax

In the form of [wă-], the three words in the left column have been prefixed to many root morphemes to create new words, whereas the three words in the right only have limited productivity. Note the following examples:

```
{=a kind of bamboo}
[wă<sup>31</sup>t (an<sup>33</sup>]
                        bamboo + black
                        bamboo + purple
                                                                              {=a kind of bamboo}
[wă<sup>31</sup>maŋ<sup>33</sup>]
                                                                              \{=a \text{ bamboo bush}\}
                        bamboo + bush
[wă<sup>31</sup>pjap<sup>55</sup>]
                                                                              \{=an incisor\}
[wă<sup>33</sup>man<sup>33</sup>]
                        tooth + face\{?\}
                                                                              {=overlapping teeth}
[wă<sup>55</sup>thap<sup>55</sup>]
                        tooth + layer
                                                                              {=a tooth protruding outward}
                        tooth + [tap<sup>31</sup>] rise/protrude
[wă<sup>55</sup>tap<sup>55</sup>]
                                                                              {=the corpse of an ox}
[wă<sup>33</sup>maŋ<sup>33</sup>]
                        ox + corpse
                                                                              {=cattle's hair}
[wă<sup>31</sup>mun<sup>33</sup>]
                        ox + hair
                        ox+[thum31] finish/to be at the end {=a sow which has turned
[wă<sup>55</sup>thum<sup>55</sup>]
                                                                                   barren}
                                                                              {=a \text{ kind of fish}}
                        fish+red
[wă<sup>31</sup>k<sup>h</sup>ie<sup>33</sup>]
```

```
[wă<sup>31</sup>kiik<sup>55</sup>]
                     fish + < onomatopoeia >
                                                              {=a kind of fish which squeaks like
                                                                  [k_1ik^{55}]
[wă<sup>31</sup>na<sup>31</sup>]
                     fish + to sting
                                                              {=a kind of fish which has a prickle
                                                                  at both ends of the mouth}
[wă<sup>33</sup>po<sup>33</sup>]
                     corn+kernel
                                                              {=the kernel of the corn}
[wă<sup>55</sup>phji<sup>751</sup>]
                      corn+[phii<sup>231</sup>] skin
                                                              {=the skin of the corn}
[wa<sup>55</sup>kh<sub>3</sub>o<sup>755</sup>]
                     corn + dry
                                                              {=dried corn, maize}
[wă55thon51]
                      ax + back
                                                              {=the back of an ax}
[wă<sup>33</sup>man<sup>33</sup>]
                      ax + face
                                                              \{=the face of an ax\}
```

Since the set of words beginning with 'wa-' has become much larger in size, the identity of [wă-] as a prefix has been made stronger by this reduction of several morphemes into the same orthographic form in the word-initial position. Furthermore, the multiple origins of the prefix are in general obscure to Jinghpo-speakers, who may then treat 'wa-' as a single word-formational element.

Another case similar to 'wa-' [wă-] is 'n-' [n-]. Its origins are as follows:

r1×31.....311

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[n-] from:	[mam <sup>33</sup> ]	grain, pac	idy	[lă³¹mu³¹]	sky	
	[sum <sup>31</sup> -]	iron <sup>12)</sup>		[ma <sup>31</sup> ]	child	
	[wan <sup>31</sup> ]	fire		[man <sup>33</sup> ]	face	
[n <sup>33</sup> nan <sup>33</sup> ]	grain+new		{=grai	n of the nev	v harvest}	
[n <sup>55</sup> sa <sup>51</sup> ]	grain + $[n^{31}sa^{31}]$ c	old	` •	n of the last	,	
[n <sup>33</sup> khje <sup>33</sup> ]	grain+red		{=red			
	grain + $[p^h 30^{31}]$ w	hite		te grain}		. •
[n <sup>55</sup> sin <sup>55</sup> ]	sky+[sin <sup>33</sup> ] dark			ning, night}		$\sim$ [niŋ $^{55}$ sin $^{55}$ ]
[n <sup>31</sup> lum <sup>55</sup> ]	sky+[lum <sup>33</sup> ] war	m	${=}spri$	ng}		$\sim$ [niŋ $^{31}$ lum $^{55}$ ]
[n <sup>31</sup> p <sup>h</sup> oŋ <sup>55</sup> ]	sky+[of the sky]	to be	_,			
	clear		${=balr}$	ny/sunny w	eather}	$\sim$ [niŋ <sup>31</sup> pʰoŋ <sup>55</sup> ]
[n <sup>31</sup> tup <sup>31</sup> ]	iron+to hit		${=a bl}$	acksmith}		$\sim$ [niŋ $^{31}$ tup $^{31}$ ]
[n <sup>31</sup> tup <sup>55</sup> ]	iron+a little blu	nt	${=a bl}$	unt knife/n	eedle}	$\sim$ [niŋ $^{31}$ tup $^{55}$ ]
$[n^{31} \int i^{31}]$	iron + little <sup>13)</sup>		${= sma}$	ll knife}		$\sim$ [niŋ $^{31}$ ʃi $^{31}$ ]
[n <sup>31</sup> pja <sup>33</sup> ]	child+[pja?55] de	estroy <sup>14)</sup>	${= mis}$	carriage}		
[n³¹kji <sup>?33</sup> ]	child+?		{=illeg	itimate chile	<b>d</b> }	$\sim$ [niŋ $^{31}$ kji $^{931}$ ]
[n <sup>31</sup> kam <sup>33</sup> ]	child+eldest son		${= elde}$	est son}		$\sim$ [ma $^{31}$ kam $^{33}$ ]

<sup>12)</sup> The usual Jinghpo word for 'iron' is [ph3i31]. The morpheme [sum31-] 'iron' is bound, as in [sum31tu33] 'a hammer', and it is cognate with corresponding words in other TB languages: Qiang [su: mu], Gyarong [fam], and Shixing [so35].

<sup>13) [-</sup>fi<sup>31</sup>] is a bound morpheme as in [pu<sup>31</sup>fi<sup>31</sup>] intestine + little {=small intestine} and [k<sup>h</sup>a<sup>931</sup> fi<sup>31</sup>] river + little {=brook}. Incidentally, the latter word as an entry is printed as two words in Xu et al. (1983:236), i.e. hka shi, but as one word in Nhkum et al. (1981:743), i.e. hkashi.

<sup>14)</sup> Hanson (1906:484) suggested that [pja<sup>33</sup>] in [n<sup>31</sup>pja<sup>33</sup>] was related to [pja<sup>955</sup>] 'to be destroyed'. But it may come from [pja<sup>31</sup>], glossed as 'to run, spout, as water from a spout ...; to run, as a sore; ... to hang, as a streamer' by Hanson (p. 78), but as '[of sticky substance or soft things] to flow downward' in Xu et al. (1983:75).

```
[n^{31}p^h30^{55}] face+features/looks {= face/look of a dead body}

[n^{31}k^hut^{31}] fire+to be cooked/done {= smoke}
```

(5) The pronunciation of all semi-prefixes is different from their respective original morphemes, so native speakers of Jinghpo, as previously suggested, may not know the diachronic development of these prefixes. This accounts for the following polysyllabic phrases in which there are two morphemes having the same meaning:

```
[wă<sup>31</sup>lun<sup>55</sup>]
                                              [na^{55}] fish + [lun^{55}] 'to rise, as smoke' (Han., p. 349)
                                               {=a school of fish swimming upstream to breed}
[ŋa<sup>55</sup> wă<sup>31</sup>lun<sup>55</sup>]
                                              meaning the same as [wă<sup>31</sup>lun<sup>55</sup>]
[wă<sup>31</sup>ʒat<sup>31</sup>]
                                               [na^{55}] fish +? \{=carp\}
[\eta a^{55} \text{ w} \breve{a}^{31} 3 a t^{31}]
                                              carp
                                              [\eta a^{33}] cattle + ear { = cattle's ear}
[wă<sup>33</sup>na<sup>33</sup>]
[na^{33} w \bar{a}^{33} n a^{33}]
                                               cattle's ear
[wă<sup>55</sup>t<u>i</u>k<sup>55</sup>]
                                               [wa<sup>33</sup>] tooth + [tik<sup>55</sup>] to be tight together
                                               \{=\text{to gnash [the teeth]}\}^{15}
                                              to gnash the teeth
[wa^{33} wă^{55}tik^{55}]
[wă<sup>33</sup>ph<sub>3</sub>a<sup>33</sup>]
                                               corn+plot {=cornfields}
                                               ([wă<sup>33</sup>] perhaps from the 2nd syllable in [khai<sup>55</sup>nu<sup>33</sup>])
[k^hai^{55}nu^{33} wă^{33}p^h3a^{33}]
                                               [k^hai^{55}nu^{33}] corn+[w\bar{a}^{33}p^h\bar{a}^{33}] cornfields {=cornfields}
```

In the first three cases above, a tri-syllabic compound has been formed in which the first syllable means the same as the second one. As for the fourth case, the verb 'to gnash [the teeth]' itself was originally a compound of two free morphemes, i.e. [wa<sup>33</sup>] and [tik<sup>55</sup>]; now it can take [wa<sup>33</sup>] 'tooth' as its object.

(6) Words with a semi-prefix are mostly nouns consisting of two elements. These words present a problem for applying the term 'compound' to Sino-Tibetan (ST) languages, for there seems to be no clear-cut answer to the question of whether they are compounds or not. One reason for saying yes is that some semi-prefixes do have a pronunciation close to their respective origins, such as:

[kă-]	$<$ [ka $^{55}$ ]	soil	[wă-]	$<$ [k $\underline{a}^{55}$ w $a^{55}$ ]	bamboo
[lă-]	< [na <sup>33</sup> ]	ear	[wă-]	< [wa <sup>33</sup> ]	tooth
[mă-]	$<$ [ma $^{31}$ ]	child	[wă-]	$<$ [ $n^{31}$ w $a^{33}$ ]	ax
[num-]	$<$ [lam $^{33}$ ]	road			

Native speakers would therefore know the separate meanings of the constituents in disyllabic words with the above prefixes. But on the other hand, there are a few arguments for saying that even though words with a semi-prefix were once compounds, they are, synchronically speaking, compounds no more. In the first place,

<sup>15)</sup> Hanson (1906:702) has a different spelling for this word, i.e. 'wudik', equivalent to [wă<sup>55</sup>tik<sup>55</sup>] in the IPA transcription system used in Xu et al. (1983).

they are not so by definition. Crystal (1991) defines the term 'compound(ing)' as follows:

A term used widely in descriptive linguistic studies to refer to a linguistic unit which is composed of elements that function *independently* in other circumstances. Of particular currency are the notions of compounding found in 'compound words' (consisting of two or more *free* morphemes, as in such 'compound nouns' as *bedroom*, *rainfall* and *washing machine*) and 'compound sentences'... [p. 70, with emphasis for the first two italic words added]

A compound noun is made up of *free* morphemes, but Jinghpo words with a semiprefix are not. Secondly, Jinghpo speakers may not know the origins of semiprefixes whose weakened phonetic form is very different from the pronunciation of the original full morphemes. If the meaning of the first syllable is obscure, just like the word 'cranberry' in English, then the term 'compound' does not apply. Lastly, there exists a contrast between compounding and prefix word-formation in Jinghpo, as shown by the following examples:

[ŋa³³]	cattle	$[wă^{33}p^hu\eta^{33}]$	cattle+group {=a herd of cattle}
[woi <sup>33</sup> ]	monkey	$[woi^{33} p^h u n^{33}]$	monkey+group {=a group of monkeys}
		[wă <sup>55</sup> ∫an <sup>51</sup> ]	$cattle + meat \{ = beef \}$
[wa <sup>?31</sup> ]	pig	[wa <sup>931</sup> ∫an <sup>31</sup> ]	$pig + meat \{=pork\}$
		[wa <sup>931</sup> zum <sup>55</sup> ]	pig+pestilence {=hog cholera, swine fever}
		[wă <sup>55</sup> ʒum <sup>55</sup> ]	cattle+pestilence {=cattle cholera}
[ŋa <sup>55</sup> ]	tooth	[wă <sup>55</sup> ʒum <sup>51</sup> ]	tooth+[3um <sup>31</sup> ] all fallen {=to have no teeth}

The bound forms [wä<sup>33</sup>-] and [wä<sup>55</sup>-], respectively reduced from [na<sup>33</sup>] 'cattle' and [na<sup>55</sup>] 'tooth', are prefixes, whereas the free morphemes [wa<sup>931</sup>] 'pig' and [woi<sup>33</sup>] 'monkey' are not. Orthographically, words like 'beef' and 'herd of cattle' are written as one word (washan, wahpung), but compounds like 'pork' and 'group of monkeys' as two (wa shan, woi hpung). <sup>16</sup>)

(7) The word-internal relationship between the semi-prefix and the following morpheme also deserves comment. A distinction can first be made between a qualifying and a non-qualifying relationship. For the former, there is a further distinction in the direction of the qualification. Take for example the word [wă³³ maŋ³³] ox+corpse {=the corpse of an ox}, the second syllable is naturally the head of the word. This progressive qualification generally occurs when the second syllable is a noun. Then there are words like [wă³¹kʰje³³] 'fish+red', which is the name of a kind of fish, and [n⁵⁵sa⁵¹] grain+old {=grain of the last harvest}. This

<sup>16)</sup> This orthographic convention has not been strictly followed, however. For example, the Jinghpo compound nga rung, literally 'cattle + horn', is printed as two words as an entry in Xu et al. (1983:575), but as one word in an illustration under the entry nhtau 'bugle' in the same dictionary (p. 590): ngarung nhtau [ŋa³³ʒuŋ³³ n³¹tʰau³¹] 'bugle made from a cattle horn'.

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regressive qualification occurs when the second syllable is an adjective. Interestingly enough, although the prefixes are the semantic head here, they are phonetically less prominent than the second syllable. There exists, therefore, an incongruity between the semantic and the phonetic level.

The two types of qualification just described parallel the relevant constructions in Jinghpo syntax. For example, nouns used attributively precede the qualified noun, such as  $[kum^{31}p^h3o^{31}lă^{55}k^hon^{51}]$  silver+bracelet  $\{=a \text{ silver bracelet}\}$  (Nhkum et al. 1981: 892) and  $[tsap^{55}\int 3^{31}k3i^{31}]$  bear+gall bladder  $\{=the \text{ gall bladder of the bear}\}$  (Xu et al. 1983:740). On the other hand, an adjective by itself as a qualifier (i.e. without any function word) comes after the noun, such as  $[k^ha^{931}kă^{31}pa^{31}]$  literally 'river+big', but  $[k3ai^{31}\int 3^{33}3e^{33}ai^{33}m 3^{31}\int 3^{31}]$  literally 'very brave <particle> person' (Xu et al. 1983:961).

In a small number of cases, the second syllable is a predicate. The semi-prefix, which always derives from nominal words, can then be either the agent or the patient involved. Examples for the former are:

```
[wă³¹kjik⁵⁵] fish+<onomatopoeia> {=a kind of fish which squeaks like [kjik⁵⁵]} {=a kind of fish having a prickle at both ends of the mouth} {=a school of fish swimming upstream to breed}
```

Examples for the latter are:

```
[n<sup>55</sup>tat<sup>55</sup>] grain+[tat<sup>31</sup>] put down {=sowing in the spring}
[wă<sup>55</sup>taŋ<sup>55</sup>] ox+to block {=a fence for blocking out cattle}
```

Since almost all TB languages are SOV languages, it is not surprising that in a unit of 'noun+verb', the noun can be the agent or the patient.

(8) Some prefixes, such as the 'wa-' for 'bamboo', 'cattle' and 'fish', are very productive while others, such as the 'wa-' for 'ax', appear only in a few words. For example, there are about 70 entries beginning with the prefix 'wa-' qua 'cattle' in Xu et al. (1983: 859-77), including words like:

```
[wă^{55}kh^{i}ji^{55}] cattle+feces {=cattle's excrement}

[wă^{55}kj^{i}p^{55}] cattle+[k^{i}p^{31}] dried & sunken {=a thin ox}
```

but excluding tetra-syllabic expressions such as:

```
[wă<sup>55</sup>khji<sup>55</sup> wa<sup>731</sup> khji<sup>55</sup>] cattle's and pigs' excrement

[wă<sup>55</sup>kjip<sup>55</sup> wă<sup>55</sup>kap<sup>55</sup>] <generic n.> skinny cattle

([kap<sup>55</sup>] does not mean anything and is there only to make up the tetra-syllabic pattern.)
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There are two reasons, one linguistic and one social, for the productivity of some prefixes but not others. 1) Unlike English which has completely different names for different kinds of fish (as an example), ST languages in general use compounds for fish names which consist of a qualifier of some kind plus the word for 'fish'. In the case of Jinghpo, this latter component has further developed into a semi-prefix, for example:

```
[w\check{a}^{31}k^hje^{33}] fish+red {=a kind of fish}
[w\check{a}^{31}lai^{33}] crucian carp ([lai^{33}] meaning not clear)
```

- 2) It appears that the physical environment in which the Jinghpo people live, as well as their customs, explains why they have separate words for things related to bamboo and cattle, while other peoples do not, e.g., [wă³¹sum³³] bamboos that have died after flowering, [wă³¹kʰop⁵⁵] a 'split bamboo, used as stocks for prisoners', and [wă³¹lu³¹] a 'kind of bamboo, mostly used for joists' (Han., p. 45). (The meanings of the second syllable of these three words are all unknown.)
- (9) The present section ends with a special case of semi-prefix, viz., the [n<sup>33</sup>-] from [naŋ<sup>33</sup>] 'you-sing'. Almost all kinship terms in Jinghpo, such as [nu<sup>51</sup>] 'mother' and [p<sup>h</sup>u<sup>51</sup>] 'brother', 'decline' for person in the singular possessive pro-form, and some kinship terms as dual pronouns also decline for person. Look at the following words:

Direct address:	$[nu^{51}] \sim [a^{55}nu^{51}]$	mother
	$[p^hu^{51}]\sim [a^{55}p^hu^{51}]$	brother
General (= generic) use:	[kă³¹nu³¹]	mother
	[kă <sup>31</sup> pʰu³1]	brother
1st pers. poss. sing.:	[ŋai <sup>33</sup> nu <sup>31</sup> ]	my mother
	[ŋai <sup>33</sup> pʰu <sup>31</sup> ]	my brother
2nd pers. poss. sing.:	$[n^{55}nu^{51}] \sim [nin^{55}nu^{51}]$	your mother
	$[n^{55}p^hu^{51}]\sim[nin^{55}p^hu^{51}]$	your brother
3rd pers. poss. sing.:	[kă³¹nu³¹]	his mother
	[kă <sup>31</sup> pʰu <sup>31</sup> ]	my brother
1st pers. dual:	[an <sup>55</sup> nu <sup>51</sup> ]	my mother and I
· .	[an <sup>55</sup> phu <sup>51</sup> ]	my brother and I
2nd pers. dual:	[nan <sup>55</sup> nu <sup>51</sup> ]	your mother and you-sing.
•	[nan <sup>55</sup> phu <sup>51</sup> ]	your brother and you-sing.
3rd pers. dual:	[{an <sup>55</sup> nu <sup>31</sup> ]	his/her mother and s/he
• • • • • • • • • • • • • • • • • • • •	[[an <sup>55</sup> phu <sup>51</sup> ]	his/her brother and s/he
	M L 1	illo, ilot ototiloi alla o, ilo

Four of the seven prefixes above are pronouns by themselves, as shown by the paradigm below:

	Singular	Dual
1st pers. pron.	[ŋai <sup>33</sup> ]	[an <sup>55</sup> ]
2nd pers. pron.	[naŋ <sup>33</sup> ]	[nan <sup>55</sup> ]
3rd pers. pron.	[ʃi <sup>33</sup> ]	[ʃan <sup>55</sup> ]
3rd pers. pron. (colloq.)	[khji <sup>33</sup> ]	[khan <sup>55</sup> ]

The other three prefixes that are not identical to independent pronouns include the [a<sup>55</sup>-] used in addressing the relative directly, the [kă³¹-] in kinship terms used without specific reference and in the 3rd person singular possessive (perhaps related to the colloquial forms of the 3rd person pronouns [kʰji³³] and [kʰan⁵⁵]), and the [n-] $\sim$ [niŋ-] in the 2nd person singular possessive. While the first two morphemes are prototypical prefixes, the last one is a borderline case between the semi- and the prototypical prefix. On the one hand, it is clear that [n-] $\sim$ [niŋ-] originates from the second person singular pronoun [naŋ³³] you. This is *the* trait of semi-prefix. But on the other hand, the second syllable in prefixed kinship terms is clearly the head of the word and the possessive meaning of the initial syllable leans away from the pure lexical meaning of semi-prefixes. These two factors make it not all unreasonable to classify [n-] $\sim$ [niŋ-] as a prototypical prefix in a purely synchronic analysis of morphology in Jinghpo kinship terms.

#### 1.3 Look-alike Prefixes

Roughly speaking, prefixes that are neither prototypical nor semi- are lookalike prefixes. ('Look-alike' is hereafter abbreviated to 'LA'.) This last type of prefix is different from the first two in several ways. To begin with, words having a semi-prefix are almost all nouns, whereas words containing a LA prefix belong to various parts of speech. Second, the origins of LA prefixes are not yet completely known. What is certain is that some of them did come from initial consonant clusters in PTB. Third, a LA prefix itself has no meaning at all. As for the other syllable in a word with a LA prefix, it may not have any meaning either. For example, both syllables in words like [mă³¹li³³] 'four', [num³¹la³³] 'soul', and [kǎ²⁵ʒa⁵¹] 'hair on the head' lack a meaning of their own. If the syllable following a LA prefix does have meaning, then it is usually synonymous with the word consisting of the two syllables in question. Look at these examples:

```
[lă<sup>55</sup>ŋa<sup>55</sup>] wild plantain [ŋa<sup>731</sup>-] banana, as in [ŋa<sup>731</sup>khʒon<sup>33</sup>] 'A variety of wild plantain' (Han., p. 509) [n<sup>33</sup>kjin<sup>33</sup>] cucumber [kjin<sup>31</sup>-] 'Plants of the Cucurbitaceae family' (Han., p. 196), as in [kjin<sup>31</sup>ʃau<sup>33</sup>] watermelon [mă<sup>31</sup>ʒuŋ<sup>33</sup>] the spine [ʒuŋ<sup>31</sup>-] the back, as in [ʒuŋ<sup>31</sup>kuŋ<sup>55</sup>] hunchback
```

More importantly, the three prefixes above, i.e. [lă<sup>55</sup>-], [n<sup>33</sup>-] and [mă<sup>31</sup>-], do not qualify the second syllable in any way. Accordingly, while words with a prototypical prefix or a semi-prefix have a morphological head, words with a LA

prefix do not.

The LA prefix, however, shares the general attributes of Jinghpo prefixes as laid out at the beginning of this paper. In addition, the former was once a means to enlarge the Jinghpo lexicon, a function common to all three types of prefixes. The next few sections dwell on the free variation cases and origins of LA prefixes.

# 1.3.1 Free variation of Jinghpo prefixes

LA prefixes show more instances of free variation than semi-prefixes do. For the sake of presentation, three types of cases can be distinguished. They are as follows:

(1) In general, the form [n-], be it a semi- or a LA prefix, is in free variation with [nin-]:

[n <sup>31</sup> ko <sup>33</sup> ]	$\sim$ [niŋ $^{31}$ ko $^{33}$ ]	$\sim$ [thiŋ³¹ko³³]	household ([thiŋ31-] house)
[n <sup>31</sup> ma <sup>31</sup> ] [n <sup>31</sup> nan <sup>33</sup> ] [n <sup>31</sup> tat <sup>31</sup> ] [n <sup>31</sup> tsam <sup>33</sup> ]	$\sim$ [niŋ <sup>31</sup> ma <sup>31</sup> ] $\sim$ [niŋ <sup>31</sup> nan <sup>33</sup> ] $\sim$ [niŋ <sup>31</sup> tat <sup>31</sup> ] $\sim$ [niŋ <sup>31</sup> tsam <sup>33</sup> ]		<n.> wound new to set up [an appointment] <n.> slanting rain; <v.> to rain slantingly, as coming into the room</v.></n.></n.>

A major exception to the rule is the semi-prefix [n-] from [mam<sup>33</sup>] 'the rice plant'. Words like [n<sup>55</sup>p<sup>h</sup>un<sup>55</sup>] 'stem of the rice plant' and [n<sup>33</sup>nan<sup>33</sup>] 'grain of the new harvest' have no variant forms like [niŋ<sup>55</sup>phun<sup>55</sup>] and [niŋ<sup>33</sup>nan<sup>33</sup>] respectively in either Hanson (1906) or Xu et al. (1983).

(2) The prefix [n-] can also be in free variation with other prefixes, for example:

All the words beginning with [n-] cited up to here, including those in Section 1.2, clearly show that the prefixes in free variation with [n-] usually have a nasal as the initial and/or final consonant in the syllable.

(3) Some LA prefixes are in free variation with zero prefix. That is to say, the other syllable in a word with a LA prefix can stand alone to convey the same meaning as the whole word, for example:

[a <sup>31</sup> soi <sup>33</sup> ]	$\sim$ [soi <sup>33</sup> ]		peep at
[n <sup>31</sup> mai <sup>31</sup> ] [n <sup>31</sup> ʒi <sup>31</sup> ] [n <sup>31</sup> ti <sup>231</sup> ] [n <sup>31</sup> tuk <sup>55</sup> ]	$\sim$ [mai <sup>31</sup> ] $\sim$ [ʒi <sup>31</sup> ] $\sim$ [ti <sup>?31</sup> ] $\sim$ [tuk <sup>55</sup> ]	$\sim$ [niŋ $^{31}$ mai $^{31}$ ] $\sim$ [niŋ $^{31}$ tu̯k $^{55}$ ]	tail spear pot poison
[IIa.tūKaa]	, ~[tūk]	- finij tuk j	•
[nam <sup>31</sup> lap <sup>31</sup> ]	$\sim$ [lap $^{31}$ ]		leaf
[tum <sup>31</sup> pjon <sup>33</sup> ]	$\sim$ [pjon $^{31}$ ]		side by side
[ʃiŋ³¹t∫oŋ³³]	$\sim$ [tʃoŋ $^{33}$ ]		to compete
[kă <sup>31</sup> kat <sup>31</sup> ]	$\sim$ [kat $^{31}$ ]		to run

Several points should be noted here. First, the LA prefix does not change the meaning and part of speech of the following syllable. Second, since there is a general trend in ST languages toward disyllabification, the variant with a LA prefix should be more recent than the one without. Third, many disyllabic variants are used in literary writings, like lyrics, proverbs, and traditional stories, which pay more attention to rhythm and euphony. The most productive prefix used for this purpose is  $[a^{31}$ -]. It can go before all monosyllabic nouns, such as  $[po^{33}] \sim [a^{31}po^{33}]$  'head' and  $[pum^{31}] \sim [a^{31}pum^{31}]$  'hill'.

Literary variants are marked with the label < lit. use > in Xu et al. (1983). Look at the following pairs of synonymous words:

P. # in Xu et al. for the label < lit. use>	Word pairs	Gloss
	[thaŋ <sup>33</sup> ]	'v. To return; to revert, to turn around' 'adv. up side down; turned around'
		(Han., p. 681)
p. 816	[sum³¹tʰaŋ³³]	'To reverse, return' (Han., p. 598); n. in
		Xu et al.
	[sum <sup>31</sup> tu <sup>33</sup> ]	hammer (Xu et al., p. 816)
p. 449	[mă <sup>31</sup> tup <sup>31</sup> sum <sup>31</sup> tu <sup>33</sup> ]	hammer
•	[ten <sup>31</sup> ]	time (Xu et al., p. 830)
p. 509	[mă <sup>31</sup> ten <sup>31</sup> ]	time
•	[mă <sup>31</sup> k <sup>h</sup> ʒun <sup>33</sup> ]	'A path, track, made by small animals'
p. 260	[k <sup>h</sup> ʒun <sup>33</sup> ]	'A path; (probably the original word for road)' (Han., pp. 422 & 326)

Although it is the variant with a prefix that is usually marked with < lit. use >, occasionally it is the other way round, like the last pair of words quoted above.

# 1.3.2 Instances of LA prefixes originating from clusters in PTB

The WT cognates of some Jinghpo words with a prefix have an initial consonant cluster. Since WT reflects the ancient form of the Tibetan language (ca. 7th

century) and is, on the whole, closer to PTB than Jinghpo is, it may be assumed that the prefixes in those Jinghpo words are direct descendants from clusters in PTB (see Section 1.3.2.1). But it is also possible that a PTB cluster may have already been reduced to a single consonant in the ancient form of the Jinghpo language (or of the proto-language for the whole Jinghpo subgroup within TB) before the existing Jinghpo prefix was added (see Section 1.3.2.2). The actual assignment of examples to one of these two sections is based on educated guesswork, and there are a few double assignments.

1.3.2.1 The following is a list of Jinghpo words containing LA prefixes that have probably originated from initial consonant clusters in PTB. A question mark at the beginning of the line marks an uncertain set of cognates:

WT	Jinghpo	Other TB languages <sup>17)</sup>	Gloss & remarks
bzi	[mă³¹li³³]	Cuona M. [pli <sup>53</sup> ]	four
		Gyarong [kə wdi]	
		Queyu [b3i13]	
bla	[num <sup>31</sup> la <sup>33</sup> ]	Queyu [bla55so55]	soul
		Dulong [pw31la53]	
brgjad	[mă <sup>31</sup> ts <u>a</u> t <sup>55</sup> ]	Alike T. [wdzat]	eight <sup>18)</sup>
	•	Queyu [pfε <sup>13</sup> ]	
? bjihu	[nam³¹t∫i³³]	Muya [ndze <sup>55</sup> fiu <sup>33</sup> ]*	little bird
			J.: [-tsi31] little, young
			* bird

<sup>17)</sup> Except for WB words, data under the column of 'Other TB languages' are from Huang (1992). Please refer to that book for the fieldworker(s) and exact fieldwork location involved for each language. The Zhaba language here is different from the language of the same name described in Lu Shaozun (1985), which is, according to Huang (1991:65), a dialect of the Queyu language. Abbreviations for languages are as follows:

Abb. In pinvin	Other names of the language	Abb. Full form
· ·		
J. = Jingpo	Jinghpaw, Kachin	D. = Deng
L. = Luoba	Lhoba	T. = Tibetan
M. = Menba	Monba	WT = Written Tibetan
P. = Pumi	Primi, Prunmi	WB = Written Burmese
$\mathbf{Y}_{\cdot} = \mathbf{Y}_{\mathbf{i}}$	Lolo	,

The following languages are also known in other names (an asterisk means 'according to Anonymous 1991:368'):

```
In pinyin = Other names

Darang Deng = Digaru*

Geman Deng = Midzu*

Dulong = Rawang*, Trung

Motuo Menba = Tsangla*

In pinyin = Other names

Muya = Minyak

Namuzi = Namuyi [also in pinyin]

Yidu Luoba = Midu*, Chulikata*
```

?	sub~ bsub~	[sop <sup>31</sup> ]* [mă <sup>31</sup> sop <sup>31</sup> ]**	Queyu [psə <sup>55</sup> ] Shixing [bə <sup>33</sup> su <sup>53</sup> ] Namuzi [mi <sup>33</sup> su <sup>35</sup> ]	wipe away  * slightly stroke once  ** stroke, touch
	gsub dgu	[t∫ă <sup>31</sup> k <sup>n</sup> u <sup>31</sup> ]	Cuona M. [tu <sup>31</sup> ku <sup>53</sup> ] Qiang [zguə]	nine
			Dulong [dw31gw53]	
	skra	[kã <sup>55</sup> 3a <sup>55</sup> ]	Cuona M. [khra53]	hair on the head
	ltag	[lă <sup>31</sup> tʰa <sup>?31</sup> ]		uplands, higher place
	ldzi ba	[wa <sup>931</sup> -k <sup>h</sup> ă <sup>33</sup> li <sup>33</sup> ]	Queyu [st $\mathfrak{w}^{13}$ ] $\sim$ [tl $\mathfrak{w}^{13}$ ]	flea <sup>19)</sup>
			Daofu [zku]	
			WB [lhe <sup>3</sup> ]	
			Karen [thui <sup>31</sup> kli <sup>55</sup> ]	five
	lŋa	[mă <sup>31</sup> ŋa <sup>33</sup> ]	Gyarong [kə mŋo] Darang D. [mɑ³¹ŋɑ³⁵]	HAC
			Yidu L. [ma <sup>31</sup> ŋa <sup>55</sup> ]	
		[lă <sup>31</sup> ko <sup>33</sup> ]	ilda E. įma ija j	foot
	rkaŋ pa rku	[lă <sup>31</sup> ku <sup>55</sup> ]		steal
	sbrul	[lă ku ] [lă <sup>33</sup> pu <sup>33</sup> ]	Alike T. [rbu]	snake
	Sorui	Im ba 1	Gyarong [kha bre]	
			Yidu L. [ja <sup>55</sup> bu <sup>55</sup> ]	
	fibu	([ʃiŋ³³tại³³])		worm
	phrag pa	[kă <sup>31</sup> pha <sup>931</sup> ]	Gyarong [ta rpak]	shoulder
	rdzen pa	[kă <sup>31</sup> ts <u>i</u> ŋ <sup>33</sup> ]	Geman D. [kwn <sup>55</sup> dzam <sup>53</sup> ]	raw, uncooked
	rŋo(d)	[kă <sup>31</sup> ŋau <sup>33</sup> ]	Zhaba [kə55ŋu33]	stir-fry <sup>20)</sup>
		7	Minyak [khu55ŋu53]	•
	rma k <sup>h</sup> a	[n <sup>31</sup> ma <sup>31</sup> ]		wound *
		[n <sup>31</sup> ma <sup>31</sup> #k <sup>h</sup> a <sup>33</sup> ]*	G	* scar tail
	rŋa ma	$[\text{mai}^{31}]$ $\sim$	Gyarong [te jmi]	tan
		$[n^{31}mai^{31}]$ $\sim$	Queyu [rnə <sup>13</sup> ] WB [amri <sup>3</sup> ]	
		[niŋ³¹mai³¹]	Shixing [mæ <sup>33</sup> tsũ <sup>55</sup> ]	
			Xiandao [ni <sup>31</sup> tshɔ <sup>31</sup> ]	
			Nusu Nu [mm <sup>55</sup> p12 <sup>53</sup> ]	
	rluŋ	[n <sup>31</sup> puŋ <sup>33</sup> ]	Transactor Faltering Transactor	wind
	? rdo	[n <sup>31</sup> luŋ <sup>31</sup> ]	Motuo M. [luŋ]	stone <sup>21)</sup>
		· · · · · · · · ·	Jiulong P. [guo <sup>11</sup> lũ <sup>55</sup> ]	

18)	But the Jing	hpo word for	r 'hundred" has no prefix:	
•	WT	Jinghpo	Other TB languages	Gloss
	brgja	[tsa <sup>33</sup> ]	Batang T. [dza <sup>53</sup> ]	hundred
	•		Alike T. [wjjæ]	
			Queyu [bdzə <sup>13</sup> ]	
19)	But the Jing	hpo word fo	r 'heavy' has no prefix:	4
	ldzid po		Cuona M.#[li <sup>55</sup> po <sup>53</sup> ]	heavy
	, •		Queyu [qa55rlə55]	*

<sup>20)</sup> The parentheses in the WT form stands for optionality. That is to say, rno(d)=rno~rnod.

21)

22)

rgja

barking deer<sup>22)</sup>

	mt <sup>h</sup> ud	[mă <sup>31</sup> tut <sup>55</sup> ]	Gyarong [ke mth Darang D. [ma <sup>55</sup> Yidu L. [ma <sup>55</sup> tho	tho55]	to connect, join
	mdaĥ	[n <sup>31</sup> tan <sup>33</sup> ]	Zhaba [mda <sup>55</sup> ~r		arrow
					J.: bow <sup>23)</sup>
	smjug mdoŋ	[n <sup>31</sup> tum <sup>55</sup> ] [n <sup>31</sup> tum <sup>55</sup> n <sup>31</sup> tan <sup>33</sup> ]*	Muya [tce55 ndo5	<sup>33</sup> ]	bamboo tube as a container
					T.: bamboo+caddy J.: [tum <sup>33</sup> ] storehouse * <generic n.=""> Muya: [tcæ<sup>24</sup>] tea</generic>
	mtchu to	[n <sup>31</sup> kup <sup>31</sup> ]	WB [hnut-kham <sup>2</sup>	3]	lips
			Dulong [nuti <sup>55</sup> kə]	p <sup>55</sup> ]	T.: also '(tea-pot) spout'
					J.: mouth
					Dulong: [nui <sup>55</sup> ] mouth
?	(star ga)	[n <sup>31</sup> pu <sup>31</sup> ]	Alike T.[khæ mb Daofu [khə mbə]	e rta rgæ]	walnut
	spuŋ	[sum <sup>31</sup> pum <sup>31</sup> ]			to heap, stack
?	stag	[ʃă³¹ʒo³³]			tiger
			· .		<ul><li>J.: <generic n.=""></generic></li><li>tigers, leopards, &amp;</li><li>the like<sup>24</sup>)</li></ul>
	skar ma	[ʃă <sup>33</sup> kan <sup>33</sup> ]			star
	skar fid skas fidzeg	-	Queyu [łi55ki33]		ladder
	skus nazeg		Lüsu [ti <sup>33</sup> ki <sup>53</sup> ]		
			WB [lhe <sup>2</sup> -kū <sup>3</sup> ] Naxi [le <sup>33</sup> dzi <sup>21</sup> ]		T.: fidzeg 'to climb'
	skam pa	[lă <sup>55</sup> kap <sup>55</sup> ]	[10 mtm ]		fire-tongs <sup>25)</sup>
	sram	[∫ă <sup>31</sup> ʒam <sup>33</sup> ]			otter
I	But the Jinghp	o word for 'to beat	has no prefix:		
		tum <sup>31</sup> ]	•	T.: to pest	le, pound, hit
		· -			[the drum, gong]
I	But the Jinghp	o word for 'intestin	e' has no prefix:		r , o 01
		pu <sup>31</sup> ] Karen		intestine	
					d to [lă³³pu҈³³]
7	The Jinghpo w	ord for 'arrow' [pă	55la55] is related to		rpart in Cuona Menba
ľhl:	a <sup>53</sup> ]	L. 2	•		

<sup>23)</sup> [bla<sup>53</sup>].

25) But the Jinghpo words for 'dry' and 'speech, words' have no prefix:

skam po  $[ka^{33}]$ WB [khrok4] dry Quiqiong [su<sup>55</sup>tçã<sup>55</sup>]

skad tcha [ka31] WB [ca1kā3] speech, words

<sup>24)</sup> Another generic noun for 'tigers, leopards, and the like' is [nam<sup>31</sup>3ai<sup>55</sup>]. Other Jinghpo words for 'tiger' are  $[30\eta^{31}pa^{31}]$  and  $[n^{31}pa^{31}]\sim[ni\eta^{31}pa^{31}]$ .

Zla ba
(bdun) [să³¹nit³¹] Gyarong [kə ʃnəs] seven    Daofu [zne]   Queyu [sna⁵⁵]   Anong Nu [s₁³¹ni⁵⁵]     snom [mă³¹nam⁵⁵] Zhaba [nʌ³³mni⁵⁵mni³³] to smell sth.²⁶)     sgo [n³³kʰa³³] Zhaba [ngɪ¹³] door   [tʃiŋ³³kʰa³³] Lüsu [ngæ³⁵]   Wuding Y. [nkʰu²]     fbibs ([tʰoŋ³¹]) Jiulong P. [nə¹¹di³⁵] put up an umbrella T.: also 'put up a tent'     fidegs [mă³¹ti²³¹] Namuzi [lu³³nkʰi³³] prop up, support     ldag~fidag [mă³¹ta²⁵5] Yidu L. [ng⁵⁵mɪe⁵⁵] to lick, lap     Jinuo [mrə⁵⁵]     fidi [n³³tai³³] Xiahe & Alike T. [ndə] this     Gyarong [ʃtə] J.: [tai³³] that     figebs [mă³¹kap³¹] Xiahe T. [ngap] cover (up)
Daofu [zne] Queyu [sna <sup>55</sup> ] Anong Nu [s1 <sup>31</sup> ni <sup>55</sup> ]  snom [mă <sup>31</sup> nam <sup>55</sup> ] Zhaba [ŋx <sup>33</sup> mni <sup>55</sup> mni <sup>33</sup> ] to smell sth. <sup>26</sup> )  ? sgo [n <sup>33</sup> kha <sup>33</sup> ] Zhaba [ng1 <sup>13</sup> ] door  [tʃiŋ <sup>33</sup> kha <sup>33</sup> ] Lüsu [ngæ <sup>35</sup> ] Wuding Y. [ŋkhu²]  [fibibs ([thoŋ³1]) Jiulong P. [nə¹¹di³5] put up an umbrella T.: also 'put up a tent'  fidegs [mă³¹ti?³1] Namuzi [lu³³nkhi³3] prop up, support ldag~fidag [mă³¹ta²55] Yidu L. [ha⁵5m1e⁵5] to lick, lap Jinuo [mrə⁵5]  ? fidi [n³³tai³3] Xiahe & Alike T. [ndə] this Gyarong [ʃtə] J.: [tai³3] that figebs [mă³¹kap³¹] Xiahe T. [ŋgap] cover (up)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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? sgo $[n^{33}k^ha^{33}] \sim [t \text{ Lüsu } [nga^{35}] $
$[t \clip{fin}{33k^ha^{33}}] \qquad L\"{usu} \clip{[ngæ^{35}]} \\ Wuding Y. \clip{[nk^hu^2]} \\ Muding Y. \clip{[nk^hu^2]} \\ Muding Y. \clip{[nk^hu^2]} \\ Inside Y. \clip{[ns^{11}di^{35}]} \\ Inside Y. \clip{[ns^{11}di^{35}]} \\ Inside Y. \clip{[ns^{11}di^{35}]} \\ Inside Y. \clip{[ns^{11}di^{35}]} \\ Inside Y. \clip{[ns^{31}di^{31}]} \\ Inside Y. \clip{[ns^{33}nk^hi^{33}]} \\ Inside Y. \clip{[ns^{33}nk^hi^{33}]} \\ Inside Y. \clip{[ns^{33}nk^hi^{33}]} \\ Inside Y. \clip{[ns^{33}nk^hi^{33}]} \\ Inside Y. \clip{[ns^{33}]} \\ Inside Y. \clip{[ns^{33}]}$
$\begin{array}{c} \text{ Wuding Y. } [\eta k^h u^2] \\ \text{ fibibs } ([t^h \circ \eta^{31}]) & \text{ Jiulong P. } [\eta s^{11} \text{di}^{35}] & \text{ put up an umbrella} \\ & & & & \text{ tent'} \\ \text{ fidegs } [\text{m} \breve{a}^{31} \text{ti}^{231}] & \text{ Namuzi } [\text{lu}^{33} \text{nk}^h \dot{a}^{33}] & \text{ prop up, support} \\ \text{ldag} \sim \text{ fidag } [\text{m} \breve{a}^{31} \text{tag}^{255}] & \text{ Yidu L. } [\text{hg}^{55} \text{mie}^{55}] & \text{ to lick, lap} \\ & & & & \text{ Jinuo } [\text{mre}^{55}] \\ \text{? } \text{ fidi } [\text{n}^{33} \text{tai}^{33}] & \text{ Xiahe & Alike T. } [\text{nde}] & \text{ this} \\ & & & \text{ Gyarong } [\text{fte}] & \text{ J.: } [\text{tai}^{33}] \text{ that} \\ \text{ figebs } [\text{m} \breve{a}^{31} \text{kap}^{31}] & \text{ Xiahe T. } [\text{ngap}] & \text{ cover (up)} \\ \end{array}$
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ldag~fidag [mă³¹ta²⁵5] Yidu L. [ha⁵5m1e⁵5] to lick, lap  Jinuo [mrə⁵5] ? fidi [n³³tai³³] Xiahe & Alike T. [ndə] this  Gyarong [ʃtə] J.: [tai³³] that  figebs [mă³¹kap³¹] Xiahe T. [ngap] cover (up)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
? fidi $[n^{33}tai^{33}]$ Xiahe & Alike T. $[ndə]$ this Gyarong $[ftə]$ J.: $[tai^{33}]$ that figebs $[m\check{a}^{31}kap^{31}]$ Xiahe T. $[ngap]$ cover $(up)$
Gyarong [ $f$ tə] J.: [ $tai^{33}$ ] that figebs [ $m \ m \ m \ m^{31}$ kap <sup>31</sup> ] Xiahe T. [ $n \ m \ m \ m \ m \ m \ m \ m \ m \ m \ $
figebs [mă <sup>31</sup> kap <sup>31</sup> ] Xiahe T. [ŋgap] cover (up)
Iiulong P [nollkue55]
statong r. [ne kuc ]
Dulong [kpp <sup>55</sup> ]
fitshub [mă <sup>31</sup> tsut <sup>55</sup> ] Qiang [χtşə] block up, plug
Muya $[no^{33}dza^{53}]$
fidre çig [ʃă <sup>55</sup> kʒep <sup>55</sup> ] Alike T. [ydza xək] bedbug
Geman D. [mw³¹klɑp⁵³] T.: çig 'louse'
? fiphjid [kă³¹tsut⁵⁵] Zhaba [a³³(p)tşə⁵⁵] wipe [the table]
Wuding Y. [ntch22]

1.3.2.2 It is also possible that the existing prefixes in some Jinghpo words are secondary. That is to say, they came into being only after the Jinghpo language (or subgroup) had become distinct from PTB. For the illustration of a semi-prefix, there are the following group of words:

WT	Jinghpo	Other TB languages	Gloss
pus mo dpuŋ pa	[lã <sup>31</sup> pʰut³1] [lã <sup>31</sup> pʰum³1]	Qiang [əɪ pɑx]	knee T.: shoulder J.: upper arm
fidom pa	[lã <sup>31</sup> lam <sup>33</sup> ]	Cuona M. [klam <sup>35</sup> ] Karen [k <sup>h</sup> li <sup>55</sup> ] Dulong [lɑm <sup>55</sup> ]	fingertip to fingertip of out-stretched arms
rkaŋ pa	[lă <sup>31</sup> ko <sup>33</sup> ]		foot
lag pa	[ta <sup>955</sup> ]~	WB [lak <sup>4</sup> ]	arm, hand
	[lă <sup>31</sup> ta <sup>955</sup> ]	Daofu [5a] Shixing [li <sup>35</sup> ]	

But the Jinghpo word for 'nasal mucus' has no prefix:
snabs [nep<sup>31</sup>] Batang T. [nau<sup>253</sup>] nasal mucus
WB [nhap<sup>4</sup>]

It is probable that in the process of disyllabification, the Jinghpo reflex of the PTB etymon for 'hand, arm, (or even limb)', as indicated by the initial syllable in the WT form lag pa, got attached to some nouns of body parts in the same language, thereby producing words like [lă³¹pʰut³¹] 'knee', which should have, as shown by WT pus mo, only a simple consonant as the initial in PTB. The choice of 'arm/hand' as a semi-prefix in Jinghpo may have been triggered by the first element of the proto-clusters in the second to the fifth words quoted above (especially 'foot'), as reflected by the three WT forms in question.

According to this analysis, the initial [l] in WT lag pa 'arm, hand' then corresponds to both the initial [l] and the medial [t] in the Jinghpo cognate [lă³¹ta²⁵⁵]. The etymology of the latter word started with a monosyllable in PTB probably of the form \*lag, which later turned into [ta²⁵⁵] in Jinghpo. Afterwards, the semi-prefix [lă³¹-], also derived from the PTB word for 'arm/hand', was added to the root. There are two reasons for not saying that only the initial syllable in [lă³¹ ta²⁵⁵] came from \*lag and that the second syllable, of unknown origin, was added later. For one thing, it seldom happens that a root morpheme in a Tibetan word corresponds to a prefix in Jinghpo. For another, there is another example for the correspondence between WT [l] and Jinghpo [t], viz., the pair of cognates meaning 'moon': WT zla ba and Jinghpo [ʃă³³ta³³].

Even when the WT cognates of Jinghpo words with a prefix include a cluster, however, it is still possible that these prefixes do not originate from the clusters in PTB. There are at least two reasons for this. 1) The consonant(s) in the Jinghpo prefix is/are phonetically very different from the consonants in the WT cluster, for example:

ltçe (leb)	[[iŋ <sup>31</sup> let <sup>31</sup> ]	Gyarong [tə ∫mE] Karen [ble <sup>33</sup> ] WB [lhyā <sup>2</sup> ]	tongue <sup>27)</sup>
fidre cig	[ʃã <sup>55</sup> kʒep <sup>55</sup> ]	Alike T. [ydza xək] Geman D. [mw <sup>31</sup> klap <sup>53</sup> ]	bedbug T.: cig 'louse'

2) Cognates in other TB languages do not support the proposition that the Jinghpo prefixes in question descend directly from clusters in PTB, for example:

, smjug ma	[k <u>ă</u> 55wa55]	Queyu [lma55]	bamboo
	[wa <sup>?31</sup> -]*	WB [wa³]	*#Prefix for 'bamboo'28)
		Karen [wa31]	
(fikhri(l) çiŋ	[ʒi <sup>33</sup> ])	WB [anway <sup>2</sup> ]	vine
		Batang T. [ba <sup>53</sup> ]	
,		Muya [bæ <sup>53</sup> ]	
		Karen [yi31bo55]	

<sup>27)</sup> The optional leb is a Tibetan morpheme meaning 'flat and thin', as in leb leb <adj.> 'flat and thin' (Yu 1983:961).

<sup>28)</sup> For example, [wa<sup>931</sup> phan<sup>33</sup>] 'A clump of bamboo' (Han., p. 704).

lteb~ltab	$[k \bar{a}^{31} t^h a p^{31}]$	Gyarong [ke ltəp]	fold up [a quilt]
		Shixing [la <sup>55</sup> tça <sup>55</sup> ]	•
•		Dulong [mw31dep55]	
bla	[num <sup>31</sup> la <sup>33</sup> ]	Queyu [bla55so55]	soul
		Dulong [pui³¹la⁵³]	
gsum	[mă <sup>31</sup> sum <sup>33</sup> ]	Darang D. [ka31sun35]	three

The prefix in [mă<sup>31</sup>sum<sup>33</sup>] 'three' is especially likely to be added in parallel to other Jinghpo numerals such as the following:

WT	Jinghpo	Gloss
bzi	[mă³¹li³³]	four
brgjad	[mă <sup>31</sup> ts <u>a</u> t <sup>55</sup> ]	eight
lŋa	[mă³¹ŋa³³]	five

The initial syllables in the second batch of Jinghpo words quoted in this section (starting from 'tongue') have unknown origins. They have no meaning at all. Their sole function seems to be to form a disyllabic pattern. They are therefore classified as LA prefixes.

1.3.2.3 The above section presented the case in which Jinghpo prefixes correspond to WT initial clusters. This section now deals with Jinghpo words which have a prefix while their Tibetan cognates have a simple consonant as the initial. There are two possible explanations for this. 1) The lack of prefix in Tibetan usually indicates that the prefixes in those Jinghpo words are secondary. 2) A minority of WT words may have dropped the prefixes in their PTB etyma, but traces of them can still be found in the Jinghpo reflexes. Evidence from other TB languages may lend help in deciding individual cases.

Examples for the first possibility are as follows:

		•	
WT	Jinghpo	Other TB languages	Gloss
(gnam)	[lă³¹mu³¹]	Qiang [mu tup]	sky
		Lanping P. [my <sup>55</sup> ]	
		Queyu [mu <sup>55</sup> ]	
	*.	Dulong [mu <sup>955</sup> ]	
		WB [mui <sup>3</sup> ]	
dug	[tuk $^{55}$ ] $\sim$	Motuo M. [du?]	poison
	[ $n^{31}$ tuk $^{55}$ ] $\sim$	Qiang [duə]	But: Alike T. [yduk]
	[niŋ³¹tu̞k⁵⁵]	Gyarong [tek]	,
		Daofu [du]	•
rus pa	[n <sup>31</sup> ʒa <sup>33</sup> ]	WB [arui <sup>3</sup> ]	bone
	* .	Lanping P. [30 <sup>55</sup> q0 <sup>13</sup> ]	
	•	Daofu [rə ra]	
rwa	[n³¹ʒuŋ³³]	Cuona M. [ru <sup>35</sup> ]	horn

Motuo M. [wa ron]

Gyarong [tə ru]

Bogaer L. [a rən]

Yidu L. [su<sup>55</sup>]

Motuo M. [rum]

Daofu [ro rəm və]/[su]

But: Daofu [qrə mbə

Geman D. [kıŭŋ³⁵]

to help

ram fidegs [kă<sup>31</sup>ʒum<sup>33</sup>]

Examples for the second possibility are as follows:

tç <sup>h</sup> uŋ tç <sup>h</sup> uŋ	[kă³¹t∫i³¹]	Qiang [χtşα] Lanping P. [qa <sup>13</sup> tsε <sup>13</sup> ]	little, small
		Gyarong [kə ktsi]	>
gug po	[mă <sup>31</sup> ko <sup>931</sup> ]	Gyarong [ka rgo rgo]	crooked, bent
		Daofu [(də) ryu]	
t <sup>h</sup> igs pa	$[n^{31}t^he^{231}]$	Gyarong [nthek]	a drop [of oil]
		Queyu [ndzie <sup>55</sup> ]	
	at the second second	Lüsu [nthua53]	
		Lanping P. [stha13]	

All the Jinghpo words quoted in this section have a LA prefix. It does not matter whether or not the initial syllables of these words originate from proto-clusters. As long as they do not derive from content morphemes or have any meaning, but *are* in the general phonetic format of Jinghpo prefixes, as typified by the [lă<sup>31</sup>-] in [lă<sup>31</sup>mu<sup>31</sup>] 'sky', they are LA prefixes.

What has been said in Section 1.3 up to now is about the correspondence of Jinghpo prefixes in Tibetan. To complete the picture, there should be two more types of cases where the absence of prefix in Jinghpo corresponds to the absence and presence of prefix in Tibetan. Note the following two words:

k <sup>h</sup> ji	[kui <sup>31</sup> ]	Qiang [khuə]	dog
		Jiulong P. [khi55]	_
	4.0	Dulong [dw31gwi55]	
		WB [khwe <sup>3</sup> ]	
skad tç <sup>h</sup> a	[ka <sup>31</sup> ]	WB [cakā <sup>3</sup> ]	speech, words

# 1.3.3 Ambiguous Cases: Semi- or LA Prefixes?

For some instances of Jinghpo prefixes, it is not yet certain if they are semiprefixes or LA prefixes. The first example comes from the three Jinghpo variant forms for 'seed' in Hanson (1906):

[mam <sup>33</sup> li <sup>33</sup> ]	'Seed-grain'	(Han., p. 390)
[n <sup>33</sup> li <sup>33</sup> ]	'Seed; grain used as seed'	(Han., p. 494)
[li <sup>33</sup> ]	'Seed, any grain used as seed'	(Han., p. 344)

At first sight, it may be assumed that the initial syllable in the second form above is a semi-prefix derived from [mam<sup>33</sup>] 'grain'. However, the Queyu cognate of 'grain' begins with a consonant cluster the second element of which is also [l]:

WT	Jinghpo	Other TB languages	Gloss
(son)	$[n^{33}li^{33}]$	Queyu [rlui <sup>55</sup> ]	seed

There remains, therefore, the possibility that the prefix  $[n^{33}-]$  in Jinghpo originates from a consonant cluster in PTB.

Another case in point is [n<sup>31</sup>thu<sup>33</sup>], the Jinghpo word for 'knife'. Again, the nasal prefix in this word correlates to the initial syllable of the cognates in two dialects of the Yi language, as shown below:

(gri) 
$$[n^{31}t^hu^{33}]$$
 Wuding Y.  $[be^{55}t^hu^{33}]$  knife, sword Sani Y.  $[mi^{55}t^hv^{11}]$ 

But the Jinghpo prefix may also be a reduced form of [sum<sup>31</sup>-], a reflex of the PTB word for 'iron' (see Section 1.2(4) above). As for the second syllable of [n<sup>31</sup>thu<sup>33</sup>], it has the meaning of 'knife, sword' as a bound morpheme in compounds such as [thu<sup>31</sup>noŋ<sup>31</sup>] a 'sword, hilt and all of steel' (Han., p. 691). Or [thu<sup>33</sup>] is, by itself, a free morpheme meaning 'to cut [for sap]' (Xu et at., p. 321). The same kind of uncertainty also holds for the prefix in the Jinghpo word for 'ax':

sta ri $\sim$	$[n^{31}wa^{33}]\sim$	Gyarong [ʃə rpa]	ax
sta re	[niŋ <sup>31</sup> wa <sup>33</sup> ]	Daofu [lvi]	
		Geman D. [a31wăi53]	
		Nusu Nu [va <sup>53</sup> ]	

The third set of cases concerns the prefix [să³¹-] in the Jinghpo names for three body organs. This prefix is very likely to originate from the free morpheme [sin³¹] 'internal organs', except that the cognates of these three words in other TB languages also have an initial syllable or a consonant cluster. Look at the following words:

sniŋ	[să³¹lum³¹]	WB [nhalum <sup>3</sup> ] Anong Nu [n.i <sup>31</sup> .uum <sup>31</sup> ]	heart
		Geman D. [lwm <sup>35</sup> ]	
mkʰris pa	[ʃă $^{31}$ k $^{31}$ ] $\sim$	Daofu [skrə]	gall bladder
	[să <sup>31</sup> kʒi <sup>31</sup> ]*	Zhaba [stsn13]	*(Han., pp. 608 & 638)
mkʰal ma	$[să^{31}te^{55}]$ ~	Qiang [spəl]	kidney
	[sin <sup>31</sup> te <sup>55</sup> ]		

Notice that in the case of 'kidney,' the prefix [să<sup>31</sup>-] is actually in free variation with

[sin<sup>31</sup>-]. This group of Jinghpo words may be another case in which the forces of semi-prefix and of LA prefix have brought about the same result.

# 2. A DISAGREEMENT IN CLASSIFICATION WITH XU (1986)

This section argues against Xu's classification of a certain set of bound morphemes as semi-prefixes. First, a description of the data. The second syllable of some Jinghpo disyllabic words cannot separate from the initial syllable to stand on their own or combine with other morphemes to form new words, for example:

[mă <sup>31</sup> ts <u>a</u> t <sup>55</sup> ]	eight	[să <sup>31</sup> nit <sup>31</sup> ]	seven
[mă <sup>31</sup> li <sup>33</sup> ]	four	[lă <sup>55</sup> pop <sup>55</sup> ]	snail
[mă <sup>31</sup> lap <sup>31</sup> ]	forget	[n <sup>55</sup> ta <sup>51</sup> ]	house; home
[mă <sup>31</sup> tat <sup>31</sup> ]	to listen		

But the second syllable in many other words with a prefix can do so, for example:

[lă <sup>31</sup> ko <sup>33</sup> ]	leg	$[ko^{33}k^hjen^{31}]$	puttee	[khjen31]	to wrap
		[ko <sup>33</sup> sen <sup>31</sup> ]	Han Chinese women's bound feet	[sen <sup>31</sup> ]	a little sharply
[mă <sup>31</sup> kui <sup>33</sup> ]	elephant	[kui <sup>31</sup> kʰu <sup>?55</sup> ]	domestic elephant	$[k^h u^{955}]$	to tame
		[kui³¹ko̞ŋ³³]	tusk	[koŋ³³]	long, sharp tooth
		[kui³¹lam⁵⁵]	wild elephant		
		[kui³¹noŋ³³]	a herd of elephant	[-noŋ <sup>33</sup> ]	a group
[n³¹puŋ³³]	wind	[puŋ <sup>31</sup> ka <sup>31</sup> ]	fierce wind		•
		[puŋ <sup>31</sup> li <sup>55</sup> ]	cool wind		
		[puŋ³¹pʰji⁵5]	breeze	[phji31]	lightly, slowly
		[puŋ <sup>31</sup> ts <u>i</u> n <sup>33</sup> ]	cold wind	[tsin <sup>31</sup> ]	slowly, mildly
		[puŋ <sup>31</sup> soi <sup>55</sup> ]	to cool off in a breeze		
[tum³¹su³³]		[su <sup>31</sup> la <sup>31</sup> ]	a male huangniu	[la <sup>31</sup> ]	male
	cattle	[su <sup>31</sup> ji <sup>31</sup> ]	a female huangniu	[ji <sup>31</sup> ]	female
		[su <sup>31</sup> lam <sup>55</sup> ]	a stray huangniu	[lam <sup>55</sup> ]	stroll, be on the loose

The fact that the second syllable can separate from the first is also a factor that makes the latter look like a prefix, although mostly of the LA type.

Since the second syllables in the first column of words listed above can also appear word-initially elsewhere, a question arises as to whether they should be treated as prefixes. Xu (1986:322) also put them under the rubric of semi-prefix, but the present paper is against this classification.

Reasons for Xu's proposition are probably as follows: (a) these syllables are word-initial in the second column of words above, (b) each one of these syllables is initial in a set of words, and (c) these monosyllabic morphemes are listed as separate entries in Xu et al. (1983).

There are, however, several reasons to revise Xu's treatment. First, these

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syllables are not in the general phonetic format of Jinghpo prefixes. They have in their rhyme sounds like [o] and [ui], and they can even end with a glottal stop. (See the Appendix for more examples of these morphemes.) In fact, there seems to be no general pattern that can be stated for their form. Second, generally speaking, prefixes form a closed class of words in a language. Crystal (1991) defines the term 'affix' as follows:

The collective term for the types of formative that can be used only when added to another morpheme (the root or stem), i.e. affixes are a type of bound morpheme. Affixes are limited in number in a language, and are generally classified into three types, ... (p. 11, emphasis added)

But in the case of Jinghpo, the number of the kind of monosyllabic morphemes in question is larger than all the three types of prefixes combined, and looks open to even further additions. Last but not least, the meanings of these syllables are clear to the native speakers.

It is therefore suggested that words beginning with this type of syllable be treated like compounds. In Jinghpo morphology, it can be stated that quite a number of words with a prefix (especially a LA one) will drop the prefix when they go into a compound. Naturally, it is possible that some of these syllables may turn into semi-prefixes in the future. In fact one qualified candidate can be found, viz., the second syllable in  $[n^{33}k^ha^{33}] \sim [t \int in^{33}k^ha^{33}]$  door. Its vowel is reduced to the schwa when it is word-initial in a compound noun, e.g.,  $[k^ha^{55}tun^{55}]$  'threshold' ( $[tun^{55}]$  floor) and  $[k^ha^{55}noi^{55}]$  'lintel' ( $[noi^{55}]$  to hang up).

# 3. HISTORY OF PREFIX MORPHOLOGY IN JINGHPO: SAMPLE ETYMOLOGIES

This section outlines the etymologies of some Jinghpo words to highlight the different origins of the semi-prefix and the LA prefix. Since this is largely a reiteration of what has been said in Sections 1.2 and 1.3, the chosen word histories are presented in a schematic format. This format also serves to sharpen the concept of development through time.

(1) The semi-prefix [wa-] qua 'tooth'. The following are the words for 'tooth' in nine TB languages:

Qiang	[şuə]	WT	so	Jinghpo	[wa <sup>33</sup> ]
Gyarong	[tə swa]	Motuo M.	[ça]	Cuona M.	[wa <sup>53</sup> ]
Nusu Nu	[sua <sup>55</sup> ]	Dulong	[sa <sup>53</sup> ]	Shixing	[wu3 <sup>53</sup> ]

Based on the first column of cognates above, it can be suggested that the PTB etymon for 'tooth' began with a consonant cluster, which later turned into an [s] in some TB languages, such as Tibetan, and a [w] in others, such as Jinghpo. The

Jinghpo reflex for 'tooth', i.e. [wa<sup>33</sup>], then formed compounds with other free morphemes in the same language. The vowel in this initial [wa<sup>33</sup>] was in time reduced to the schwa, thus resulting in these existing words:

```
[wă^{55}thap^{55}] tooth+layer {=overlapping teeth}
[wă^{55}tap^{55}] tooth+[tap^{31}] rise/protrude {=a tooth protruding outward}
```

The histories of [wa<sup>33</sup>] and [wă<sup>55</sup>tap<sup>55</sup>] can then be delineated schematically as follows:

The parentheses around the Gyarong form signifies that the PTB word for 'tooth' will be something like it. (The present paper claims no systematic reconstruction for PTB.)

The diachronic process behind the semi-prefix is also reflected by the following set of existing words in the Jinghpo language:

```
[ma<sup>31</sup>#pau<sup>33</sup>] [ma<sup>31</sup>] child + [pau<sup>33</sup>] bring up, support {= foster child}

[mă<sup>31</sup>ʒun<sup>55</sup>] twins ([ʒun<sup>55</sup>] side by side, abreast)

[n<sup>31</sup>pja<sup>33</sup>] child born in a miscarriage
```

(2) The etymology of [wă<sup>55</sup>loŋ<sup>51</sup>] '(a) ox pen; (b) stable':

```
\begin{array}{lll} \text{In the} & \text{J. } [\eta a^{33}] \rightarrow [\eta a^{33}] \circ \eta^{31}] \\ \text{past:} & \text{cattle+pen/stable} \\ & \downarrow & \downarrow \\ \text{At} & \text{J. } [\eta a^{33}] & [w \breve{a}^{55} lo \eta^{51}] & \rightarrow & [kum^{31} 3a^{31} \ w \breve{a}^{55} lo \eta^{51}] \\ \text{present:} & \text{cattle} & \text{an ox pen} & \text{horse+stable} \{=a \ horse \ stable\} \end{array}
```

The word [wă<sup>55</sup>loŋ<sup>51</sup>] has had a further stage in its history, for it has been generalized to mean 'stable, as for horses'.

(3) The LA prefix in  $[l 3^{1}mu^{31}]$  'sky' and the synonymous derived semi-prefix  $[n^{31}-]$ :

```
PTB: ([mu] as in Qiang)

J. [lä^{31}mu^{31}] [mu^{31}p^{h}o\eta^{55}] sky+to be clear

Present

J. [lä^{31}mu^{31}] sky [n^{31}p^{h}o\eta^{55}] \sim [ni\eta^{31}p^{h}o\eta^{55}] sunny weather day: <LA prefix> <semi-prefix>
```

An arrow pointing southeast from the PTB level to the transitional compound in the middle line has replaced the usual horizontal arrow. This implies that it is the monosyllabic form of 'sky' that entered into the compound, not the disyllabic [lā<sup>31</sup>mu<sup>31</sup>]. Whether this detail is historically true is immaterial for the immediate purpose of the present paper.

(4) The word for 'snake' [lă³³pu³³]. The PTB etymon should have an initial consonant cluster, which turned into a LA prefix in Jinghpo.

```
PTB: (WT sbrul, Alike T. [rbu])

\downarrow

Present J. [I\check{a}^{33}p\check{u}^{33}] \rightarrow [p\check{u}^{33}mut^{31}] snake+gray 
day: {= the gray snake, the ribbon snake}
```

The initial syllable of 'snake' in Jinghpo, i.e. [lă<sup>33</sup>-], originates from a protocluster, as reflected by WT sbrul, possibly through an in-between stage such as Alike Tibetan [rbu]. The second syllable in [lă<sup>33</sup>pu<sup>33</sup>] then became for the native speakers the root morpheme and has combined with other morphemes to form new words such as:

```
[pu<sup>33</sup>mut<sup>31</sup>] snake+gray {=the gray snake (Xu et al., p. 673),
the ribbon snake (Han., p. 519)}
[pu<sup>33</sup>tʃat<sup>31</sup>] snake+lair {=a snake nest for keeping eggs}
```

Incidentally, the first syllable in [pă³¹ʒen³¹], the Jinghpo word for 'dragon', may also be related to the WT sbrul 'snake' and/or fibu 'worm'. (The Jinghpo word [ʒen³¹] means to 'lengthen, elongate'. It is cognate with Gyarong [kə skren] and WT rin po, both meaning 'long'.)

(5) The Jinghpo words for 'dog' [kui<sup>31</sup>] and 'elephant' [mă<sup>31</sup>kui<sup>31</sup>]. The latter word is genetically unrelated to its counterparts in other TB languages, e.g., WT glan tchen, literally 'cattle+big', and WB chan<sup>2</sup>. For 'dog' cognates, please refer to the set quoted at the end of Section 1.3.2.3.

```
(WB khwe³) 'dog'

J. [kui³¹]  [mă³¹kui³¹] \rightarrow [kui³¹koŋ³³]
dog  elephant  elephant +long & sharp tooth \{=\text{tusk}\}
```

The initial syllable in the Jinghpo word for 'elephant' is clearly a LA prefix. It is added to the word for 'dog' to make up a name for a new animal. The word-final [kui³¹] has then come to acquire the meaning of 'elephant' and formed compounds with other morphemes.

The above etymologies have once again illustrated the two known origins of the Jinghpo prefix: (a) initial consonant clusters in PTB, including the case of \*s-

for causativization, and (b) reduced initial syllables in historical compounds of two free lexical morphemes. In the next stage of development, there must have been a proliferation of words with prefix in the Jinghpo lexicon. This was probably due both to a simplification of the consonant systems in the syllable-initial and -final positions and in the vowel system handed down from PTB, and to the accompanying trend for disyllabification. At the same time, some prefixes have also come to acquire the function of changing the part of speech of the root morpheme.

One by-product of this history of prefix morphology is synchronic variation in contemporary Jinghpo. Look at the following examples:

```
Semi-prefixes:
[lam^{31}sun^{33}] \sim [num^{31}sun^{33}] \sim [m \breve{a}^{31}sun^{33}] \sim [n^{31}sun^{33}] trail ([lam^{33}] road)
                                                                                                 [sun^{33}] {small road?}<sup>29)</sup>
[lam^{31} fe^{55}] \sim [num^{31} fe^{55}] \sim [m \check{a}^{31} fe^{55}]
                                                                                                'A fork of a road'
                                                                                                (Han., p. 339)30)
[lam^{31}p30^{931}] \sim [num^{31}p30^{931}]
                                                                           \sim[n<sup>31</sup>p30<sup>931</sup>] crossroads
                                                                                                  [p30<sup>?31</sup>] separate
[lam^{31}ta^{931}] \sim [num^{31}ta^{931}]
                                                                                                  a level road in
                                                                                                  mountainous areas<sup>31)</sup>
                                                     [mă<sup>31</sup>k<sup>h</sup>ʒun<sup>33</sup>]
                                                                                                  'path ... made by small
                                                                                                  animals' (Han., p. 422)
[lu\eta^{31}k^h zut^{31}] \sim [ni\eta^{31}k^h zut^{31}] \sim [n^{31}k^h zut^{31}]
                                                                               whetstone ([luŋ<sup>31</sup>-] 'stone')
LA prefixes:
[\int i \eta^{31} t i^{31}]
                      \sim[nin<sup>31</sup>ti<sup>31</sup>]
                                                 \sim [n^{31}ti^{31}]
                                                                               to assemble
[\text{num}^{31}\text{t}] \sim [\text{nin}^{31}\text{t}]
                                                 \sim [n^{31}t \int a^{55}]
                                                                               'Gloss, brightness, luster; (comp.
                                                                               ja [t \int a^{31}], gold)' (Han., p. 490)
                                                 \sim[n<sup>33</sup>tho<sup>33</sup>]
[num<sup>33</sup>tho<sup>33</sup>]
                                                                               'A fire-brand; ... a stick kindled at one
                                                                               end' (Han., p. 506)
[\text{num}^{31}\text{3ai}^{33}] \sim [\text{m}\ \text{a}^{31}\text{3ai}^{33}]
                                                                                <class. for person> {No [n<sup>31</sup>3ai<sup>33</sup>] in
                                                                               Han. or Xu et al.}
[\text{num}^{31} \text{zi}^{955}] \sim [\text{m} \tilde{\text{a}}^{31} \text{zi}^{955}]
                                                                               dew {No [n^{31}\pi^{25}]}
```

Utilizing the principle of synchronic variation as a reflection of diachronic process, the above words show that there are intermediate stage(s) to get to the [n-] form, such as [nin-] or [mă-]. In fact, there is still no variant form beginning with [ $n^{31}$ -] for [ $num^{31}3ai^{33}$ ] < class. for person > and [ $num^{31}3i^{955}$ ] 'dew' in either Hanson (1906) or Xu *et al.* (1983).

<sup>29)</sup> The Jinghpo word [lam<sup>31</sup>sun<sup>33</sup>] 'trail, path' may be related to the Tibetan word lam sran, which means 'side street' in contemporary Lhasa speech (Goldstein 1978:1118). Yu (1983:1012) has sran sran 'alley, tiny lane'. [sun<sup>33</sup>] by itself does not mean anything related to 'road' in Xu *et al.* (1983:819) or Hanson (1906:598).

<sup>30) &#</sup>x27;She, v. To cross; (an obsolete root;) see numshe and mashe.' (Han., p. 618)

<sup>31)</sup> The second syllable in [num<sup>31</sup>ta<sup>231</sup>] is from [n<sup>31</sup>ta<sup>231</sup>], which is glossed as 'horizontal' in Xu et al. (p. 562), but as 'level' <adj.> in Hanson (p. 485).

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The above examples can also demonstrate another important point. Notice that a single phonetic form  $[n^{31}-]$  is an instance of both the semi-prefix (from  $[lam^{33}]$  'road' and  $[lu\eta^{31}-]$  'stone' in this case) and the LA prefix. The reduction of two full content morphemes into the same form is an important step in the development of  $[n^{31}-]$  toward a semi-prefix. More importantly, there is also the drive to let the same phonetic forms, such as  $[n^{31}-]$  and  $[m\breve{a}^{31}-]$ , serve the purposes of both the semi- and the LA prefix.

# 4. THEORETICAL FEASIBILITY FOR FORMING NEW WORDS WITH MEANINGLESS PREFIXES

The previous parts of this paper have presented many data and observations on Jinghpo prefixes. Part 4 is a further attempt to theorize on prefix morphology in Jinghpo. Specifically, it tries to pinpoint the underlying relation among the phonetic format of the initial syllable, prefix syllables that have no specific meaning or function, and the free variation of prefixes.

Two features of prefix morphology in Jinghpo command further theoretical discussion. First, LA prefixes have no meaning, and the meaning of some semi-prefixes are obscure to native speakers. Second, there has been a historical trend in Jinghpo to impose a phonetic format on, and thus reduce the number of possible syllables in, the word-initial position. There seems to be a relation between these two features and it will make more sense upon considering a rough figure of the possible syllables in the language.

Based on Liu (1984: 10-16), there are 31 consonant initials in the language, excluding [f], [tsh], [tfh] and [x], which are used in a limited number of recent loanwords from Chinese. With a total of 89 rhymes, there are  $31 \times 89 = 2759$  combinations. This figure is close to the one given in Liu (p. 15), i.e. 2628, since not all initials can go with every rhyme. There are 4 tones in Jinghpo, but one of them, viz. [51], is more of a sandhi tone and can thus be ignored in the present calculation. So the number of possible syllables is:

$$31 \times 89 \times 3 = 8277$$

Now, multiplying 8277 by itself gives the following number of possible disyllabic words:

$$8277 \times 8277 = 68508729$$

This amount is much more than any language needs. One way to reduce the total number of disyllabic words is to restrict the number of syllables in one of the two positions, initial or final. Jinghpo has opted for the former.

Two more figures pertain to the present discussion. They are the numbers of pages for entries beginning with [la-] or [ma-] in Xu et al. (1983). The first entry

with [lă-] is [lă³¹pa³¹] 'large', which is at about the middle of p. 385, and the last entry with [lă-] is [lă³¹tsau³¹ lap³¹] 'a kind of small leaves' (cf. [lap³¹] 'leaf'), which is at about the middle of p. 422. This means that entries starting with [lă-] have about (421.5-385.5=) 36 pages. On the other hand, the first entry with [mă-] is [mă³¹ to stutter; <n.> stutter', which is at the end of p. 441, and the last entry with [mă-] is [mă³¹ tsut³¹ mă³¹tsat³¹] 'very coarse', which is at about the end of p. 518. This means that entries starting with [mă-] have about (518-441=) 77 pages. Taken together, entries starting with [lă-] or [mă-] amount to (36+77=) 113 pages. This makes up  $(113/913\times100=)$  12.38 % of the total number of pages in the dictionary proper. Naturally, not all entries starting with [lă-] or [mă-] are disyllabic, but this percentage figure shows that many words in the Jinghpo lexicon indeed begin with a prefix.

Although a Jinghpo prefix may not have any meaning, it can still be contrastive. Both the state of having a prefix or not and which individual prefix there is make a difference. The following three sets of words respectively contain instances of prototypical, semi-, and LA prefixes:

```
[li<sup>33</sup>]
                          heavy
[[ă^{31}]i^{33}]
                           to make heavy (Xu et al., p. 753)
[t[ă<sup>33</sup>li<sup>33</sup>]
                           'Disappointment, hardships' (Han., p. 96);
                           < n.> the state of being heavy (Xu et al., p. 85)
[a^{31}]i^{33} a^{31}t^{h}i^{31}
                           <adv.> fat & clumsily; very slowly (Xu et al., p. 24)
[li<sup>33</sup>]
                           'Seed, any grain used as seed' (Han., p. 344)
[n^{33}li^{33}]
                           'Seed; grain used as seed' (Han., p. 494)
                           'Seed-grain' (Han., p. 390)
[mam<sup>33</sup>li<sup>33</sup>]
[wă<sup>33</sup>li<sup>33</sup>]
                           'A bull kept for breeding' (Han., p. 45)<sup>32)</sup>
[lă^{31}li^{33}]
                           'To be green, fresh, verdant' (Han., p. 369)
[mă<sup>31</sup>li<sup>33</sup>]
                           four {cf. WT bzi}
[nin^{31}li^{33}]
                           'An example', model (Han., p. 469, which also gives 'nli')
[num<sup>31</sup>li<sup>33</sup>]
                           'Soot' (Han., p. 475);
                           smelling of fire (Xu et al., p. 645) \{[\text{num}^{31}] < [\text{wan}^{31}] \text{ 'fire'}?\}
[sum31li33]
                           'To adorn; ... to dress, attend to the toilet' (Han., p. 595)
```

There also exist occasional instances in which the prefix does not change the root's part of speech and the meaning of the disyllabic word is related to that of the root, for example:

```
[koŋ³¹] body [a³¹koŋ³¹] figure
[tup³¹] to hammer and forge; [a³¹tup³¹] to pound an aching part of the body, as in massaging

[sin³¹] internal organs [mă³¹sin³¹] heart < as related to emotions>
```

<sup>32)</sup> Hanson (1906:45) has 'uli' for this word, while Xu et al. (1983:867) has 'wali'.

[kui <sup>31</sup> ]	dog	[mă³¹kui³³]	elephant
[tum <sup>33</sup> ] [tʃut <sup>55</sup> ] [sam <sup>55</sup> ]	storehouse; little house corner, as of a table appearance; behavior	[n <sup>31</sup> tum <sup>55</sup> ] [n <sup>55</sup> t∫ut <sup>55</sup> ] [n <sup>31</sup> sam <sup>55</sup> ].	bamboo tube as a container corner, nook imposing or awe-inspiring posture <sup>33)</sup>
[po <sup>33</sup> ] [pat <sup>55</sup> ]	head to dam up [water]; to fill up [a hole]	[niŋ <sup>31</sup> po <sup>33</sup> ] [kă <sup>31</sup> paౖt <sup>55</sup> ]	leader to take up space and block off the way
[si <sup>31</sup> ]	fruit	[lă <sup>55</sup> si <sup>51</sup> ]	soybean

The two members of the word pairs above have the same part of speech and are related in meaning. This is possible because an extra syllable, which is meaningless, can make the distinction in Jinghpo morphology. For another illustration, Hanson (1906) has this set of words:

ulang	'(from lang, to handle.) A handle of an axe, spade or hoe; comp.
•	gunglang.' (p. 45) {walang [wă <sup>33</sup> laŋ <sup>33</sup> ] in Xu et al. (p. 866)}
ginlang	'the handle, as of a hoe, rake or dipper' (p. 154)
•	{[kin <sup>31</sup> laŋ <sup>33</sup> ] the handle of an umbrella (Xu et al., p. 193)}
gunglang	'the handle, as of an edge-tool; comp. ulang and ginlang' (p. 169)

The LA prefix in Jinghpo demonstrates that it is feasible for a natural language to create new words with a small inventory of word-initial syllables which can be devoid of any meaning.

Seen in the new light of this theoretical feasibility, free variation implies that it does not matter which individual prefix is actually used. For example, there are a total of five words for the meaning of 'vine, creeper' in Hanson (1906:475) and Nhkum et al. (1981:651). They are ru, namru, numru, sumru and shingru. The former dictionary has shingru and namru as free variants of numru, while the latter gives ru, numru and sumru. Since these two dictionaries record the Jinghpo lexicon for two fieldwork locations, it means that in each of these two locations, there are at least three variants for 'vine; creeper'.

# 5. CONCLUDING REMARKS

There are three major aspects in the present study of prefix morphology in Jinghpo. They are synchronic description, diachronic development, and general

<sup>33)</sup> It is Hanson (1906) who indicated the link between the two words in question. But strangely enough, even though [sam<sup>55</sup>] can, as specified under its own entry (p. 581), be either a verb ('to appear, seem') or a noun ('appearance, visage'), the [sam<sup>55</sup>] in [n<sup>31</sup>sam<sup>55</sup>] is said to mean 'to seem' (p. 502). The gloss in this paper for [n<sup>31</sup>sam<sup>55</sup>] is based on Xu et al. (1983:632), and is slightly different from that of Hanson's.

morphology. For the first aspect, the classification of Jinghpo prefixes in this paper is more comprehensive than the one in Xu (1986), but there is still a need to doublecheck the details and individual cases. With respect to the second aspect, TB cognates found here will be of interest to Tibeto-Burmanists working on comparative linguistics. On the other hand, more information about word-internal structure in other TB languages will ensure a more detailed and accurate reconstruction of PTB morphology, which will in turn shed new light on the origins of more Jinghpo prefixes. As for the third aspect, prefix phenomena in other TB languages need further study, for semi-prefixes and LA prefixes may also be common there. Two examples of the former can be found in Lhasa Tibetan: [no131y:51] 'fish bone', literally [na13] 'fish' plus [1y:55] 'bone', and [kəŋ55sum55] 'tripod', literally [kaŋ55] 'three' plus [sum<sup>55</sup>] 'leg' (Yu 1983: 376 & 35). Examples of the latter are: the word for 'three' in Darang Deng [ka31sum35], cf. WT gsum, and the Dulong word for 'elephant' [dw31gwi55]. Lastly, there is the contrast between the prefix and the suffix means for disyllabification towards which a ST language inclines. For example, Tibetan has nominal suffixes such as pa and ma, as in WT rus pa 'bone' and mtshe ma 'twins' respectively.

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Appendix Disyllabic Jinghpo words in which the second syllable is word initial elsewhere (see Part 2 of the paper)

[lă <sup>31</sup> juŋ <sup>33</sup> ] [lă <sup>31</sup> ko <sup>33</sup> ] [lă <sup>31</sup> phut <sup>31</sup> ] [lă <sup>55</sup> ti <sup>51</sup> ] [lă <sup>31</sup> pu <sup>31</sup> ] [lă <sup>55</sup> khon <sup>51</sup> ] [lă <sup>55</sup> kat <sup>55</sup> ] [lă <sup>31</sup> kat <sup>31</sup> ] [lă <sup>55</sup> ŋa <sup>55</sup> ] [lă <sup>33</sup> ŋu <sup>33</sup> ] [lă <sup>55</sup> pho <sup>55</sup> ]	wild banana banana < generic n.> leaves for wrapping food	[juŋ <sup>31</sup> -] [ko <sup>33</sup> -] [p <sup>h</sup> ut <sup>31</sup> -] [ti <sup>31</sup> -] [pu <sup>31</sup> -] [kat <sup>31</sup> -] [kat <sup>31</sup> -] [kat <sup>31</sup> -] [pu <sup>33</sup> -] [pu <sup>33</sup> -] [pi <sup>0</sup> 0 <sup>255</sup> -]	finger leg knee nose pants; skirt bracelet banyan bee banana snake leaf soybean
[mă <sup>31</sup> jam <sup>33</sup> ]		[jam <sup>31</sup> -]	slave
[×31:0311		[jum <sup>31</sup> -]	slave
[mă <sup>31</sup> ju <sup>931</sup> ]	•	[ju <sup>931</sup> -]	throat

5 VEC. 0 553
[mă $^{55}$ tʃap $^{55}$ ] [tʃap $^{31}$ -] pepper, chili
[ $m\bar{a}^{31}3u\eta^{33}$ ] the spine [ $3u\eta^{31}$ -] the back
[n <sup>31</sup> kup <sup>31</sup> ] [kup <sup>31</sup> -] mouth
[n <sup>33</sup> kjin <sup>33</sup> ] cucumber [kjin <sup>31</sup> -] gourd, melon, etc.
[n <sup>31</sup> k3au <sup>31</sup> ] black monkey [k3au <sup>31</sup> -] gibbon
$[n^{33}k^h3a\eta^{33}]$ $[k^h3a\eta^{31}-]$ vegetable
$[n^{31}lu\eta^{31}]$ $[lu\eta^{31}-]$ stone
$[n^{31}pu^{31}]$ $[pu^{31}-]$ walnut
$[n^{31}pun^{33}]$ $[pun^{31}-]$ wind
$[n^{55}p^hje^{51}]$ $[p^hjen^{31}-]$ satchel
[n <sup>31</sup> tum <sup>55</sup> ] [tum <sup>31</sup> -] bamboo tube as container
$[n^{31}3u\eta^{33}]$ $[3u\eta^{33}-]$ horn
$[n^{33}k^ha^{33}]$ $[k^ha^{55}-]$ door <sup>34)</sup>
$\sim [t \int \underline{i} \eta^{33} k^h a^{33}]$
$[n^{33}k^h3a\eta^{33}]$ [kh3a\text{31-}] vegetable
$\sim$ [tʃiŋ <sup>33</sup> k <sup>h</sup> ʒaŋ <sup>33</sup> ]
$[n^{31}k^h 3ut^{31}]$ [kh3ut <sup>31</sup> -] whetstone
$\sim$ [luŋ <sup>31</sup> k <sup>h</sup> ʒut <sup>31</sup> ]
[ $[3^{33}k3ui^{33}]$ [ $k3ui^{33}$ -] carbuncle, boil
[ʃă³¹tai³³] [tai³¹-] umbilical cord
[ʃă <sup>55</sup> to <sup>55</sup> ] [to <sup>931</sup> -] pillar, column
$[30^{931}]$ [30 <sup>931</sup> -] wild fire
$[ \int a^{33} 3u^{33} ]$ [3u <sup>31</sup> -] bamboo rat
[t[ã55khan51] [khan31-] crab
$[t]_{\underline{a}}^{\underline{a}} \cdot \mathbf{a} \cdot \mathbf{a} \cdot \mathbf{b}$ $[t]_{\underline{a}}^{\underline{a}} \cdot \mathbf{a} \cdot \mathbf{a} \cdot \mathbf{b}$ $[t]_{\underline{a}}^{\underline{a}} \cdot \mathbf{a} \cdot \mathbf{a} \cdot \mathbf{b}$
$[t]_{\underline{a}}^{\underline{a}}_{\underline{5}}^{\underline{5}}_{\underline{3}}^{\underline{5}}_{\underline{1}}$ $[3u^{31}-]$ alcoholic beverage
$[t]_{\underline{a}}^{\underline{a}} = [t]_{\underline{a}}^{\underline{a}} = [t]_$
lija k jai j Olphan
[kă³¹puŋ³¹] [puŋ³¹-] a type of Jinghpo dance
$[k \ddot{a}^{31} p^h a^{931}]$ $[p^h a^{931}-]$ shoulder
$[nam^{31}t^hun^{33}]   [t^hun^{33}-]   lime$
[puŋ <sup>31</sup> sap <sup>31</sup> ] [sap <sup>31</sup> -] towel (or dishcloth) gourd
$[p^hun^{31}tu^{31}]$ $[tu^{31}-]$ cogon
[pǎj³3khʒam³³] [khʒam³¹-] hamadryad
$\sim$ [pu²³kʰʒam³³]
$[p\check{a}^{33}]$ $[lon^{31}]$ clothing
[pă $^{31}$ si $^{33}$ ] [si $^{31}$ -] cotton
[sum <sup>55</sup> pʒa <sup>955</sup> ] [pʒa <sup>931</sup> -] caterpillar

<sup>34)</sup> As an entry on its own in Xu et al. (1983), the morpheme for 'door' has the pronunciation of [kha55-] (p. 222), but it has the schwa when word-initial in other entries, such as [khā55tun55] 'threshold' (p. 223).

[tum <sup>31</sup> si <sup>33</sup> ]		[si <sup>31</sup> -]	porcupine
[tum <sup>31</sup> su <sup>33</sup> ]		[su <sup>31</sup> -]	huangniu cattle
[tsă̄ <sup>55</sup> mat <sup>55</sup> ]		[mat <sup>31</sup> -]	nettle
[t∫iŋ³¹pʰaʔ³¹]		[pha?31-]	strap of a satchel, basket, etc.
[u <sup>31</sup> ko <sup>931</sup> ]		[ko <sup>?31</sup> -]	hornbill
[pai <sup>31</sup> nam <sup>33</sup> ]	goat	[nam <sup>31</sup> -]	sheep, goat

#### REFERENCES

## Articles and monographs:

### Anonymous

1991 Sound Systems and Lexical Items of Tibeto-Burman Languages
[Zàngmiănyŭ Yŭyīn Hé Cîhuì]. Beijing: The Chinese Academy of Social Sciences Press.
Crystal, David

1991 A Dictionary of Linguistics and Phonetics. 3rd ed. Oxford: Basil Blackwell. Dai Qingxia

1993 The convergence of multiple morphemes on a single orthographic form in disyllabic Jinghpo words [Jǐngpōyǔ shuāngyīnjié cí de yīnjié jùhé]. Yuyan Yanjiu. 1: 183-189.

Dai Qingxia, Huang Bufan, Fu Ailan, Renzengwangmu [in pinyin], and Liu Juhuang

1991 Fifteen Tibeto-Burman Languages [Zangmiănyŭ Shíwŭ Zhong]. Beijing: The Beijing Yanshan Press.

Dai Qingxia, and Xu Xijian

1992 The Grammar of Kachin [Jǐngpōyǔ Yǔfǎ]. Beijing: The CUN Press.

Fu Maoji (ed.-in-chief)

1986 Zhongguo Minzu Yuyan Lunwenji [Collection of Papers on Minority Languages in China]. Chengdu: The Sichuan Nationalities Publishing House.

Gesangjumian [in pinyin]

1982 The causative category in Tibetan verbs [Zangyŭ Dongcí de Shǐdong Fanchou]. *Minzu Yuwen* [Languages and Orthographies of Ethnic Minorities]. 5: 27-39.

Huang Bufan

1991 The Zhaba language [Zhábā yŭ]. In Dai et al. 1991, pp. 64-97.

Liu Lu

1984 An Outline grammar of the Jinghpo Language [Jǐngpōzǔ Yǔyán Jiǎnzhì]. Beijing: The Nationalities Publishing House.

Lu Shaozun

1985 A brief description of the Zhaba language [Zhábāyŭ gàikuàng]. Minzu Yuwen 2: 67-76. Xu Xijian

1986 Prefixes in the Jinghpo language [Jǐngpōyǔ de qiánzhuì]. In Fu Maoji 1986, pp. 307-323.

# Primary sources of language data:

Goldstein, Melvyn C. (ed.-in-chief)

1978 Tibetan-English Dictionary of Modern Tibetan. 2nd ed. Kathmandu: Ranta Pustak Bhandar.

Hanson, O

1906/1954 A Dictionary of the Kachin Language. Rangoon: Baptist Board of Publications.

Huang Bufan et al.

1992 A Tibeto-Burman Lexicon [Zàngmiăn Yŭzú Yŭyán Cíhui]. Beijing: The CUN Press.

Nhkum Seng Hkum (= Yue Xiangkun), Dai Qingxia, Xiao Jiacheng, and Xu Xijian

1981 A Chinese-Jinghpo Dictionary [Hàn Jĩng Cídiăn = Miwa-Jinghpo Ga Ginsi Chyum].

Kunming: The Yunnan Nationalities Publishing House.

Qujizhaba [in pinyin]

1949/1957 Gexi Quzha's Dictionary of Tibetan, with Chinese Gloss [Géxī Qūzhā Zàngwén Cídiān, Fù Hànwén Zhújiĕ]. Translation of original gloss into Chinese by Fazun and Zhang Keqiang, 1957. Beijing: The Nationalities Publishing House.

Xu Xijian, Xiao Jiacheng, Nhkum Seng Hkum, and Dai Qingxia

1983 A Jinghpo-Chinese Dictionary [Jing Hàn Cídiăn = Jinghpo Miwa Ga Ginsi Chyum]. Kunming: The Yunnan Nationalities Publishing House.

Yu Daoquan (ed.-in-chief)

1983 A Tibetan-Chinese Lexicon of Contemporary Lhasa Tibetan [Zàng Hàn Lāsà Kǒuyǔ Cídiǎn]. Beijing: The Nationalities Publishing House.